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Independent State School Partnerships in England – Challenging Boundaries and Embracing Differences

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Abstract

The UK Government's Department for Education provides state-maintained primary and secondary school places for young people in England. Some parents, however, choose private education, sending their children to fee-paying independent schools, which are not subject to the same government control. These typically have smaller classes and superior facilities to state schools, and although they educate only 7% of all pupils, their alumni occupy a proportionally higher number of seats in government and places at top UK universities. Furthermore, many independent schools hold charitable status, bringing them significant tax benefits, further extending their financial advantage. In 1997 the Labour government charged independent schools with sharing their facilities and their teachers with local state-maintained schools. The first 'independent state school partnerships' (ISSPs) were centrally funded the following year, and by 2017 the Independent Schools Council reported that 88% of its schools were involved in some form of partnership with schools in the maintained sector. While private education divides the main UK political parties, ISSPs have received support from both Labour and Conservative governments since their introduction. There has, though, been little research into their nature or their worth. This paper considers the findings of my study of three English ISSPs, exploring the relationships between schools and the ways they are embracing differences between them. It explores the nature of joint working and what the headteachers, teachers and pupils involved in them understand by the term partnership.

Keywords: Partnership, State-maintained School, Independent School, Mutual Benefit, Relationships

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Introduction

In this paper I shall briefly outline the English education system and introduce independent state school partnerships (known as ISSPs). Key terms collaboration and partnership will be considered and my reasons for studying successful partnerships. I will share some insights gained from a review of school documents, semi-structured interviews, and observations of partnership activities to consider how ISSPs are crossing sectoral boundaries, by building bridges and embracing differences between schools.

The UK Government's Department for Education provides state-maintained primary and secondary school places for young people in England. Some parents, however, choose private education, sending their children to fee-paying independent schools, which are not subject to the same government control. These typically have smaller classes and superior facilities to state schools (Green et al, 2011), and although they educate only 7% of all pupils (ISC, 2016), their alumni occupy a proportionally higher number of seats in government and places at Oxford and Cambridge Universities (The Sutton Trust, 2017). Furthermore, many independent schools hold charitable status (Fairbairn, 2017), bringing them significant tax benefits, further extending their financial advantage, and exacerbating opposition to them.

ISSPs and Partnership Working

When New Labour came into power in 1997, independent schools feared losing their charitable status, but in his drive to raise educational standards the then Prime Minister Tony Blair chose 'partnership not confrontation' with them (Peel, 2015, p.8), and charged independent schools with sharing both their facilities and their teachers with local schools (DfEE, 1997). This was not only to help raise standards, but as a contributing factor in independent schools demonstrating public benefit, and so retaining their charitable status. Twenty years later, the Independent Schools Council (ISC, 2017) reported that 88% of its schools were involved in some form of partnership with schools in the maintained sector. In 2017, Lucas et al, conducted a 'rapid review' of ISSP activity and impact', and they defined an ISSP as 'any deliberate collaboration or association of two or more schools, whether formal or informal, short or long-term, wide-ranging or focused'. Through my research I am working on formulating a more grounded and specific definition of partnership in this educational cross-sector context.

While independent state school partnerships are widespread in England, they are under-researched, so my theoretical framing of successful partnership has focussed on English National Health Service and policing partnerships. These were introduced by New Labour at the same time as ISSPs, feature cross-sector working between public and private organisations, and have been researched more extensively. The literature revealed a number of common features across successful partnerships. Key among these were: shared objectives (Hunter and Perkins, 2014); 'mutual values and trust' which Dhillon (2005, p.211) considered to be the 'social glue' that hold organizations and individuals together'; 'transparent lines of communication within and between partner agencies' (Carnwell and Carson, 2004:9); commitment (Johnstone et al, 2009); resources, including all partners using 'their own resources jointly... for mutual benefit' (Powell & Dowling, 2006:309); and the 'engagement of senior management' (Perkins et al, 2010:105).

Potential barriers to partnership working can be found in 'cultural differences' (Hunter and Perkins, 2014:44), which can result in 'cultural stereotyping between professionals', and also

in ‘significant disparities in power’ (Wildridge et al, 2004:8), which can not only inhibit the establishing of a partnership, but can destabilise its activities. All of these features and barriers were considerations for me as I headed into my study.

Powell et al (2001:57) claim that partnerships ‘evolve over time’, so I chose to look at established partnerships, whose structure and processes were more open to scrutiny than those more recently established, which may still be in the early ‘stimulating and rewarding’ phase (Audit Commission, 1998:29). I conducted a qualitative study in two phases. In the first phase, I conducted documentary research and semi-structured interviews with headteachers and partnership coordinators. This was followed by observations of partnership activities, semi-structured interviews with staff involved in them, and pupil focus groups. In total, I conducted forty-three semi-structured interviews and five pupil focus groups. Each partnership, school and participant has been anonymised through the use of pseudonyms in my study.

Three English ISSPs

My research explored three partnerships, with different structures, different ways of working and different levels of mutuality:

Leslie Independent State School Partnership, or LISSP, was established over 15 years ago, and is what the DfE (2018) labels a ‘hub and spoke’ partnership, with secondary school ‘spokes’. LISSP was initially funded by a DfE grant and when that ended Franklin School, the independent school at the hub, took over the funding. Franklin School’s coordinator organises and runs the partnership.

Maxwell Schools’ Association, or MSA, is another ‘hub and spoke’ partnership, this time with a vast number of primary school ‘spokes’. The youngest of my partnerships, its work is externally funded by the independent school’s central body. This partnership’s activities are also directed by the independent school’s coordinator.

Finally, Napier Schools Together Group, or NSTG. Over twelve years old, this is what is described by the DfE as a ‘broad area partnership’. Like LISSP, this was initially funded by a DfE grant; but when funding stopped the NSTG schools decided to continue by putting in equal payments. The partnership employs a coordinator to run its programme of activities, who is not affiliated to any of the schools,.

Table 1 shows the participants from my telling cases whose voices are heard in this paper:

Participant	ISSP	Role
Alan	LISSP	State school headteacher
Amber	MSA	Independent school pupil
Bobby	NSTG	State school coordinator
Carolyn	MSA	Independent school headteacher
Dawn	MSA	State school teacher
Dylan	NSTG	State school former pupil
Jazmin	NSTG	State school pupil
Kathryn	MSA	State school teaching assistant
Kieran	NSTG	State school pupil
Matthew	LISSP	Independent school coordinator

Mia	LISSP	State school coordinator
Patrick	NSTG	Founding state school headteacher
Sasha	NSTG	State school former pupil
Sharon	LISSP	State school headteacher

Table 1: Participants

The Nature of Cross-Sector Working between Schools

It is clear from the literature that there are fundamental differences between state-maintained and independent schools. State-maintained schools are funded by the government; budgets are tight, with headteacher Alan, telling me that ‘there just isn't enough money in the system’. By contrast, independent schools are funded by fees, and while not all have the gothic spires associated with Eton College, they are more affluent than their state neighbours. Independent schools also typically have smaller classes (Aldrich, 1996), and their teachers are more likely to ‘be specialists in shortage subjects’ such as Latin or physics (Green et al., 2008, p.383). Other studies have found that independent school facilities tend to be of a higher quality (Tapper, 2003) and they offer more extra-curricular opportunities (Benn, 2012). This means that if schools are to work together effectively, they must build bridges and embrace their differences, ensuring that they do not reinforce inequalities.

The Lucas et al definition of ISSPs that I shared earlier described the partnerships in terms of collaboration, but I consider collaboration and partnership to be different things, the first an act and the second a relationship. This reflects the meaning adopted by Carnwell and Carson (2004, p.4) who ‘distinguish between what something is (a partnership), and what one does (collaborate or to work together in a joined-up way)’.

LISSP and NSTG are partnerships between secondary schools and my data revealed that their participants saw cross-sector working as a relationship. In NSTG, all schools shared a clear mission. They all made equal annual financial contributions and were involved in both strategic and operational aspects of the partnership. Even in LISSP, where activities were organised and funded by the independent school, state partners felt they had influence over the programme on offer. In my third ISSP, MSA, the independent school is secondary, working with local state primary schools. The independent school sets the annual programme, arranges funding and also organises and runs the activities. The school’s headteacher Carolyn, acknowledged that their working is collaboration. She told me that schools were ‘*collaborating* together on something rather than a formal partnership’. MSA was the youngest of my ISSPs, and relationships between partners were not as strong as in LISSP or NSTG. This may be explained by Bourne’s (2017:41) finding that ‘Building strong trusting relationships from scratch or developing existing relationships between independent and state-funded schools takes time’.

One of the aims of my research was to explore the meaning of partnership, as those involved in ISSPs experience it. In both LISSP and NSTG there was an emphasis on schools being equal partners. State head Sharon said LISSP was ‘a partnership of *equals*’, while founding state school head Patrick emphasized that NSTG was ‘shared partnership... [schools] were doing it together’. In exploring the meaning of partnership, I asked the pupils in my focus groups for their views. Their responses reflected a remarkable understanding of the relationship between schools from the two sectors. The NSTG student leaders built on each other’s contributions to collectively generate an insightful interpretation of partnership as: the coming together of two or more parties for the mutual benefit of all (Dylan) on equal footing,

so they... receive an equal amount (Kieran) [but where] they give as much as they can, rather than an equal amount (Sasha).

The students were comfortable with some schools giving more than others, which happened in their partnership through use of facilities or some teachers contributing to activities as part of their school commitments.

Distilling my data into a succinct meaning of partnership, I consider it to be ‘a relationship in which parties work together as equals for mutual benefit’. Furthermore, I found that the stronger the relationship, the greater the equality and mutuality between partners.

Embracing Differences through Activities

To consider how schools embrace their differences I shall consider some of the activities that I encountered in my fieldwork. As discussed earlier, independent schools typically have superior facilities, teachers with expertise in shortage subjects and, additionally, they do not have to follow the National Curriculum (Aldrich, 1996). In my study, I encountered activities that drew directly on these differences.

In some activities independent schools shared their facilities and resources with state school pupils. LISSP organised a Spring Play, where partner schools each prepared an act, which were then drawn together in a production held in the independent school’s theatre. State school coordinator, Mia, emphasised the impact the play had on the local community, ‘those scheduled rehearsals where everybody’s together I think there is something so powerful about that because you realise it’s not just about you and it’s not just about your school’. Mia’s headteacher, Sharon, told me that ‘being able to go into a theatre... that *is* really important and that is part of their [pupils’] aspiration’. The Spring Play was also important to the independent school, hosting coordinator Matthew described it as ‘a huge highlight of the year’.

MSA ran a science day for year five girls from local state primary schools, held in the independent school’s science laboratories, with its sixth formers acting as mentors. One of the mentors, Amber, said that this activity gave ‘children who are still in primary school an experience and an understanding of what you can do in science’. Both primary staff participants spoke positively about being given access to ‘those brilliant labs’ (Dawn) and the ‘equipment they have we may not have’ (Kathryn). Sharing facilities does not always involve the independent schools acting as hosts, though, the NSTG summer school I observed was hosted by a partner state school with modern buildings and sophisticated IT facilities. Summer school coordinator, Bobby, told me that spreading events around the schools was important because it ‘demonstrates to parents to students, to staff that it is a partnership and they are, the state schools and the independent are actually working together’.

As I mentioned, independent schools do not have to follow the government’s prescribed curriculum, and some partnership activities introduced state school pupils to new subjects through sharing the specialisms of independent school teachers. Examples of this I saw were Latin courses offered to secondary school pupils in LISSP, and a GCSE Astronomy course in NSTG. These were subjects that were offered in the partnership independent schools but not in the state partners. NSTG pupil, Jazmin, told me that this allowed state school pupils to ‘experience things that you never would be able to otherwise’.

Further advantages associated with independent education include cultural capital and the impact this has on university aspiration and application (Walford, 2003). Independent school pupils dominate entrance into top universities, and their application support and advice processes are typically regarded as better than those offered to state pupils (Benn, 2012). In LISSP, I encountered a three-year programme for first generation university applicants, who were given experiences aimed at enriching their cultural capital and raising their university aspirations. This was delivered through activities such as workshops and theatre trips, alongside university visits and support with applications. The state school coordinator from Huxley High School claimed that ‘the programme gives great opportunities for students that otherwise might not have the chances to develop cultural capital and really gain in depth knowledge of university life’ (quoted in the Franklin School partnerships brochure).

In some activities I saw a more overtly two-way exchange of expertise between schools. In NSTG masterclasses, state and independent school teachers worked collaboratively to plan and deliver courses. In LISSP, one of the state school headteachers led a leadership skills development course, with sessions for both independent and state school teachers. School leaders from schools in both sectors were involved in delivering sessions on the course. In this partnership, I also found shared governance with the head of a partner state school on the independent school’s governing body and independent school governors in two state partner schools.

Challenges of ISSP Working

While the meaning of partnership working focussed on equality and relationships, cross-sector working was not without challenges. Wildridge et al (2004) warned that power disparities could be barriers to effective partnership working, and in LISSP and MSA, the balance of power was clearly with the independent schools. In LISSP, this power differential was acknowledged. Strong relationships and trust enabled this differential to be known, understood and accepted by state partners. The MSA partnership was still emerging, with relationships less well formed, and there was some lingering mistrust from primary partners about the independent school’s motives for offering them free activities. These outreach activities could be regarded as ‘paternalistic patronage’ (Wilde et al, 2016:315), or a form of bestowing opportunity to the less advantaged, seen by Kenway and Fahey (2015:95) as a ‘gift economy’. While primary partners filled places on MSA activities, they were not prepared to enter into formal partnership with the independent secondary school, and only two primary members of staff were willing to participate in my research.

Another challenge came from differences in political ideology. Peel (2015:4) claimed that independent schools polarise opinion, ‘extolled for their standards of excellence on one hand and reviled for their social exclusiveness on the other’. Founding head Patrick told me that some state heads were hesitant about joining NSTG ‘from a philosophical and political point of view’. This was recognised in the partnership’s third-year self-evaluation, which claimed that some teachers ‘harboured suspicions or even antipathy to professionals in another sector’, but went on to assert that they had ‘confronted those feelings and seen them superseded by understanding, appreciation and respect’. While this seems persuasive, it must be noted that this was an internal evaluation, more likely to be positive in its tone. Patrick attributed headteachers putting aside their political views, to the partnership being ‘educational’ not ‘political’.

Conclusion

While private education divides the main UK political parties, ISSPs have received support from both Labour and Conservative governments since their introduction. They allow pupils in both sectors to cross-border, each gaining glimpses of the world of the other, while then safely returning to their own. While independent state school partnerships challenge the limits of each sector's boundaries, they do not, and cannot, mitigate the inequalities between them. Across my three ISSPs, I met teachers and headteachers who pragmatically set aside their personal politics to enable their pupils and teachers to benefit from joint activities. Through building relationships and offering activities that bring mutual benefit, ISSPs are helping these schools to embrace their differences.

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***Learning Management Guidelines of the General Education Curriculum that Promotes
Citizenship Skills of the 21st Century in Thailand***

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Abstract

This article introduces the guidelines for teaching and learning in the general education (GE) curriculum that corresponds to the 21st century skills of global citizenship of Thailand and is being implemented in an open university. This curriculum focuses on enhancing and developing students' knowledge, skills, and competencies all of which are meant to be used as 'soft skills' in day-to-day lives in the era of post-globalization by designing the GE curriculum in accordance with the Thailand qualification framework for higher education (TQF:HEd). The principle behind this is that the GE curriculum is implemented in undergraduate programs. That is, 24 credits of GE courses are mandatory for all students, and in this regard, students will gain extensive knowledge in social science, science, mathematics, and humanities, as well as the 21st century skills of global citizenship. The GE curriculum is designed to expand intellectual perspectives, promote cognitive skills and desirable attitudes towards life. In addition, this curriculum elevates the learning management standards in the GE department in line with the concept of educational management 4.0 and in order to integrate and put such concept into practice, leading to the highest benefits for the students' lives in the digital era.

Keywords: Learning Management, General Education, Citizenship Skills of the 21st

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Introduction

General Education Course it is the courses which aim at developing learners to have extensive knowledge, a broader world view, an understanding of self-nature, others and society, and logical thought. Learners are able to use language to communicate in the meaningful ways, obtain morality, aware of the value of arts and culture of both Thailand and the international community. Learners must be able to apply knowledge to life and live in society as well. (Ministry of Education Thailand, 2015)

Objectives of general education courses in Thailand universities explain as follows: 1) to acquire broad knowledge in various disciplines, seeing the relationship and interdependence of different disciplines, 2) to acquire the knowledge and ability of utilizing effective language in everyday communication, 3) to achieve such intelligence skills as thinking, analyzing, criticizing, initiatively loving progress, and seeing foresight with world view while being yourself, 4) to know yourself, understand society, see social problems, be ready to take responsibility, solve your own and others' problems appropriately and live happily in the societies 5) to be able to see the value and aesthetics in arts, culture and traditions. In addition the concept of Paitoon Sinlarat (Sinlarat, 2007), has mentioned and divided the objectives of general education courses into four major categories: 1) a wide knowledge purposes to provide students with basic knowledge for further study of other subjects 2) the understanding purposes; to provide students with a broader worldview, understanding of global and international society, and knowing as well as understanding both self and others 3) the utilizing all knowledge and understanding purpose to allow learners to apply the knowledge that they have acquired to be useful in their daily life 4) the cultural / moral / ethical appreciation purpose to provide learners with knowledge and awareness of the value of arts and culture and skillful.

In order for the learners to think critically, learners need the ability to make decisions, solve problems, as well as communicate. These needs are is consistent with general education guidelines at Harvard university. Harvard University's Program in General Education provides a broad foundation that enables students to make meaningful connections across disciplines. Students are required to choose and take one course in each of four perspectives: Aesthetics & Culture; Ethics & Civics; Histories, Societies, Individuals; as well as Science & Technology in Society. (Harvard college, 2019)

Twenty-first-century skills are abilities and attributes that can be taught and learned in order to enhance ways of thinking, learning, working and living in the world. Most frameworks seem to converge on a common set of 21st century skills or competences, namely: collaboration; communication; Information and Communication Technology (ICT) literacy; and social and/or cultural competencies (including citizenship). Most frameworks also mention creativity, critical thinking and problem solving. Across the various frameworks, it is acknowledged that ICT is at the core of 21st century skills. (International Bureau of Education, 2019) All people, regardless of their ages and gender, must have opportunities to gain the knowledge and skills proposed, with an inclusive, equitable and lifelong learning focus. Lifelong learning incorporates multiple and flexible learning pathways, entry and re-entry points at all ages, and strengthened links between formal and non-formal structures, including formal accreditation of the knowledge, skills and competencies acquired through non-formal and informal education. (Unesco, 2017)

Thailand Qualifications Framework (English: Thailand Qualifications Framework), popularly abbreviated as TQF (TQF), is a framework used as a base for transferring credits of higher

education institutions in Thailand. This framework has prepared using the method of teaching quality control by the Higher Education Commission. The Thai qualification standard framework was built from the concept of the National Qualifications Framework of United Kingdom in which is used for a quality control system, transferring credits of students at the secondary and tertiary level. TQF's future goals are to enable students in ASEAN countries to be able to transfer credits among ASEAN universities with the similar standards and its qualities. Currently, there are three countries participating in the program, included Thailand, Malaysia and Indonesia.

Methodology

This research used curriculum analysis and synthesis methods (Levander & Mikkola, 2009) General Education in Thailand. There were 26 supervised universities, 57 public universities and 72 private universities. Researcher selected the sample universities for data analysis by using the Times Higher Education or THE's ranking scores, another famous world university ranking agency from England. It is the largest university ranking today. Researcher used the results that have been announced The World's Top University Rankings 2019. (Times Higher Education World University Rankings, 2019)

Thai universities Ranked among the top universities in Asia:

- Mahidol University
- Chulalongkorn University
- Khon Kaen University
- Chiang Mai University
- Thammasat University
- Kasetsart University
- King Mongkut's Institute of Technology Ladkrabang

The selected issues for the data analysis of general education courses consisted of:

1. Subject group
2. Learning outcomes
3. 21st century skills of global citizenship

To clarify the definition of these three topics, each topic explained as follow:

Subject Group

It is a group of subjects within the general education courses in which each university in Thailand has different subdivisions. For example, Kasetsart University (Thailand) is categorized into Wellness, Entrepreneurship, Thai Citizen, Global Citizen, Language and Communication, Aesthetics, etc.

Learning Outcomes

Learning outcomes is being set up that are defined in the general education course management. The achievement of the study should be consistent with the course objectives and course groups which are defined in the curriculum structure. For example, ChiangMai University has the following learning outcomes according to the following subject groups:

GELO 1 is a person who learns,

GELO 2 is a co-creator of innovation and

GELO 3 is a responsible and strong citizen of the country and the world.

21st Century Skills Of Global Citizenship

It is a collection of knowledge, skills, work habits and personality traits which are believed by all societies and universities' stakeholders such as educators, school reformers, college professors, employers, and alumni that it is critical to success in today's world. In college and professional programs, contemporary and work basically 21st century skills can be applied in any field of study in all professional and civic education throughout the lifelong learning. (Partnership for 21st Century Skills, 2010)

Results

Researchers analyzed data from general education courses and the analysis was performed, showing the results in Table 1 as follows:

Table 1: the comparison of teaching and learning management in all three areas of Thai universities.

University name	Subject group	Learning outcomes	21 st century skills of global citizenship
Mahidol University	1.Humanities 2.Social Sciences 3.Language 4.Science and Mathematics 5.Health Recreation	Outcome-Based Education (OBE) TQF	Health Literacy Digital Literacy Social and Humanity Literacy Communication Literacy Science and Environmental Literacy Finance and Management Literacy
Chulalongkorn University	1.Interdisciplinary 2.social science 3.science 4.Humanities 5.Next-Gen 1 6.GenEd 21 st Century 7.Next-Gen 2	TQF (+5) 1.Want to know and know how to learn 2.Leadership 3.Well-being 4.Public mind 5.Being-Thai	Leadership Learning Society Global Citizen Thainess & Multicultural Sustainable Development Innovation& Entrepreneur Well-being
KhonKaen University	1.Language 2.Humanities and 3.Social Sciences 4.Mathematics and Science	TQF, KKU: QF	FE = Freshman Education LA = Liberal Arts Education EC = Education for Creativity
ChiangMai University	1.Subject to developing learner skills 2.Course in developing innovation skills as a co-creator	TQF GELOs GELO 1 is a person who learns. GELO 2 is a co-creator of innovation.	Digital Literacy Language Literacy Health Literacy Financial Literacy Management Skills Thinking Skills Entrepreneurial Skills Startup and Innovation

University name	Subject group	Learning outcomes	21 st century skills of global citizenship
	3.Courses for developing strong citizenship skills	GELO 3 is a responsible and strong citizen of the country and the world.	Adaptability Civic Literacy and Environmental Concerns Culture and Art Volunteerism
Thammasat University	1.Social Science 2.Humanities 3.Science and Mathematics 4.Language	TQF	3 pillars Global Mindset Soft Skills Spirit of Thammasat
Kasetsart University	1.Wellness 2.Entrepreneurship 3.Thai Citizen and Global Citizen 4.Language and Communication 5.Aesthetics	Academic results of the 8 general education subjects of Kasetsart University	Wellness Entrepreneurship Thai Citizen and Global Citizen Language and Communication Aesthetics
King Mongkut's Institute of Technology Ladkrabang	1.Value of life 2.Way of society 3.The science of thinking 4.The art of manipulation 5.Language and communication	TQF KMITL General Education Outcomes	Desired KMITL Graduate & 21st Century Skills 1.Moral by identity Of the institute 2.Have pride in being Thai 3.Knowledgeable 4.creative 5.cognitive skills Discretion / skill Problem solving 6.volunteerism and leadership 7.IT competence 8.communication skills and Presentation

From Table 1, the analysis results are as follows:

Universities in Thailand, every university has a program of general education which is a skill-driven subject called soft skills. As shown in the table in the subject group, the courses mostly have been classified as follows: humanities, social science, science, language, mathematics, health, communication and aesthetics. Each of them has emphasized its own strengths in subjects such Chulalongkorn university :Next-Gen 1, GenEd 21st Century, Next-Gen 2, etc and King Mongkut's Institute of Technology Ladkrabang: Value of life, Way of society, The science of thinking, The art of manipulation, etc.

As for the learning outcomes of each university, most of them use TQF to determine their learning outcomes. However, there are some universities that define general education learning outcomes according to the university context. For example, Khon Kaen University has KCU: QF, ChiangMai University has GELOs, Kasetsart University has Academic results of the 8 general education. Even though we mentioned and shown examples of few universities, found

their own learning outcomes based on its context, their learning outcomes in general education subjects still must be aligned with TQF.

The universities in Thailand that provide teaching and learning general education. It will focus on the moral and ethical expectations of students, and focus on the identity of each university. Able to analyze the principles of teaching and learning into issues as follows,

Knowledge

To develop learners to have basic knowledge of digital technology, economics, nanotechnology, business in trade, art creation, Innovation, knowledge of multiculturalism.

Concept

To develop learners ability to think critically, have creative thinking skills, ability to think for the future, compare and strategic thinking. Develop critical thinking, problem solving, using math and reasoning skills.

Skill

To develop learners with innovative skills according to their aptitude. Using science and the social sciences as a foundation for creating innovation, having the skills to learn to live with oneself, to build oneself, be a valuable citizen of society.

Attitude

The ability to discriminate ethical choices has an understanding of the global nature and its belief-based significance for scientific and ethical reasons.

Conclusion

Table 2: shows guidelines for teaching and learning in the general education category in the broader perspective of Thailand.

	Teaching method	Measurement and evaluation methods	21 st century skills of global citizenship	Content used for teaching general education
general education category in the broader perspective of Thailand	Online learning	Digital Literacy Skill Exam	Health Literacy Leadership Entrepreneurship	Humanities Social Sciences Language
	Learning through assigned tasks	Performance evaluation	Thai Citizen and Global Citizen Language and Communication	Science and Mathematics Wellness Entrepreneurship
	Learning in class	Authentic assessment	Aesthetics Innovation Digital Literacy	Thai Citizen and Global Citizen Aesthetics
	Communication practice Foreign language	Foreign language proficiency test	Civic Literacy and Environmental Concerns	

Learning activities through lectures, case studies and simulations	The exam actual situation
Class discussion	Observing the ideas that influence the behavior of the discussion.
Project-based or problem-based learning	Results from the project or reflection problems by the learners

From table 2, the analysis shows that most general education in Thailand has used online-teaching and learning based and emphasizing the assessments and its outcomes on digital literacy skills. This also demonstrates that they have combined global citizenship of 21st century skills with digital literacy skills—also meant that if students achieve digital literacy skills, they also accomplish in global citizenship.

The results of guidelines for teaching and learning in general education categories can be summarized as follows:

1. Must be a person with an interest in demographic change. Be reasonable, open-minded, and always listen to the opinions of others. This is the subject of knowledge in understanding world situations and understanding oneself.
2. Must be a person with an interest in a post-globalized world, and pay attention to the environmental crisis, which is knowledge in developing innovation to improve the quality of life and to solve various problems of the world in the 21st century
3. Must be able to trade and have a code of ethics in trading with the scope of knowledge in trading.
4. Must be someone who knows the value of individualism and pluralism, respect the rights freedoms of oneself and others, which is a matter of real knowledge of multiculturalism and democracy.
5. Must be someone who knows how to digitize information, must know how to combine technology. Which is about the knowledge of the use of technology and the integration of technology into one.

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Embodied Learning of Dance by GenZ and the Alphas as a Shift in Traditional Dance Education

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Abstract

The learning of a craft such as classical ballet, which requires mindful, cognitive, and physical coordination at the onset, runs contrary to the existing capabilities of GenZ (ages 10-24) and the Alphas (ages 0-9), who are now the current students in the studio. Impacted by technology, their inherent urge to constantly experiment and communicate at a frenetic pace pose challenges in lesson retention, especially in a conventional setting as a dance studio, where the mode of teaching is strictly transmissional. This paper investigated the efficacy of adapting a traditional instructional method in today's dance classroom. To develop an analytical understanding of movements, worksheets were tailor made to reinforce the lessons of weekly ballet classes. Anchored on studies that support the skills of coloring, tracing, and writing as means to create neural pathways to the brain, worksheets were devised to visually simplify foundational movement concepts, as well as to enhance focus and concentration. Findings indicated that learning objectives were reached in a shorter amount of time, which allowed the dance teacher to seamlessly progress into more advanced lessons, quicker. The shift from disembodied learning to embodied learning changed the relationship between the dance teacher and the student. No longer did the learning of dance remain simply transmissional, or a form of mimicry, from a linear teacher to student stimulus response model. The learning of dance became not only a physical response to the student's propensities; but also an intellectual and sensorial answer to his development as a dancer and human being.

Keywords: Learning Experiences, Student Learning, Learner Diversity

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The Problem and its Background

Generations Z (ages 10-24) and Alpha (ages 0-9) were born into a world where algorithms keep them from focusing intently on learning traditional skills and art forms which require intense concentration at a very young age. Their urge to click, scroll, and swipe at a frenetic pace, with a view towards easy gratification, potentially reduces participation in physical activity (2019), specifically the learning of a highly disciplined craft such as classical ballet. How does a teacher of dance therefore, adapt the traditional curriculum to accommodate students raised by technology (Giguere, 2011)? Does a compromise on traditional dance education exist?

Background of the Study

Compared to twenty (20) years ago, there are less dance students today who persevere in the craft (2011), the decline largely due to the disinterest of the youth to learn an art form that requires mindful, cognitive and physical coordination at the onset, which is to be sustained for many years (Schulten, 2018).

The way children learn today has changed dramatically due to technology (Patel, 2017; Arya, 2019). Over the last few years, researchers around the world have raised concerns about the impact of smartphones and media multi-tasking on concentration. The ability to focus is not just a value in itself, but functions as the gateway to higher forms of learning, especially memory, which in turn leads to deeper comprehension. There must be a solution to address Generations Z and Alpha's current eight (8) second attention span (Patel, 2017); a simple quick-fix that prevails on his current propensities, to keep him in the studio, learning and developing his love for dance, and inadvertently teaching him to process information that he will need to survive onstage and in the world (*, 2011).

Aside from introducing the movement vocabulary in smaller chunks, there are other "old-school" solutions available to today's dance teacher. Several studies support the skill of writing as a means to create neural pathways to the brain, as well as to develop eye-hand coordination and self-discipline (Macias, 2013; Nowak, 2017). Tracing words enables young children to make accurate movements required for drawing and writing and other fine motor movements, and greater advancements in retention and comprehension (Mattson & Kratochwill, 1970; Martina, 2017). And no less than Carl Jung, the founder of analytical psychology, extolled the intellectual benefits of coloring, emphasizing that it engaged areas of the brain that enhanced focus and concentration (Mantzios and Giannou, 2018).

Perhaps combining both writing, tracing, and coloring in worksheets, tailor-made to supplement the work at the studio, can likewise pique and enhance Gen Z and Alphas' learning of a highly regimented art form such as classical ballet. Inclusion of such in beginning ballet classes would not only innovate the teaching of the craft, it would ultimately ensure that the world will never be without its corps d' ballet.

Review of Literature and Studies

This review is organized to first give readers a seminal understanding of the traditional teaching style in a classical ballet construct and its disconnect to the current Generation Z and Generation Alpha students, given their inability to focus and propensities toward visual media. This review then moves on to Generations Z and Alphas' learning styles and how the

activities of tracing and coloring can address their leanings toward a highly visual syntax and likewise enhance their cognitive abilities toward lesson retention and comprehension. The concept of inculcating both activities of tracing and coloring in worksheets aimed to strengthen knowledge of beginning movement vocabulary is introduced as an exploratory strategy, cognizant of the implications of the generational characteristics of today's student on the classical ballet teaching construct.

Classical Ballet Teaching Style vis-à-vis Today's Student

Classical ballet technique is commonly taught through the use of authoritarian practices and largely follows a transmissional model of teaching, whereby the student learns by imitating movement vocabulary modelled by the teacher (Morris, 2003; Alterowitz, 2014). Methods of training have hardly changed since the middle of the last century; the standard being that lessons are entirely teacher led. The construct of the ballet dancer as a docile subject juxtaposed to an all-knowing instructor is impeded by the generational characteristics of today's young dance students (Hamilton, 1998; Rossum 2004; Carmichael, 2018).

The classical ballet teaching construct operates within the Banking Concept in Education, a concept originally explored by Brazilian philosopher, Paulo Freire in his 1968 book, "Pedagogy of the Oppressed." The "banking" concept of education is a method of teaching and learning where students simply store the information relayed to them by the teacher (Freire, Ramos, Shor, and Macedo, 2018). Paulo Freire developed this model in his attempt to describe and critique the traditional education system. The name refers to the metaphor of students as containers into which educators must put knowledge (Freire, Freire, Barr, and Freire, 2017).

Related to the aforementioned Banking Concept, the classical ballet teacher uses an authoritarian teaching style, enforcing classical ballet precepts with rigorous control (Enghauser, 2003; Carmichael, 2018). The learning of such highly specialized craft invokes a hierarchical way of learning, modeling superordinate and subordinate positions in the dance studio (Aceto, 2012).

Generation Z and Alphas' Inability to Focus

Accustomed to constant stimuli from smartphone application and streaming platforms, Generations Z (ages 10-24) and Alpha (ages 0-9) are now unable to concentrate in class. The ubiquity of technology in their lives (2018) has shrunk their attention span to eight (8) seconds (Patel, 2017). Dance teachers, and all teachers for that matter, must communicate in a language that engages and communicates content to today's student in understandable ways. Clearly, Generation Z and Generation Alpha need to be communicated using new syntax, with perhaps multi-modal approaches (Giguere, 2011).

Generation Z and Alphas' Learning Style

In an era of information overload, Generations Z and Aphas' messages have increasingly become image-based, communicating with emojis, memes, and animated Graphics Interchange Formats (GIF) (Arya, 2019), influenced greatly by the visual rather than the verbal (2019). Being born into a world of iPhones (The word of the year in 2010 when Generation Alpha were first born was "app." (2011)), YouTube (There are now 100 hours of YouTube videos uploaded every minute (Welch, 2013)), and Instagram (where life is

photographed and shared instantly and globally), Generation Z and Generation Alpha have become “Screenagers,” who multi–screen and multi–task (2019). They are kinesthetic, visual, and interactive learners (2018; Arya, 2019). Lessons do not “stick” unless they see them (Knoll, Otani, Skeel, and Horn, 2016; 2018).

Visual Activities

Given the foregoing, utilizing the visual element in the dance studio therefore, could have a greater impact of catching their attention and sustaining it for the period of the lesson (Lachman).

Tracing Letters

Visual activities that require the simultaneous use of hands and eyes, such as tracing letters, first introduced in pre–school, is a valuable eye–hand coordination exercise, as it calls for uniting visual and motor skills (William, 2015). The eyes direct attention to a stimulus and help the brain understand where the body is located in space. This is the beginning of self–perception. The hands simultaneously carry out a determined task based on the visual information the eyes receive. This is the beginning of spatial–perception.

Tracing words enables children to make accurate movements required for drawing and writing and other fine motor movements as well as developing retention and comprehension skills (Mattson and Kratochwill, 1970). Tracing, which later on leads to writing, develops complex cognitive abilities that integrates both thinking, sensation, and motor control (Nowak, 2017), skills greatly required not only on stage but in day–to–day life.

Dr. Jane Vincent, a researcher at London School of Economics and Political Science, conducted a survey to assess the merits of digital note taking over pen and paper. Students across ten European and Asian countries confirmed that digital technology was fundamentally important to them for studying and for researching data, and presenting their finished work. The same students, however, consistently reported that their ability to retain knowledge was far higher when using pen and paper. Creating handwritten notes provided more internal ability to access information at a later stage (Promethean, 2019).

Coloring

Further building on developing eye–hand coordination, the activity of coloring, the act, motion, and precise grip involved, aid in the development of the muscles of the fingers, hands, and wrist, which later build into fine motor skills (Przybyla, et al., 2019). Furthermore, the proprioceptive system comes into play when a child attempts to vary the amount of pressure exerted to shade specified areas (Mantzios and Giannou, 2018). Physiologically, the act of coloring uses both left and right hemispheres of the brain, enhancing specific areas of the cortical regions related to focus, problem–solving, and concentration (Bramão, Faisca, Forkstam, Reis, and Petersson, 2010; 2018).

Worksheets

To engage students more fully, today’s educators have resorted to creating worksheets to buttress understanding of foundational concepts quicker (Lee, 2014). Again, using Generation Z and Generation Alpha’s visual inclinations, worksheets with simple coloring

and tracing activities, strengthen their learning out-of-class (Amran and Man, 2018). Worksheets are geared towards personalized learning, targeting them precisely to the group by assessing their progress and tailor making them towards the comprehension of the course material (Lee, 2014; Ruecker, Shepherd, Estrem, and Brunk-Chavez, 2017).

The Need to Re-define the Pedagogy of Beginning Ballet Teaching

For Generation Z and Generation Alpha, having a seamless, online experience is more important than learning movements that require focus and concentration at the onset. Navigating the critical issues of the current generational demographic, calls for changes that engender better teaching and learning in the dance studio (Stinson, 2010). There is a need to explore practical teaching strategies in the classical ballet teaching construct that use Generations Z and Generation Alphas' strengths and weaknesses toward his mastery of beginning dance skills and self-efficacy (Choi and Kim, 2014).

Challenged by the call to innovate the classical ballet teaching construct, worksheets specifically designed and contextualized for use in the dance studio, provide brief, but succinct, descriptions of basic, classic positions, foundational movements, as well as explanations to proper etiquette essentials for dance practice. The factual illustrations to color, are aimed to help young students understand what they are learning, allowing them to additionally analyze the movement concept, which in turn, increase their comprehension.

Re-defining the content of the classical ballet teaching construct by the introduction of worksheets will transform the dance classroom into one that involves far more than dance technique and control, and the recognition that teachers need a wide range of teaching strategies to motivate and engage the current body of students. Fully engaged students allow the teacher to harness the students' multiple intelligences (nonverbal spatial and musical, linguistic and intrapersonal intelligences) required to the learning of a highly specialized art form (Giguere, 2011; Choi and Kim, 2014; Arya, 2019).

Synthesis

As a function of generational markers, and the ubiquity of technology in their lives (2018), children in classrooms today, have an attention span of eight (8) seconds (Patel, 2017), and singularly approach all tasks from a visual perspective (Lachman). Considering the aforementioned, the pedagogy of beginning ballet teaching is re-defined by introducing worksheets aimed towards strengthening retention and comprehension of lessons. This study explores innovating the classical ballet construct from a strictly transmissional model of teaching and learning to shifting to a different paradigm: that of embodied knowing as opposed to a disembodied knowing of foundational movement concepts.

Theoretical Framework

This study endeavored to examine the subject of generational diversity, and its impact on the classical ballet teaching construct, through the lens of a pre-existing and well-established theory.

In view of the foregoing, this study was anchored on the Strauss-Howe Generational Theory, also known as the Fourth Turning Theory or simply the Fourth Turning, which was created by authors, William Strauss and Neil Howe, which describes a theorized recurring generation

cycle in American history (Strauss and Howe, 1992). According to the theory, historical events are associated with recurring generational personas (archetypes). Each generation unleashes a new era, called a turning, which lasts around twenty to twenty two (20–22) years, in which a new social, political, and economic climate exists, which in turn result to distinctly dominant, behaviors and attitudes which define that particular era. A generation produces an aggregate persona of people born every 20 years such as Baby Boomers (born between 1946 to 1964), Generation X (born between 1965 and 1976), Millennials (born between 1977 and 1994), Generation Z (born between 1994 and 2004), and Generation Alpha (born from 2010 to 2025) (Strauss and Howe, 1998).

The framework was contingent on the premise that a symbiotic relationship exists between historical events and generational personas. Strauss–Howe’s Generational Theory was used as a measure by the researcher to provide her with the schematic reminder that today’s behaviors in any teaching–learning construct are radically influenced by crises and/or “triggering” world events (Strauss and Howe, 1998), and that such behaviors should be used as a diving board to engender better teaching and learning.

Utilizing Strauss–Howe’s Generational Theory, and for the purposes of this study, diagrammed below are Generations Z and Alphas’ characteristics in diagram form:

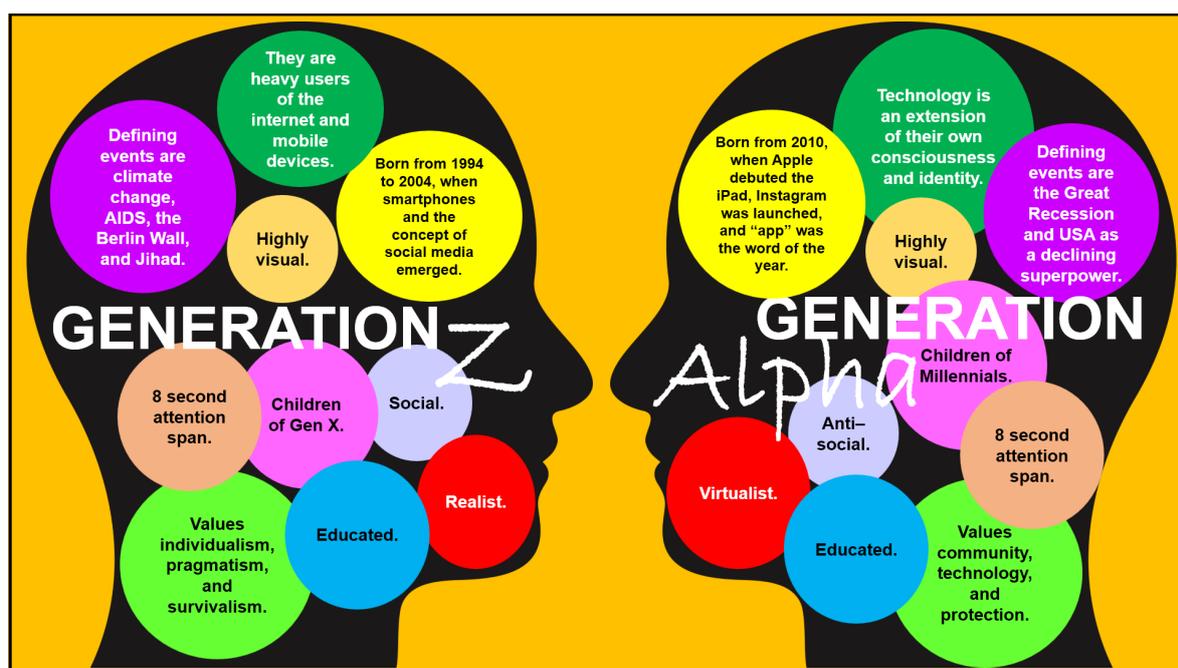


Figure 1: Generation Z and Generation Alpha Profiling Based on Strauss–Howe’s Generational Theory

Conceptual Framework

This study postulated that by addressing today’s beginning ballet students’ visual learning preference and eight (8) second attention span, with well–designed worksheets, students can be more fully motivated and engaged, retaining and comprehending lessons quickly. This study additionally hypothesized that well–designed worksheets can draw on students’ continued interest. It was furthermore postulated that when instructional materials are well–matched to learning outcomes, that are both aligned to Generation Z and Generation Alphas’ characteristics and preferences, an entirely new way of teaching and learning emerges. This

study posited a shift from disembodied knowing to embodied knowing, which innovates the “old” transmissional model of the classical ballet teaching construct (Hamilton, 1998; Rossum 2004; Carmichael, 2018).

The conceptual framework model follows.

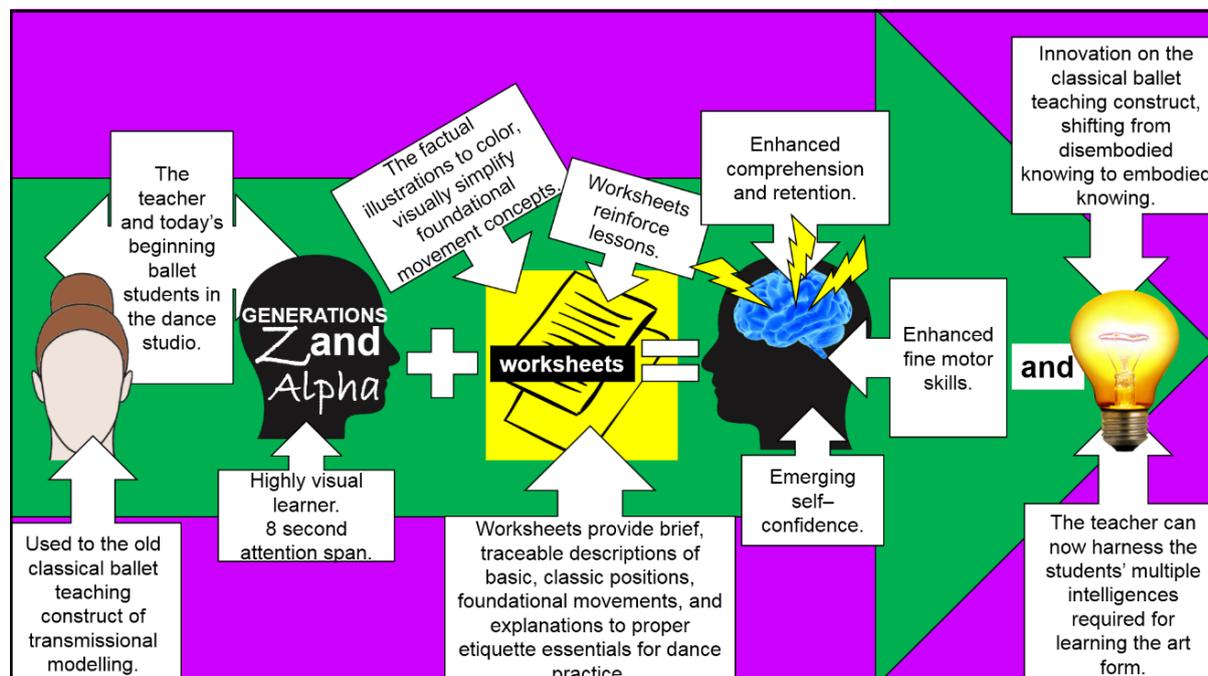


Figure 2: Conceptual Framework of the Study. Diagram of Generations Z and Alphas' Characteristic Visual Preference for Learning and 8 Second Attention Span (Strength and Weakness), Subjected to Worksheets Aligned to His Strength and Weakness, to Enhance Comprehension, Retention, Fine Motor Skills, and Self-Confidence. Classical Ballet Teaching Construct, Shifting from Disembodied Knowing to Embodied Knowing.

Statement of the Problem

Given Generation Z and Alphas' visual learning preference and current eight (8) second attention span, this study intended to explore the association between worksheet usage in the dance studio, to enhance Generation Z and Alphas' comprehension skills as well as supplement learning in beginning ballet classes. Specifically, the following questions were addressed:

1. Does worksheet usage improve instruction in the classical ballet teaching construct?
2. Do written instructional materials, such as worksheets, positively impact students' retention and comprehension in the dance studio?
3. Do the worksheets supplement enhancement of fine motor skills?
4. What are the implications of using worksheets in the classical ballet teaching construct in the area of active learning and continued interest in dance?

Significance of the Study

Much of the prevailing research regarding the behavior of Generation Z and Generation Alpha, takes a systemic perspective focusing as a whole, on their characteristics and preferences and how those impact today's classroom (2019). This study however, was

ostensibly interested in how that same profile, can be aligned to the learning of a highly specialized art form of classical ballet.

Insomuch as the lifeline of any art form is having a new generation to develop, the dance industry and its teachers themselves, thus serve to gain from this research effort. Not having students, interested or excited enough to continue training will ultimately result to not having corps d' ballets in the future. Choosing expediency over hard work, Generation Z and Generation Alpha are believed to abandon those art forms that require more time and effort (Schulten, 2018); they are choosing to learn badminton over tennis, street dance over classical dance, the former are easier to acquire in the skills domain, while the latter require more time, consistency, practice, and grit.

While increased technology has shifted many aspects of the learning environment in the dance studio, the use of worksheets as scaffolding to students' learning of foundational movement concepts, will inevitably impact the classical ballet teaching construct from one that is strictly transmissional, to one that espouses embodied learning. The old pedagogy is challenged in the area of efficacy and sustainability of the art form. The profile of the today's beginning ballet student requires the construct to deviate from the traditional and explore alternative means to keep the youth within the confines of the dance studio, learning and honing his craft towards professionalism. The new dance pedagogy will ultimately embrace the academic concept of providing instruction based on individuals' preferred learning styles (Rogowsky, Calhoun, and Tallal, 2015).

The findings on worksheet usage contextualized for beginning ballet classes, should be considered for educational policymaking that bolster the lesson retention and comprehension of today's beginning ballet students in a consequential and sustainable way. Worksheet usage as instructional materials, can further create educational modules in tertiary level institutions, for aspiring dance teachers.

Moving away from the dance industry and its teachers as the unequivocal beneficiaries to this study, the findings of this study could spur more concerted studies towards exploring the pedagogy of the classical ballet teaching construct as well as the methods and/or strategies in keeping Generation Z and Generation Alpha engaged and motivated in the dance studio.

Definition of Terms

GENERATION Z, or Gen Z for short, is the demographic cohort succeeding the Millennials. Born between 1994 and 2004, Generation Z has used digital technology since childhood and is comfortable with the Internet and social media, but is not necessarily digitally literate (Patel, 2017; 2018; Arya, 2019).

GENERATION ALPHA was born from 2010 through 2025, they are the first generation entirely born within the 21st century. Technology for Generation Alpha is not something separate from themselves, but rather, an extension of their own consciousness and identity (Patel, 2017; 2018; 2019).

LEARNING STYLE refers to individual preference for mode of instruction or study that is most effective (Rogowsky, Calhoun, & Tallal, 2015).

VISUAL LEARNING STYLE, often referred to as the spatial learning style, is a way of learning in which information is associated with images. This learning style requires that learners first see what they are expected to know (Knoll, Otani, Skeel, & Horn, 2016).

CLASSICAL BALLET TEACHING CONSTRUCT refers to the traditional way of teaching dance which is strictly transmissional modelling or mirrored guidance from the instructor (Hamilton, 1998; Rossum 2004; Carmichael, 2018).

LESSON RETENTION refers to the recall of learned information, stored in long-term memory in such a way that it can be readily retrieved in response to standard prompts (Divoll and Browning, 2010).

COMPREHENSION refers to the understanding of movement concepts and the ability to demonstrate such with accuracy and confidence (Mainwaring and Krasnow, 2010).

Scope and Delimitations

It was unfortunate that a lack of prior, research studies on this topic, could make this endeavor exploratory rather than explanatory in research design (2019); a particular limitation ascribed to the inevitable need for further research.

This study was limited to the worksheet usage of teachers in four (4) dance schools, École de Ballet Manille, Alabang Country Club Ballet, ESS Ballet Jeunesse, and the Elizabeth Seton School South Branch. The data collection and findings may or may not have necessarily lent themselves applicable to other dance institutions. This specific study however, may be pertinent to all dance schools that have highly specialized syllabi comparable to the aforementioned schools.

This study was also restricted to the time frame given of one (1) year, from March 2017 to March 2018, which was manifestly not lengthy enough to measure the longitudinal effects of worksheet usage, or to measure the phenomenon's change or stability within the sample. It would have been ideal to follow the progress of the same group of students over an extended period of time, thereby pinpointing the actual rates of comprehension and retention within the targeted population.

Research Methodology

This chapter elaborates on the research design, the participants, the sampling technique, the research instrument, the data gathering procedure, the treatment of the data, and ethical considerations. Due to the nature of the research design, other methodology parts are not included.

Research Design

This is a qualitative research using case study model, testing whether worksheet usage can be contextualized in the classical ballet teaching construct, to simulate retention and comprehension of foundational movement concepts. A focused group interview methodology, is thereafter implemented to collate and analyze data on the perceptions of the participating teachers on the efficacy of worksheet usage toward retention and comprehension skills of Generation Z and Generation Alpha students in beginning ballet

classes. Sousa (2014) stated that qualitative research is a powerful process of naturalistic inquiry that seeks in-depth understanding of current or prevailing status of events, things, or social phenomena. It focuses on the "why" rather than the "what" of social phenomena and relies on the direct experiences of human beings as meaning-making agents in their everyday lives.

This phenomenological study was conducted in a span of one (1) year, disseminating sixty (60) worksheets that were matched to the learning outcomes of the beginning ballet syllabi used in four (4) dance schools. Through focused group interviews and discussions, six (6) semi-structured questions zeroing on worksheet usage of Generation Z and Generation Alpha in the classical ballet teaching construct, were asked of teachers of the four (4) dance schools. The resulting data was organized according to prevalent themes, and analyzed furthermore in the context of Strauss-Howe's Generational Theory.

There were two (2) main foci in this study. First, determining whether worksheet usage can be contextualized in a classical ballet teaching construct; and second, whether worksheet usage can be a scaffolding tool on Generation Z and Generation Alpha beginning ballet students' learning.

Participants of the Study

Four (4), beginning ballet teachers, with at least, five (5) years of teaching experience prior to this study, from École de Ballet Manille, Alabang Country Club Ballet, ESS Ballet Jeunesse, and the Elizabeth Seton School South Branch, served as the participants of this study.

Sampling Technique

Since majority of dance schools in the Metro do not have a predetermined educational syllabus, prescriptive curriculum, or standardized method of instruction, the researcher zeroed in on acquiring data from four (4) dance schools that have actual time-bound curricula to test the validity of worksheet usage contextualized to the classical ballet teaching construct. The study therefore utilized the non-random sampling technique.

Research Instrument

The research instrument used are sixty (60) worksheets, given to one hundred (100) beginning ballet students spread across four (4) dance schools in the Metro, in a period of one (1) year. These worksheets were specifically designed to support the learning outcomes of beginning ballet syllabi. The worksheets had coloring and tracing activities which provide brief, but succinct, descriptions of basic, classic positions, foundational movements, as well as explanations to proper etiquette essentials or practices for beginning dance practice.

Semi-structured interviews or a pre-determined set of open questions that prompted discussions, explored the participating teachers' perceptions and contextual accounts on worksheet usage, which were the main data used to answer this study's questions. These were conversations with a purpose, otherwise known as in-depth interviews. These in-depth interviews were held during two (2) mutually convenient free times, lasting two (2) hours each time, the first held before worksheet usage in March 2017 and the second interview was conducted after a year of worksheet usage, in March 2018.

Validity and Reliability of the Instrument

An interview guide was prepared to triangulate the questions. This interview guide was validated by a dance program chairman in Manila. Two (2) other instructors with supervisory positions from another dance program located at a university in Quezon City, provided cross verification of the aforementioned six (6) interview questions.

The interview guide follows:

Interview Session No.	Question No.	Questions
1	1.1	What is the usual profile of students in today's beginning ballet classes?
	1.2	What bearing does the profile of today's beginning ballet students have on beginning ballet classes?
	1.3	What is the estimated ratio of students remaining in the training program in one (1) year?
Interview Session No.	Question No.	Questions
2	2.1	Were the worksheets well-matched to the learning outcomes of the beginning ballet syllabus?
	2.2	Does worksheet usage change the classical ballet teaching construct?
	2.3	What is the estimated ratio of students remaining in the training program in one (1) year, after worksheet usage?

Table 1: Semi – Structured Interview Questions

Data Gathering Technique

The researcher sought permission from the directors of École de Ballet Manille, Alabang Country Club Ballet, ESS Ballet Jeunesse, and the Elizabeth Seton School South Branch, to involve their beginning ballet teachers in a worksheet usage study and thereafter hold interview sessions with the aforesaid teachers at the beginning and end of one (1) year of implementing the worksheet modules. The participating teachers were requested to engage in focused group interviews which consisted of a series of six (6) pre-determined questions which were responded to in the same order. (Please see Table 1: Semi-Structured Interview Questions.) The interviews were documented by video and audio recording, and transcribed thereafter.

A thematic analysis was conducted on the transcriptions, extracting factors which showed a relationship between worksheet usage and achievement, first searching for themes, then reviewing themes, and finally defining and naming themes.

It was hoped that the chosen method would result in compelling discussions on worksheet usage as a plausible resource for teachers of Generation Z and Generation Alpha beginning ballet students, as well as forging creative solutions to innovating the classical ballet teaching construct.

Presentation, Analysis, and Interpretation of Data

This chapter presents the data gathered, its analysis and interpretation. This study yielded the following data:

Presentation and Analysis of Data

As per the participating teachers' documents on file, following are brief descriptions of the participants' profiles at the time of this study.

Participant No. 01 is female, forty-five (45) years of age, holds an undergraduate degree in Literature, worked as an apprentice for a local dance company, and owns her own dance studio. She is also affiliated with a renowned dance syllabus organization outside of the country. Participant No. 01 has been teaching beginning ballet classes for twenty three (23) years.

Participant No. 02 is female, thirty-five (35) years of age, holds an undergraduate degree in Business, and is a certified Pilates instructor. She apprenticed at a local dance company, owns her own dance studio, and teaches at two (2) other dance schools. Participant No. 02 has been teaching beginning ballet classes for twelve (12) years.

Participant No. 03, is female, thirty-one (31) years of age, holds an undergraduate degree in Business, worked as a professional dancer for a local dance company, and is currently head of the marketing division of a major fast food chain. Participant No. 03 teaches part-time for two other dance schools and has been teaching beginning ballet classes for nine (9) years.

Participant No. 04, is female, twenty-three (23) years of age, holds an undergraduate degree in Early Childhood Education, currently a preschool teacher in a renowned school in South of the Metro, and is a dancer at a contemporary dance company. Participant No. 03 has been teaching beginning ballet classes for five (5) years.

Theme 1: Inability of Today's Beginning Ballet Students to Focus and Retain Lessons

Majority of this study's participating teachers consistently replied that today's beginning ballet students, composed of Generation Z and Generation Alpha cohorts, are challenging to handle due to their inability to focus (Patel, 2017; Arya, 2019). The difficulty of retaining information is startling (Ruecker, et al, 2017). Despite a more developed visual ability (Lachman), beginning ballet students today, so accustomed to switching between short bursts of information as displayed on social media, have acquired an inability to focus on or analyze basic pieces of information required to execute the simplest movement vocabulary (Patel, 2017; Schulten, 2018; Arya, 2019).

Theme 2: A Need to Change the Old Way of Teaching Classical Ballet Due to the Current Student Profile

The participants alluded to the evident need for a specialized approach to educating today's Generations Z and Alpha students who have very pronounced learning proclivities (Knoll, et al, 2016; Patel, 2017; Schulten, 2018; Arya, 2019). The classical ballet teaching construct needs revisions to include multi-sensory teaching techniques and interventions to help them

progress through the required beginning ballet movement vocabulary as well as keeping them engaged in the dance studio (Morris, 2003; Aceto, 2012; Holmes, 2014).

Theme 3: The Ballet School Dropout Crisis

There is a drop-out crisis in beginning ballet classes which, if not properly addressed, will impact a stage with no corps d' ballet in the future (2011). Today's Generations Z and Alpha are disinterested to learn a craft that requires mindful, cognitive and physical coordination at the onset (Schulten, 2018), and involves years of focus, determination, consistency, and practice (Patel, 2017; Arya, 2019). The proclivities of today's students imply new ways of teaching dance (Enghauser, 2003; Alterowitz, 2014; Choi and Kim, 2014).

Theme 4: Worksheet Usage Was Tailored to Content

Worksheets were thought to be well aimed at the Generations Z and Alpha target audience. They were purposeful in their building of skills and recalling mechanics of basic movements. They were "effective," which means they adequately accomplished or produced the intended or expected result and left a vivid or deep impression on the users (Lee, 2014; Martina, 2017; Amran and Man, 2018).

Theme 5: The Viability of Worksheets in the Dance Studio Setting

Teaching materials, in this case, worksheets, tailored to the content in which they are being used, supported student learning in the classical ballet teaching construct. Although worksheet usage is more the territory of pre-school classes, application of them in a similar teaching environment, fostered development of skills and sub-skills for both presentation and practice purposes (Lee, 2014; Martina, 2017; Amran and Man, 2018). The classical ballet teaching construct was not changed but enhanced, to successfully deliver learning outcomes of beginning ballet syllabi. Accommodation of such a teaching tool in the classical ballet teaching construct although unheard of, provides a new framework for beginning ballet classes which can expedite coverage of the content, and ensure that students record key items. Inclusion of simple coloring and tracing tasks not only abnegates student passivity; they trigger focus and retention of lessons (Bramão, Faisca, Forkstam, Reis, and Petersson, 2010; William, 2015; Przybyla, et al, 2019).

Theme 6: The Efficacy of Worksheet Usage to the Ratio of Retained Students

The estimated sixty one point seventy five percent (61.75%) drop out from beginning ballet classes, which seems to be atrocious by any standards (2011), are not thought to be so by the participants. They were in fact elated at the current retention rate when compared to other years. Although this study was admittedly not sufficiently robust to support more than the most general observations as to the impact of whether worksheet usage affect the retention and comprehension of students in the dance studio, all four (4) participants unanimously pointed to the implementation of the worksheets as a decisive factor in the retention of their current students.

Data Analysis and Conclusions

The responses garnered from this study verbalized innermost reflections and autobiographical narratives of the participating teachers, on their experiences with Generations Z and Alpha, in

their respective beginning ballet classes. The focused group discussions additionally revealed valuations on the classical ballet teaching construct vis-à-vis the profile of today's students. These findings on worksheet usage contextualized for beginning ballet classes, should be considered for educational policymaking that bolster the lesson retention and comprehension of today's beginning ballet students in a consequential and sustainable way.

Through the participants' responses, the researcher identified elements that were perceived as significant behavioral learning changes of today's Generation Z and Generation Alpha beginning ballet students and a consequent call to enhance the classical ballet teaching construct for inclusion of worksheets expressly created to support beginning ballet syllabi, and instrumental to increased lesson retention and comprehension of the target audience.

Interpretation of Data through the Lens of Strauss–Howe's Generational Theory

As mentioned previously, this study was anchored on Strauss–Howe's Generational Theory which elaborates on the notion that a generation produces an aggregate persona of people born every 20 years (Strauss and Howe, 1992; Strauss and Howe, 1998), the point of this study's interest being, Generations Z and Alpha in beginning ballet classes. The participating teachers supported the findings on Generations Z and Alphas' inability to focus and retain lessons as a function of the ubiquity of technology in their lives (Patel, 2017; Arya, 2019). The current profile of today's beginning ballet students however, suggests introduction of innovative strategies (Mainwaring and Krasnow, 2010; Stinson, 2010) to produce learning experiences matched to individuals' learning styles (Rogowsky, Calhoun, and Tallal, 2015; Knoll, Otani, Skeel, and Horn, 2016).

The Implication of Reform in the Classical Ballet Teaching Construct

The classical ballet teaching construct, that being linear and mechanical, emanating from teacher to students as mute receptors of information (Freire, Freire, and Freire, 2017; Freire, Ramos, Shor, and Macedo, 2018), requires reform in the face of today's students. Generations Z and Alphas' learning reflexes are a function of their great exposure to technology (Patel, 2017; Arya, 2019). The existing construct therefore needs to optimize its course content with more innovative channels of communication to reach them (Morris, 2003; Aceto, 2012; Holmes, 2014). The more natural solution would be to include interactive tools and digital practices (Arya, 2019); but these have no place in the process of acquiring and honing physical skills and should not detract attention from the importance of traditional pedagogy and a strong teacher–student bond. Considering the profile of today's beginning ballet students, what is necessary at this point, is to facilitate learning beyond studio walls (Branscombe, 2019). The inclusion of instructional materials as alternative channels of teaching today's Generations Z and Alphas, given their innate disadvantages to thrive in a normal classical ballet teaching construct, is initially proposed as a reform to the former. Given the participating teachers' frustrations in dealing with today's generational cohorts as well (Holmes, 2014), worksheets with tracing and coloring activities that extend the range of vicarious learning experience (Mattson and Kratochwill, 1970; William, 2015; Amran and Man, 2018; Mantzios and Giannou, 2018), seem to be a welcome addition to the teaching–learning paradigm in today's dance studio.

The Implication of a Shift from Disembodied Learning to Embodied Learning

Related to the foregoing, there is an implied shift to embodied learning, integrating the mind into the body's sensorimotor systems (Bresler, 2004; Branscombe, 2019), from disembodied learning, as a product of linear and mechanical teaching (Freire, Ramos, Shor, and Macedo, 2018). Instead of merely expecting the student to receive and store information like robotic receptacles; given the students' profiling, teachers use vivid, teaching tools to effect cognition integrating the body in the learning process (Trapp, 2008; Spector and Park, 2017).

Worksheet usage with coloring and tracing activities, which naturally unites both visual and motor skills (William, 2015; Mantzios and Giannou, 2018), promote the abovementioned embodied learning in the dance studio. The data, which illustrates positive correlation between worksheet usage and lesson retention and comprehension of beginning ballet students, conveys strong themes around facilitating a change in practice, and changing philosophies and practices. A pedagogical change in the form of worksheet usage toward embodied knowing, is a process that needs to be supported by a community of practice intent on improving classical ballet learning across multiple cognitive domains.

The Turnover Rate of Beginning Ballet Classes

Interestingly, another positive outcome of worksheet usage was the retention of a higher number of students in beginning ballet classes.

Based on gymnastics, cheerleading, dance, and martial arts industries, there is no such thing as a "normal" dropout rate for any age group. There is, however, a minimum turnover of approximately twenty percent (20%) that almost every facility experiences in its recreational programs (Giguere, 2011). Statistics show that overall retention is almost completely dependent upon the effort and energy that the owners and instructors put into the program (Holmes, 2020).

Based on this study's findings however, the sixty one point seventy five percent (61.75%) turnover rate, although falling far behind the aforementioned estimation of the twenty percent (20%) turnover rate mentioned in Guigere's study, in 2011, was still thought of, to be encouraging by the participants, in light of the optimistic effect of the inclusion of worksheets contextualized for use in the classical ballet teaching construct as opposed to past years without worksheet usage. There seems to be a positive correlation between worksheet usage and students' retention in the Philippine dance studio setting.

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Reading Comprehension Proficiency of English Major Students

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Abstract

This study aims to investigate the reading comprehension ability of English major students using the online Thai Reading Evaluation and Decoding System (Thai-READS) and to examine educational levels and gender as predictors of EFL students' reading comprehension ability. The system comprises three components: the Encoder, the Reading Matrix and the Decoder to map reading comprehension ability using a cross-reference of the Reading Matrix and the Decoder. The participants consisted of 362 English major students from one public university in Bangkok, Thailand. Descriptive statistics (i.e., percentage, mean, and standard deviation) was used to describe students' general reading performance while inferential statistics (i.e., t-test and one-way ANOVA) was used to test the hypotheses. The main findings revealed that a majority (59.94%) of the students performed satisfactorily at Band 4. However, only a small number of students were categorized into Band 5 (25.16%) and Band 6 (3.04%). The findings from one-way ANOVA affirmed that there were statistically significant differences in the Thai READS scores among all educational levels (Year 1–Year 4), $F(3, 358) = 20.42, p = 0.00$. An independent-samples t-test was then conducted to compare the scores for males and females. There was no significant difference in the scores for males ($M = 44.0, SD = 7.07$) and females ($M = 42.80, SD = 5.95; t(353) = 1.49, p = 0.14$, two-tailed). Although the students' average reading performance was at Band 4, effective teaching interventions need to be implemented to enhance their reading comprehension ability.

Keywords: Thai Reading Comprehension Evaluation and Decoding System (Thai-READS), Reading Comprehension, English as a foreign language (EFL)

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Introduction

Reading comprehension ability in the English language is a vital skill to be mastered by the university students for academic and future occupational purposes (Hui, Saeed, & Khemanuwong, 2020). Despite its significance, Thai students have often experienced considerable difficulties in reading (Chomchaiya & Dunworth, 2008). It has been evidenced that without effective reading strategies and assessment– foreign language learners found it problematic to overcome reading difficulties and achieve comprehension. In the Programme for International Student Assessment (PISA) in 2018, Thai 15-year-old students' average score (393 points) was lower than an average of 487 points in OECD countries (OECD, 2018). This infers that reading comprehension among the Thai students would be at an unsatisfactory level. The low performance of Thai high school students in their reading achievement suggests that in advancing to the tertiary level, undergraduates would still need ample guidance to improve their reading comprehension ability.

Moreover, Educational Testing Service (ETS), the world's largest organization for educational testing and assessment based in Princeton, New Jersey, USA. ETS has issued reports on the results of TOEFL Internet Based Test. In TOEFL IBT, the details of sections and total score means for Thailand in 2010, 2012, 2014, and 2017 are presented in Table 1.

Table 1: Results of TOEFL Internet-Based Test (IBT)

Years	Reading (30)	Listening (30)	Speaking (30)	Writing (30)	Total (120)	Rank	Total Countries (Asia)
2010	18	19	18	20	75	21	33
2012	18	19	19	20	76	23	35
2014	18	19	19	19	74	22	35
2017	19	20	19	20	78	20	35

Source: ETS's reports in four different years

As shown above, among the four English skills, reading seems to be the weakest skill for Thai students. Most of the Thai undergraduates are reported to be experiencing difficulties in employing reading strategies (Akkakoson & Setobol, 2009). In addition, Chomchaiya and Dunworth (2008) found that while the students appeared to be motivated to improve their reading comprehension ability, they have not yet fully developed their reading skills.

Like other EFL undergraduates, English major students are expected to process and comprehend a large volume of texts in English from sources of journals and textbooks. As supported by a study of Chairat (2016), the workplace required business reading and translation skills to perform their jobs. Due to this reason, it is undeniable that English reading skills are important and highly expected by businesses and organizations. The stark findings of the level of reading comprehension ability of Thai students further warrant a closer scrutiny into benchmarking English major undergraduates' reading performance more accurately.

Literature Review

Schema Theory and Contextual Bias in Reading Comprehension Ability

As previously discussed, reading comprehension ability is a vital skill for English learners. In the endeavour to identify students' reading comprehension ability, the reading literature

identifies schema as the basis for cognition and information processing (Axelrod, 1973). Comprehension refers to the ability to perform reading tasks of going beyond the words, understanding the ideas and the relationships between ideas conveyed in a text (McNamara, 2007). The readers' comprehension ability could be differentiated into high and low reading performers depending on how well the readers could perform the comprehension tasks. Readers are often guided by their previous experience and knowledge of the content area of a text in their attempt to comprehend the written text, which is regarded as content schemata (Khemanuwong, Kho, Mohamed, Ismail, Saeed, & Uampittaya, 2020). The schema theory assumes that a written text does not carry meaning by itself (An, 2013). It rather gives a direction to the readers in the retrieval and construction of meaning from their prior knowledge or schemata (Rumelhalt, 1980).

Apart from the readers' ability to activate content schemata, students' reading comprehension ability mainly relies on how well readers could relate the text to their cultural schemata and culturally based clues (Floyd & Carrell, 1987). In test-taking, the literature has identified the positive effects of addressing cultural schemata in improving test-takers' reading comprehension ability. Sasaki (2000) conducted a study on Japanese first-year university students in answering cloze text to examine how cultural schemata could be activated to influence students' comprehension and test-taking processes. Regarding the undergraduates' effort to understand a text, the study suggested that the students who answered culturally familiar version of the test could perform significantly better than those who received culturally unfamiliar version of the test.

Hence, the present study is based on the widely accepted argument that readers perform better with culturally familiar texts. We argue that when readers are given texts fitting to their cultural schema, contextual bias which could confuse or mislead readers' comprehension ability would be reduced. In our study, we employ the Thai-READS, which eliminated the contextual bias in the instrument. By providing the test instrument designed to address the contextual bias, the test-takers' mastery could be enhanced (Khemanuwong, Mohamed, & Ismail, 2018).

Research Objectives

This study primarily aims to investigate the reading comprehension proficiency of English major students which are assessed by the Thai-READS. More specifically, the study addressed three research objectives (ROs) as follows:

RO1: To investigate general reading comprehension ability of English major students.

RO2: To determine a statistically significant difference in scores on reading comprehension ability among English major students in different years of study.

RO3: To determine a statistically significant difference in scores on reading comprehension ability between male and female English major students.

Research Questions

The following research questions (RQ) are guided to achieve the aims of the present study:

RQ1: What is general reading comprehension ability of the English major students measured by the Thai-READS?

RQ2: Is there a statistically significant difference in mean scores on reading comprehension ability among English major students in different years of study?

RQ3: Is there a statistically significant difference in mean scores on reading comprehension ability between male and female English major students?

Hypothesis

Null hypotheses (H_0) for the two corresponding with the last two research questions are formulated as follows:

H_{01} : There is no statistically significant difference in mean scores on reading comprehension ability among English major students with different years of study.

H_{02} : There is no statistically significant difference in mean scores on reading comprehension ability between male and female English major students.

Research Methodology

The present study used quantitative research approach to determine reading comprehension ability of English major students. In the SPSS program, some statistical techniques including descriptive (i.e., mean, standard deviation, and percentage) and inferential statistics (i.e., t-test and one-way ANOVA) were used to analyse the data.

Participants

A total of 362 English major students of King Mongkut's Institute of Technology Ladkrabang (KMITL) participated in this study by purposive sampling. There were 85 males (23.48%) and 277 females (76.52%) participating in the present study. They were made up of 53 first-year students (14.64%), 52 second-year students (14.36%), 198 third-year students (54.70%) as well as 59 fourth-year students (16.30%).

Research Instrument

The online Thai-READS was employed to determine the English major students' reading comprehension ability. The Thai-READS eliminated the contextual bias to address differences in cultural, background and worldly knowledge. According to Khemanuwong et al. (2018), the content validity of the Thai-READS was high with 0.92 of the index of item objective congruence (IOC). Moreover, the Thai-READS had a high reliability of the test with 0.91 in the KR-20 coefficient. According to Boopathiraj and Chellamani (2013), questions in a test should indicate a level of difficulty. In the Thai-READS test, 60 MCQ questions are distributed with three difficulty levels— easy (25%), average (50%) and difficult (25%), with three sub-skills of reading comprehension— literal, reorganization, and inferential, which are incorporated in Barrett's taxonomy of reading comprehension (Lim, Eng, & Mohamed, 2014). As supported by the study of Hui, Saeed, and Khemanuwong (2020), the Thai-READS is suitable to assess university students' reading comprehension ability at any levels. By administering the Thai-READS to the English major students, the analysis of the reading comprehension ability could provide insights on which specific sub-skills of reading comprehension that the students would need to improve (Khemanuwong, Hui, Mohamed, Ismail, Saeed, & Uampittaya, 2020).

Data Collection Procedure

Prior to the onset of data collection, we requested an official permission from the university and the participants' consent. The steps were taken to ensure an ethical consideration in

conducting this research. Before the participants took the online test, we had a brief orientation session presenting the main purpose of the research. The participants were informed that their information was kept confidential and anonymous. To conduct the test, we have followed a guideline of time allocation in Mohamed et al.'s (2010) study which provided 70 minutes for the test-takers to complete the online test.

Research Findings

RQ1 aimed to explore general reading comprehension ability among English major students. As shown in Figure 1, it was found that most of the students (85.10%) showed their performance in English reading comprehension in Meet Standard group; 59.94% in Band 4 and 25.16% in Band 5. Furthermore, the results from quantitative data analysis using descriptive statistics revealed students' performance that there was three percent of the students clustered in Band 6 or as Above Standard achievers.

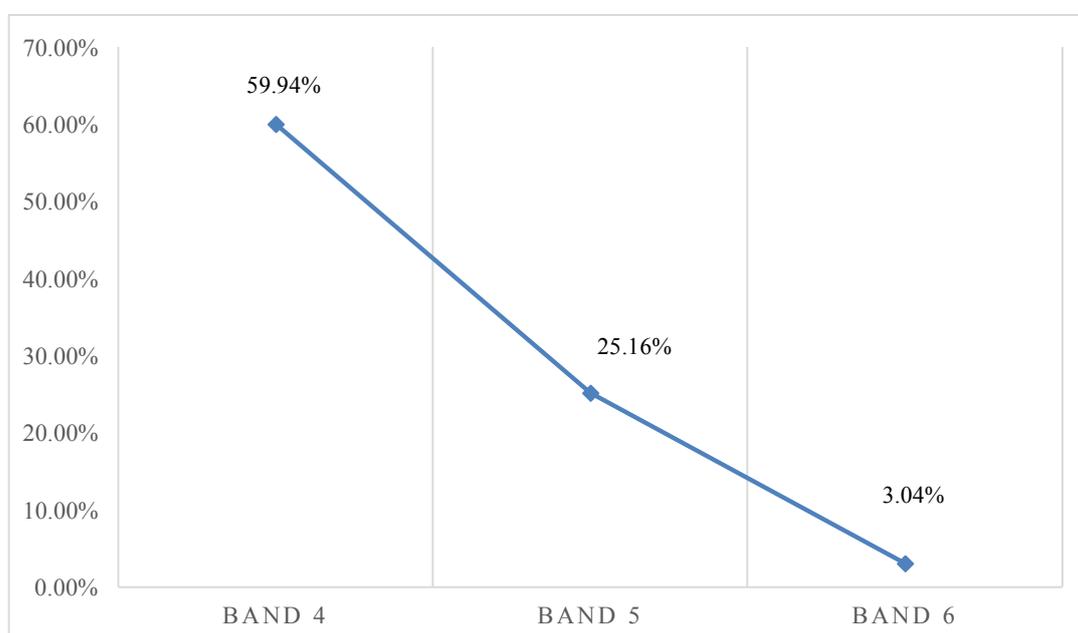


Figure 1: Students' Reading Comprehension Abilities in Different Bands

RQ2 aimed to determine whether there is a statistically significant difference in mean scores on reading comprehension ability between male and female English major students. The results in Table 2 showed that there was no statistically significant difference in mean scores on reading comprehension ability between male and female English major students, $t(353) = 1.50$, $p = 0.14$.

Table 2: Results of Independent Samples T-Test

		Levene's Test for Equality of Variances		T-Test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Scores	Equal variances assumed	0.482	0.488	1.50	353	0.14
	Equal variances not assumed			1.36	109.59	0.18

Supporting the results in Table 1, the analysis of descriptive statistics in Table 3 indicated that mean scores of male students ($M=44$, $SD=7.08$) and female students ($M=42.81$, $SD=5.96$) were not significantly different. Therefore, the first null hypothesis failed to be rejected.

Table 3: Results of Mean Scores

Gender	Mean	Standard Deviation	Number of students
Male	44.00	7.08	85
Female	42.81	5.96	277

RQ3 examined if there is a statistically significant difference in mean scores on reading comprehension ability among English major students in four different years of study. Before using the one-way ANOVA, a preliminary assumption of homogeneity of variances was tested and the results showed that homogeneity of variances was not violated since p value was greater than 0.05 as shown in Table 4.

Table 4: Results of Homogeneity of Variances

Levene Statistics	df1	df2	Sig
1.670	3	358	0.173

Table 5 reported the results of the one-way ANOVA and indicated that there was a statistically significant difference in mean scores on reading comprehension ability among English major students in the four different years of study, $F(3, 358) = 20.42$, $p = 0.00$. Thus, the second null hypothesis was rejected.

Table 5: Results of the ANOVA

	Sum of Squares	df	Mean of Squares	F	Sig.
Between groups	2061.160	3	687.053	20.422	0.000
Within groups	12043.933	358	33.642		
Total	14105.094	361			

As illustrated in Table 6, the results of multiple comparison using Tukey HSD indicated that mean scores between first-year and second-year students, between first-year and third-year students, between first-year and fourth-year students, between second-year and third-year students, between second-year and fourth-year students, as well as between third-year and fourth-year students showed significant differences since p values were less than 0.05. However, it was also detected that mean scores of second-year and third-year students did not show a significant difference.

Table 6: Results of Multiple Comparison Using Tukey HSD

(I) Years	(J) Years	Mean Difference (I-J)	Standard Error	Sig.
1	2	-3.65*	1.13	0.00
	3	-2.47*	0.90	0.03
	4	3.59*	1.10	0.00
2	3	1.18	0.90	0.56
	4	7.25*	1.10	0.00
3	4	6.06*	0.86	0.00

Note. *The mean difference is significant at the 0.05 level.

The results of the one-way ANOVA further pointed out the extent to which different pairs of year of study were different. As reported in Table 7, first-year students' mean score ($M=41.85$, $SD=6.52$) was significantly lower than second-year students' mean score ($M=45.50$, $SD=5.25$) and third-year students' mean score ($M=44.32$, $SD=5.97$). However, the first-year students' mean score ($M=41.85$, $SD=6.52$) was significantly greater than fourth-year students' mean score ($M=38.25$, $SD=4.94$). Other than that, second-year students' mean score ($M=45.50$, $SD=5.25$) and third-year students' mean score ($M=44.32$, $SD=5.97$) was not significantly different. In contrast, second-year students' mean score ($M=45.50$, $SD=5.25$) was significantly greater than fourth-year students' mean score ($M=38.25$, $SD=4.94$). Also, it was found that third-year students' mean score ($M=44.32$, $SD=5.97$) was significantly greater than fourth-year students' mean score ($M=38.25$, $SD=4.94$).

Table 7: Results of Scores in Reading Comprehension

Years of Study	Mean	Standard Deviation	Number of Students
1	41.85	6.52	53
2	45.50	5.25	52
3	44.32	5.97	198
4	38.25	4.94	59
Overall	43.14	6.25	362

Conclusion and Suggestion

Generally, this study found that the English major students' abilities in English reading comprehension was in 'Meet Standard' group ($M=43.14$, $SD=6.25$) with Bands 4 and 5 as determined by Khemanuwong's (2019) criterion. Besides that, the present study indicated that male and female English major students' mean scores on reading comprehension were not significantly different. The findings in the study are contradictory to Phakiti's (2003) assertion, which suggests that a significant outperformance of males may exist because of the use of reading strategies and metacognitive strategies. Common interest in English is one of the factors that can explain the phenomenon in the present study. Since the participants studied in English major, they are likely to have common interests in English. Therefore, the effect of gender difference may not affect their abilities in English reading comprehension. Interestingly, this study detected that the students' different years of study showed a significant effect on abilities in English reading comprehension. Language learners with more years of study are expected to show better development in language learning. However, fourth-year students in this study showed significant low performance as compared to other different years of study. This is due to mastering of language skills in fourth year may not focus on reading skills. Normally, the students in fourth year have professional practicum in workplace. For this reason, it is suggested that lecturers implement teaching strategies which could improve retention of reading comprehension among the English major undergraduates. Moreover, future research should provide proofs with robust results to show better understanding of whether years of study could consider a factor predicting abilities of reading comprehension of students.

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Online Teaching Readiness of High School Teachers in Special Education

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Abstract

The advent of technology in the 21st century transformed the educational landscape initiating a shift from traditional face-to-face teaching to online teaching. Moving the classroom experience to digital platform poses a challenge on the online teaching readiness of teachers, more so in special education where the teachers' intensive guidance and specialized skills are matched to the specific needs of learners with special needs. Hence, this study aimed to determine the online teaching readiness of high school teachers in special education along course design, course communication, time management, and technical competence. With this, quantitative research design was employed and a questionnaire on faculty readiness to teach online was adapted and used. The results revealed that the level of online teaching readiness of high school teachers in special education is high in all of the four areas of online teaching competencies namely course design, course communication, time management, and technical competence. In this regard, the use of different modalities and other online platforms in teaching online should be reemphasized and considered in order to improve and maximize the online teaching competencies of high school teachers in special education.

Keywords: Special Education, Online Teaching, Readiness, Distance Learning, Faculty Preparedness

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Introduction

The recent developments and innovations in technology initiated the shift of educational trend to the prospect of online teaching. The movement of the classroom experience to online platform poses challenges in the teaching-learning experiences of students and educators, especially in special education. Hence, determining the online teaching readiness of teachers in special education would help appraise the delivery of instruction in an online setting. This study can help curriculum developers understand the needs of the teachers and create plans and strategies that may help students with disabilities based on the online teaching specific needs and requirements. Moreover, this can help educators make necessary adjustments in their online teaching approaches in order to meet the needs of the learners. With this, learners will benefit as well for their educational needs in the online environment would be addressed through the teachers' preparation and adjustment of teaching approaches.

Literature Review

Burdette et al. (2013) discovered that teachers in special education had difficulty describing specialized instructional practices for students with disabilities in the online setting. However, measures are taken by institutions to address concerns in delivering instruction to the learners in the online setting.

In the Philippines, Magsambol (2020) states that online teaching for students with special needs proves to be a challenge for even before the coronavirus pandemic, a 2019 study by the Philippine Institute of Development Studies (PIDS) already revealed the challenges of implementing the special education curriculum in the Philippines. Nonetheless, the Department of Education (DepEd) assured that its Basic Education Learning Continuity Plan (BE-LCP) would address the specific needs of children with special needs through various learning modalities to ensure the continuity of their learning (Malipot, 2020). With this, there is a need to identify the teachers' level of online teaching preparedness for they are going to deliver courses online and utilize learning management systems and online applications.

In the context of this study, online teaching readiness refers to the teachers' mental and physical preparation for e-teaching experience and their ability to facilitate courses within an online environment (Hoppe, 2015). It is determined through the teachers' online teaching competencies along the following areas: course design, course communication, time management, and technical competence. Martin et al. (2019) defined the four online teaching competencies as follows: 1) course design is the pedagogical competency which involves planning instruction with course objectives, instructional strategies, activities, and assessments that align to objectives; 2) course communication is the interpersonal communication and interaction between the teacher and students in online courses; 3) time management is the ability to use one's time effectively or productively, especially at work; and 4) technical competence is the technical knowledge and proficiency in the use of current technology.

Problem Statement

This study aimed to determine the level of online teaching readiness of high school teachers in special education along the following areas of online teaching competencies: course design, course communication, time management, and technical competence.

Method

Descriptive quantitative research design was used to systematically analyze and measure the online teaching readiness of high school teachers in special education in the new normal classroom setup.

Materials

A 32-item questionnaire was adapted from the Faculty Readiness to Teach Online Instrument by Martin et al. (2019). It has a Cronbach's alpha of 0.92 which means that the items in the questionnaire have relatively high consistency. It is composed of questions along the four areas of online teaching competencies specifically, nine questions on course design, ten questions on course communication, six questions on time management, and seven questions on technical competence. This questionnaire was distributed through the use of electronic (Google form) and printed format.

Samples

Universal sampling was employed. With this, seventeen (17) high school teachers in special education from three SPED schools were identified, specifically, ten (10) or 58.82% from the City of San Fernando and seven (7) or 41.18% from Baguio City.

Site

The three SPED schools identified from the City of San Fernando and Baguio City were the only private and public schools that provide special education program in the secondary level. Other SPED schools from the said locality only provide special education program in the elementary level.

Procedures

Before the data gathering collection, letters of permission to conduct the study and invitation to participate, and participant consent forms were given to the school heads and teachers of the target institutions. These letters and forms contain details about the study that need to be known to the participants.

During the data gathering collection, there was a consent form distributed informing the participants that the study does not have known risks, costs, nor monetary compensation, and is voluntary. They were also informed that they were given anonymity and should the data published or disseminated; their individual information will not be disclosed. Furthermore, they were informed that the data gathered from the participants will solely be used for the purpose of the study.

After the data gathering collection, numerical data collected from the rating scale and questionnaire were both statistically treated, analysed, and interpreted. The researchers also organized an informal interview with the participants of the study to further validate the results of the study.

Measurement

A 5-point Likert scale was used to allow the participants to express their agreement and disagreement with the items provided in the questionnaire. The response of the participants ranges from strongly disagree (1) to strongly agree (5).

Data Analysis

Weighted mean was used to identify the level of online teaching readiness of high school teachers in special education along course design, course communication, time management, and technical competence.

Table 1 presents the 5-point scale that was used to categorize and interpret the level of online teaching readiness of high school teachers in special education along course design, course communication, time management, and technical competence

Table 1: Level of Online Teaching Readiness of High School Teachers in Special Education

Statistical Range	Descriptor	Interpretation
4.21-5.00	Strongly Agree	The level of online teaching readiness of high school teachers in special education is very high.
3.41-4.20	Agree	The level of online teaching readiness of high school teachers in special education is high.
2.61-3.40	Neutral	The level of online teaching readiness of high school teachers in special education is moderate.
1.81-2.60	Disagree	The level of online teaching readiness of high school teachers in special education is low.
1.00-1.80	Strongly Disagree	The level of online teaching readiness of high school teachers in special education is very low.

Validity and Reliability

Before the data gathering collection, the study proposal was evaluated and approved by the Research Ethics Committee of the University of the Cordilleras as ethically accepted. Furthermore, the reliability of the questionnaire adapted for the study has a Cronbach's reliability coefficient that is considered as highly consistent. After the data gathering collection, the process of triangulation was also utilized to further analyze and verify the findings of the study. The researchers organized an informal interview with the participants of the study.

Results and Discussion

This portion of the study presents analysis, interpretation, and discussion of the data collected on the level of online teaching readiness of high school teachers in special education along the four areas of online teaching competencies specifically, course design, course communication, time management, and technical competence.

Table 2 presents the analysis of the data on the over-all level of online teaching readiness of high school teachers in special education.

Table 2: *Over-All Level of Online Teaching Readiness of High School Teachers in Special Education*

Course Design	4.08	High
Course Communication	4.07	High
Time Management	3.90	High
Technical Competence	4.05	High
Overall general weighted mean	4.03	High

Generally, the level of online teaching readiness of the high school teachers in special education is high (4.03). This implies that the teachers are mentally and physically prepared to facilitate online classes. Similarly, Ventayen (2017) noted that basic education teachers under DepEd are ready for online teaching.

Table 3 presents the analysis of the data on the level of online teaching readiness of high school teachers in special education along course design.

Table 3: *Level of Online Teaching Readiness of High School Teachers in Special Education along Course Design*

Items	Weighted mean	Descriptive equivalent
I can create an online course orientation (e.g., introduction, getting started).	4.29	Very high
I can write measurable learning objectives.	4.18	High
I can design learning activities that provide students opportunities for interaction (e.g. discussion forums, wikis).	3.94	High
I can organize instructional materials into modules or units.	4.24	Very high
I can create instructional videos (e.g. lecture video, demonstrations, video tutorials).	4.06	High
I can use different teaching methods in the online environment (e.g. brainstorming, collaborative activities, discussions, presentations).	3.82	High
I can create online quizzes and tests.	4.12	High
I can create online assignments.	4.06	High
I can manage grades online.	4.06	High
General weighted mean	4.08	High

The results reveal that the high school teacher's level of online teaching competencies along course design is high (4.08). This implies that high school teachers in special education are pedagogically competent in preparing instructional plans with objectives, instructional strategies, activities, and assessments that are aligned to the course. These results support the ideas shared the educational supervisor in charge with one of the participating SPED schools. She cited that DepEd is implementing different modalities and one of which is online distance learning wherein the teachers are given adequate webinars to further their knowledge on how they will use online teaching as a modality to the students with disabilities who chose online distance learning. In addition, the results also support the findings of Martin et al.

(2019) wherein they found that teachers rated their course design competencies positively. On the other hand, the results oppose the findings of Balmeo et al. (2014) wherein they noted that there are problems in the availability and integration of technology in SPED schools in the locality. However, recent developments, headed by DepEd, in order to alleviate similar problems identified by Balmeo et al. (2014) are already being calibrated to further enhance the competencies of teachers in delivering online distance learning (Deiparine, 2020; Laguna, 2020; Malipot, 2020).

Table 4 presents the analysis of the data on the level of online teaching readiness of high school teachers in special education along course communication.

Table 4: *Level of Online Teaching Readiness of High School Teachers in Special Education along Course Communication*

Items	Weighted mean	Descriptive equivalent
I am comfortable sending announcements/email reminders to course participants.	4.24	Very high
I am comfortable creating and moderating discussion forums.	4.06	High
I am comfortable using email to communicate with the learners.	4.12	High
I am comfortable responding to student questions promptly (e.g., 24 to 48 hours).	4.35	Very high
I am comfortable providing feedback on assignments (e.g., 7 days from submission).	4.18	High
I am comfortable using synchronous web-conferencing tools (e.g., Adobe Connect, Zoom, Blackboard Collaborate, Skype).	3.88	High
I am comfortable communicating expectations about student behavior (e.g., netiquette).	3.88	High
I am comfortable communicating compliance regarding academic integrity policies.	3.88	High
I am comfortable applying copyright law and fair use guidelines when using copyrighted materials.	4.00	High
I am comfortable applying accessibility policies to accommodate student needs.	4.12	High
General weighted mean	4.07	High

The results reveal that the high school teacher's level of online teaching competencies along course communication is high (4.07). This implies that high school teachers in special education are prepared in personally communicating and interacting with their students in online courses. The results support the current implementation of the modes of communication used in the online distance learning in special education namely synchronous and asynchronous learning. Mulig and Rhame and University of Maryland Global Campus (as cited in Brecheisen, 2015) emphasized the significance of communication between the teachers and students in online education for communication yields clear expectations, answers and opportunity for discussion. This significance is supported by the current communication practices being used by high school teachers in the participating SPED schools. Printed and digital module formats are created by the teachers as a part of the asynchronous learning whereas extended communication in the forms of e-mail, text

messages, and phone calls are used by the teachers to provide further guidance to the students and parents. Other forms of synchronous learning such as video conferencing are as well employed to assist the students and parents. Moreover, one of the teachers also stated that the students and parents are responsive with the current modes of communication used in online distance learning.

Table 5 presents the analysis of the data on the level of online teaching readiness of high school teachers in special education along time management.

Table 5: *Level of Online Teaching Readiness of High School Teachers in Special Education along Time Management*

Items	Weighted mean	Descriptive equivalent
I am comfortable scheduling time to design the course prior to delivery (e.g., a semester before delivery).	3.88	High
I am comfortable scheduling weekly hours to facilitate the online course.	3.88	High
I am comfortable using features in learning management system in order to manage time (e.g., online grading, rubrics, SpeedGrader, calendar).	3.82	High
I am comfortable using facilitation strategies to manage time spent on course (e.g., discussion board moderators, collective feedback, grading scales).	3.76	High
I am comfortable spending weekly hours to grade assignments.	4.00	High
I am comfortable allocating time to learn about new strategies or tools.	4.06	High
General weighted mean	3.90	High

The results reveal that the high school teacher's level of online teaching competencies along time management is high (3.90). This implies that the teachers exhibit a good sense of planning and organizing schedules in delivering the course. Varvel (as cited in Martin et al., 2019) claims that "competent faculty have adequate time-management skills so that lifestyle commitments do not interfere with the ability to instruct the course" (p. 99). The teachers schedule weekly activities prior to delivery and features in learning management systems are utilized to manage course time. Moreover, facilitation strategies and new tools are utilized to regulate the time spent on activities.

Table 6 presents the analysis of the data on the level of online teaching readiness of high school teachers in special education along technical competence.

Table 6: *Level of Online Teaching Readiness of High School Teachers in Special Education along Technical Competence*

Items	Weighted mean	Descriptive equivalent
I can complete basic computer operations (e.g., creating and editing documents, managing files and folders).	4.47	Very high
I can navigate within the course in the learning management system (e.g., Moodle, Canvas, Blackboard, etc.).	3.88	High
I can use course roster in the learning management system to set up teams/groups.	3.71	High
I can use online collaborative tools (e.g., Google Drive, Dropbox).	4.12	High
I can create and edit videos (e.g., iMovie, Movie Maker, Kaltura).	3.94	High
I can share open educational resources (e.g., learning websites, Web resources, games and simulations).	4.06	High
I can access online help desk/resources for assistance.	4.17	High
General weighted mean	4.05	High

The results reveal that the high school teacher's level of online teaching competencies along technical competence is high (4.05). This implies that the teachers have adequate knowledge and skills in utilizing technology for both synchronous and asynchronous sessions. Cagiltay et al. (2019) claim that teachers' use of technology has an impact to the educational outcomes. Moreover, Martin et al. (2019) state that faculty are expected to handle web-based courses since online gradebooks are becoming a norm. In line with this, the high school teachers in special education are able to use computer operations and navigate within the learning management systems such as Learning Resources Management and Development System (LRMDS) and applications such as Google classroom, Zoom, and Kotobee.

Conclusion

This portion of the study presents the conclusion drawn and recommendations proposed by the researchers. Looking through online teaching readiness of high school teachers in special education showed that improvements may still be incorporated to achieve the maximum online teaching readiness competencies of high school teachers in special education. In light of the findings of the study, the following conclusion is drawn: the high school teachers in special education require different modalities in teaching online.

After a careful review of the conclusion, the following are recommended. Teachers are recommended to use varied online platforms like Google Meet, Zoom meetings, and video recording in teaching high school students in special education online to give more emphasis in improving their mastery in online teaching. In addition, future researches are recommended to look into other variables aside from the four components in online teaching to produce a seminar toolkit related to online teaching readiness for high school teachers in special education. Certainly, being able to reveal the over-all level of online teaching readiness along the four components of high school teachers in special education is vital in

the 21st century learning as a reflection of our special education system's adaptability in the changing curriculum.

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Awareness, Perception and Readiness of Faculty and Staff Toward Remote Educational and Operational Services During the COVID-19 Pandemic

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Abstract

The sudden transition from face-to-face instruction to remote teaching in the early days of March 2020 created a new prototype for teaching, learning, and support for faculty and staff. The disruption brought to the surface the readiness of faculty and staff, and the planning and efficacy of professional development programs. Millions of faculty and students worldwide found themselves teaching and learning in a technology-mediated environment in a matter of days. Welcome videos midway through the semester, synchronous lectures, and multimedia elements thrust faculty developers, instructional designers, and trainers into a new role: providing the faculty at their institutions 100 percent support in Emergency Remote Teaching (ERT). While the goal was to provide faculty with the knowledge, skills, and tools required to be successful in a remote teaching environment, this new paradigm underscores the staff's importance and the readiness of the faculty, academic and student affairs staff, systems, support structures, and technological infrastructure. Training to always be ready should be a perennial and increasing endeavor. This abrupt change also brought to light the relevance of training, support systems, and academic continuity planning at an institution serving more than 100,000 students annually. The role that an online campus plays in the transition of faculty to remote educational and operational services during the COVID-19 pandemic is examined in this paper.

Keywords: Remote Teaching, Faculty Training, Online Teaching, Online Learning, Instructional Technology

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Introduction

In the early days of 2020, the outbreak of a severe respiratory illness caused by novel coronavirus (SARS-Co-V2), later called COVID-19, was declared a pandemic (World Health Organization [WHO], 2020). The disease prompted mobility restrictions and calls to shelter in place, effectively triggering the closure of higher education institutions. In a matter of days, and, in some cases, hours, face-to-face interactions came to a halt, and colleges and universities suddenly found themselves providing instruction remotely. The initial strategy to deliver instruction was named Emergency Remote Teaching (ERT; Hodges, Moore, Lockee, Trust, & Bond, 2020), delivered via the internet and through a computer, similar to online learning (Singh & Thurman, 2019). During the same period, institutions rushed to provide faculty and students with tools and training to transition to this modality; instructional technology was now front and center.

Instructional technology is a strategy that has aided faculty in reaching students and helping them successfully acquire knowledge skills and instill critical thinking. To successfully adopt, use, and model instructional technologies that foster an embracement of hybrid and online learning, it is paramount to provide faculty with professional development opportunities or training (Zhu & Liu, 2020). Higher education institutions have served as de facto training centers for their own faculty, while some institutions may have a bare-bones unit that assists, supports, and trains faculty; other institutions have more sophisticated structures, such as Centers for Teaching and Learning, or an office of Academic Technology (Oblinger, 2006). The COVID-19 pandemic has triggered an acceleration (Bradley, Hirt, Hudson, Northcote, & Smit, 2020) in the use, adoption, and implementation of digital tools for teaching and servicing students, due to fears of spreading the virus and social distancing requirements. The global health crisis has created fertile ground for digital learning to take a leading role, prompting the realignment of plans and activities to support a recovery that will primarily take place in digital form (Baig, Hall, Jenkins, Lamarre, & McCarthy, 2020; Leng, Khieng, & Water, 2020). The range of services varies from basic training and the discussion of general and contemporary academic issues to more specific topics on pedagogical and classroom administration matters, including consultation, advice, course design, and the allocation of professional resources such as instructional designers, instructional technologies, and course developers to support their teaching endeavors (Morales Irizarry, 2006). The COVID-19 pandemic highlighted the need for faculty to receive continuous training in the use of teaching and learning technologies (Trust & Whalen, 2020). The sudden change from face-to-face instruction to a mode of delivery that is 100% mediated by technology took many by surprise and unprepared to handle the tasks and challenges at hand. In addition, many faculty members found themselves with a limited set of tools and strategies to support what would allow them to quickly pivot to what was initially proposed as a temporary mode of instruction, ERT (Pickett, 2020a, 2020b). In this context, it is important to define online learning as the delivery of instruction mediated through the internet and the use of information and instructional technologies, which can occur in asynchronous or synchronous mode (Singh & Thurman, 2019). While many institutions may have had a structure within academic affairs or information technology to promote and support the adoption of instructional technology, along with plans on how to do it, not all of them had these elements aligned in a comprehensive manner in the case an emergency arose, which prompted the case for business continuity or academic continuity plans (Morales, 2020). In the next few pages, I will address areas of practice that many institutions left unattended which then created a rush of activities of various scales to quickly provide faculty with what they needed to be in a new medium which is emergency remote teaching.

Awareness

While the topics of instructional technology, educational technology, online learning, and web-assisted or hybrid courses are not new to us in higher education, it is well known that they have not been embraced at higher rates (Geilman, 2018). These attitudes may have contributed to the difficulties experienced while transitioning from face-to-face teaching to emergency remote teaching during the early days of March 2020. Faculty have been aware of the existence of these tools and, for a variety of reasons, have delayed their use and implementation; institutions that are not grounded on a digital-first philosophy lacked plans to advance the adoption of these tools and practices. This situation continues to occur even when students are more mobile, tech savvy and prone to using technologies for learning. A few years back, the topic of web assisted, or hybrid courses was very active in the practice of teaching as a strategy to address the needs and learning styles of students, increase student success, and as a method to maximize limited physical space and create a culture of data driven decision-making (Leng, Khieng, & Water, 2020).

While there is no shortage of tools to help faculty excel at teaching, what may have been missing before this sudden change were the strategies to put training front and center for faculty to adopt new tools and methods and to incorporate them to their repertoire, thus creating a culture of innovation in the classroom. Video conferencing has existed for over 15 years in different formats. Tools such as Skype, Blackboard Collaborate, BigBlueButton, Webex and, more recently, Zoom and Microsoft Teams (Buchal & Songsore, 2019) have made possible connecting and communicating with students in a synchronous manner (Kudyba, 2020) that promotes additional and superior engagement and interaction with classmates and content (Moore, 1989). Developments in the telecommunications sector have made significant increases in bandwidth, making these types of communications possible with increased reliability from practically any place. The adoption of mobile devices has skyrocketed in the last decade and it is projected to reach to 13.8 billion in 2025, (Statista, 2020), thus creating opportunities that foster the use of these devices for educational purposes. What is new and different now is the number of digital devices that connect to the Internet that our own students own; this requires a different strategy for the delivery of educational content, acknowledging the limitations of bandwidth and screen size. Learning Management Systems, in existence for over two decades, has also made this transition possible by making content available on what is known as a web-assisted class allowing the faculty member to provide content, but that students can use asynchronously. This was one of the early ways to implement instructional technology (Pastrán Chirinos, Gil Olivera, & Cervantes Cerra, 2020). Early adopters thought this approach was convenient when emergencies, such as absenteeism due to health, closures due to the weather, and other spontaneous situations occurred, allowing for academic continuity (Morales, 2020). Online learning provided the groundwork and a solid foundation to support the transition to ERT and its subsequent growth after the pandemic (Lederman, 2020). Similarly, the pandemic has solidified the stature and quality of online learning as a viable way for students to learn (Zhu & Liu, 2020).

Tarrant County College conducted a survey on March 23, 2020 of faculty and students to gauge their level of preparedness to teach or take an online course respectively (Table 1).

Faculty	Students
80% felt prepared to teach an online course	75% indicated they were prepared to take an online course
n=1,520	n=17,879

Table 1. Digital Readiness Survey

In addition, it is important to consider that after the COVID-19 pandemic, universities and higher education will be different (Witze, 2020). During the past 14 months, many institutions have made significant changes in the way they operate because of the sudden shift to emergency remote teaching and the closure of physical facilities. These changes have promoted the adoption and further implementation of technologies that have existed for quite some time: automation, increased accessibility, artificial intelligence, and inclusivity (Sherwood, 2021). This period of redesigning how higher education institutions operate has provided us with an opportunity to review, explore and re-engineer how we reach our students, how we can increase access by making education more accessible and with increased inclusivity through digitalization. The pandemic has accelerated these changes which will lead to better models of higher education and, ultimately, for the delivery of education. Faculty that is more experienced and skilled in the use of instructional technologies is also more empathetic toward our students that are still multi-tasking and juggling multiple responsibilities. The role of the faculty member is changing (Pastran Chirinos et al., 2020) from being the source of information to becoming a facilitator of students' knowledge acquisition. The paradigm of teaching has been permanently influenced by the acceleration of change, the increased use of digital resources, the acceptance of alternative teaching-learning schedules, and the best practices that have been developed as a result of this global emergency (Bigatel, Ragan, Kennan, May, & Redmond, 2012). Online learning has been the precursor of this change. Most of the practices, procedures, and strategies employed during the pandemic have been widely embraced at a global scale. There is ample evidence of the benefits of the face-to-face teaching experience when the faculty adopts new strategies and techniques.

Our role as champions for faculty work and success will be of continuous investment in professional development as well as in being open to new ways of delivering instruction through a wider array and repertoire of tools and teaching techniques (Gallardo-Alba, Grüning, & Serrano-Solano, 2020; Shah, 2019), active learning (Huang et al, 2020), ready-to-teach content (Geilman, 2018) and coaching of faculty for just-in-time training (Morales & Tapia, 2018). During this period of intense professional development for faculty, we included several strategies that resulted in the creation of a workflow to facilitate the creation of content by faculty. From PowerPoint to PDF documents, to resources located on the Web in repositories like [merlot.org](https://www.merlot.org), our instructional designers provided faculty with training, strategies, and support to create short video lectures to enhance the lectures they were provided with during emergency remote teaching.

Throughout all this time, the global higher education community embarked on an extensive experimentation approach on the best combination of strategies for faculty that were previously accustomed to face-to-face instruction to now embrace and adapt instructional technologies. Tarrant County College and its online campus, TCC Connect, have

implemented (Morales, 2018) a series of strategies that have placed the college in a privileged position to facilitate a seamless transition of its face-to-face faculty to embark in ERT. These activities are the result of the implementation of the newest campus as a fully online operation.

Readiness of Faculty and Staff toward Remote Educational and Operational Services

To provide faculty with the information and knowledge they need to develop skills in ERT, a set of professional development sessions were identified. Professional development has been identified as a strategy that allows users to learn, practice and adopt new strategies, techniques, and the understanding of how to incorporate technology for teaching and learning (Johnson, 2021).

Conceptualized as a faculty success strategy, the College academic administration recognized the need to equip our faculty with online teaching strategies. Over the course of two weeks in July 2020, a total of 43 sessions on various topics were offered to all faculty members at the institutions (Table 2).

Topic	Sessions	Attendees (n)
Blackboard Basics	7	196
Accessible and Inclusive	3	152
Content and Copyright	3	166
Peer Developed Courses	4	136

Table 2. Instructional technology training sessions

It was also important to provide the professoriate with the professional development they needed to be effective in remote teaching. To accomplish this, the team at the virtual campus borrowed a page from online learning creating training in online pedagogy. Training sessions on online pedagogy were made available to faculty for their knowledge and competency development (Picciano, 2002). These aspects are paramount for the success of both students and faculty members in any teaching endeavor that is heavily mediated by technology (Table 3).

Topic	Sessions	Attendees (n)
Instructor Presence Online	4	248
Reasonable Rigor	3	201
The 1 st Day of Your Online Class	4	229
10 Kinds of Instructor Videos	3	243

Table 3. Online pedagogy training sessions

Early on, it was identified that faculty needed training in teaching technologies and strategies with content that now resided on servers instead of traditional formats, that is, physical materials. A significant barrier was the quick conversion of content or its creation for over 10,000 sections for the entire college. To expedite and ease this burden on faculty, the virtual campus had previously created 35 Peer Developed Courses in high enrollment subjects. These are master courses are ready to teach and that were developed by subject matter experts and instructional designers, which included all the components, lectures, activities, and assessments (Morales, 2017). These courses were released to our colleagues in face-to-face courses that now are being taught remotely. The approach was adopted by some faculty

members and those that accepted the help. Professors found themselves relieved of the work and stress related with creating more than 7 weeks of content in the middle of a public health emergency.

Research shows that training in the use of instructional technology tools, the pedagogy of online learning, as well as online presence has been of great benefit as these increase the success of faculty in the virtual classroom (Johnson, 2021; Morales 2017). The global crisis of COVID-19 had created an express lane that had facilitated the transition to online and blended courses in subjects that before were not even considered make available in these instructional modalities. (Beatty, 2006; Johnson 2021; Means et al., 2013; Tallent-Runnels, et al., 2006)

Student Services

Prior to the pandemic, the virtual campus was very active in developing solutions to reduce the distance between students and the institution. Previously, in 2018, several initiatives were implemented to honor and capitalize on the benefits of online learning. A vital area of the campus that maximizes information technologies for student success is Student Services by implementing several initiatives and service units to support the endeavor. Online Advising and Success Coaches were identified as areas of need to serve students. With the expectation to create an environment for students to achieve learning outcomes and progress through their degree plans, a fully online advising unit across three time zones was created (Morales & Gantt, 2018). The virtual campus completed its transition to offer New Student Orientation entirely online in the fall of 2018. The strategy reduced the dependency on physical meetings for new students to receive their orientation. The orientation, delivered synchronously using Blackboard, was made available to the entire college to serve the over 5,000 students that are accepted every fall semester. Finally, in spring of 2019, the campus upgraded one of its most important technological tools that permitted us to communicate with students, our Chat tool. Recognizing developments in machine learning, a tool that incorporates artificial intelligence, was selected. This tool is Ivy.ai, which provided the advisors with added flexibility, quick response and to expand the creation of a knowledge base.

Perceptions

The COVID-19 Pandemic has brought to the surface the needs of faculty for more opportunities to try teaching strategies enhanced by technologies that help them better reach students and for students to increase their performance. Before the pandemic, instructional technology was used in several instances to complement teaching. It widely ranged in usage and implementation, from web-assisted to blended learning to fully online (**Seaman, Allen, & Seaman, 2018**). However, it stayed as the foundation to deliver the entire activity of teaching and learning (Geilman, 2018; Quinn, 2014), creating a limited view by some of the capabilities of the tools. It is known that some academicians believed teaching with technology at various rates of inclusion would not allow for effective student learning outcomes, but before the pandemic, and widely documented in the literature, that teaching with technology resulted in no significant difference in the learning outcomes of students (Fendler, Ruff, & Shrikhande, 2018; National Research Center for Distance Education and Technological Advancements [DETA], 2019; Russell, 2001; Stack, 2015).

Lessons learned and Conclusions

The pandemic has triggered enormous acceleration in almost every industry, and higher education is not exempt. The implementation of the above-mentioned units two years before the pandemic affected College operations provided the framework and experience to quickly transition to remote services. The experience the virtual campus staff had with technologies such as web cameras, softphones, cloud services—already in existence at the college—and conducting sessions remotely, in what can be considered a best practice, allowed for the immediate validation of the procedures, which were already in place within the College. Teaching and learning at higher education institutions will be different (Witze, 2020). It is believed the world has advanced between 6 and 10 years in the adoption of digital technologies (McKinsey & Company, 2020), but it has gone an equal amount of years or more backwards in terms of equity and social mobility (Jack, 2020). Simultaneously, the global emergency created the conditions for us to pause and reflect on how we want to deliver education in the future, a future that seems to be dominated by digital learning and the need for more equitable access. It is critical for higher education institutions to create professional development opportunities for our faculty to equip them with the techniques, tools, and knowledge to fully unleash the power of technology-mediated learning (Morales Irizarry & Casanova Ocasio, 2020). Similarly, it is imperative that more and better ways to serve students via digital services be provided as these are the way where we can widen the access to increase educational attainment. Research indicates that blended learning is as effective and valid as face-to-face instruction in delivering learning outcomes (Wang, Han, & Yang, 2015). After the COVID-19 pandemic, it is forecasted that offerings delivered using blended learning approaches will increase; this will be in response to students' needs and preferences based on their learning styles.

The pandemic has accelerated the adoption of online learning in many countries, where before it was not mainstream (Zhu & Liu, 2020). The COVID-19 pandemic has also created an opportunity for us to realign priorities as we all embark in new ways of working (Kudyba, 2020), the adoption of instructional technology for teaching and learning, and a new paradigm of teaching at higher education institutions.

On the other hand, the pandemic has accelerated the need to reflect so we can all redesign philosophies, priorities, needs, and learning outcomes and competencies of our faculty so we can be better prepared, plan for emergencies, and ensure a better academic continuity. Incorporating global education and leveraging experts from other parts of the world and bringing them in through the Internet will be the norm. The past 14 months have been a testing bed regarding new ways of teaching, working, and doing things. Many of the innovations that have flourished during the crisis are centered around digital technology and will have become part of everyday life when the world returns to more ordinary times.

Technologists and policymakers face the challenge of ensuring these innovations do not entrench inequality but instead broaden opportunity. This is truly an important chance for humanity to not only bring new technology to bear but, for the first time, to do so in an equitable way to serve our students.

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Healthy Lifestyle Education in the CLIL Classroom

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Abstract

Scientific studies have shown that poor health can lead to lower academic achievement and poor class attendance in school. Teachers report improvements in attendance, attention, behavior, and levels of concentration in schools where healthy eating has become accepted practice. Research also shows that healthy lifestyle habits during adolescence/pre-adult can prevent many of the diseases and disabilities in adulthood and later. Health economists affirm that people with a better education are more likely to choose a healthier lifestyle. Considering this evidence, it is strongly suggested that education on how to have a healthy lifestyle be a mandatory subject for all students – and the younger one learns, the better. However, given the time and curriculum constraints of most schools, this is not an easy goal to achieve. Accordingly, Obihiro University of Agriculture and Veterinary Medicine (OUAVM) has chosen to incorporate healthy lifestyle education as a content and language integrated learning (CLIL) course in the English program. CLIL, which has other definitions, is a teaching method that involves teaching students about a given subject in a foreign language. It has become the umbrella term for simultaneously learning a content-based subject, such as lifestyle health, through the medium of a foreign language, while concurrently improving one's ability in the foreign language by using it to study the given subject. This paper shows how this integration can be done practically by incorporating eight natural laws of health from the NEWSTART Lifestyle program into a health course also categorized as an English III CLIL course at OUAVM.

Keywords: Newstart, Healthy Lifestyle, Nutrition, Academic Achievement, Education, CLIL

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Introduction

Research has shown that substandard health conditions can be associated with lower grades in school for students and higher absenteeism (Centers for Disease Control and Prevention, 2014; Kim et al., 2016). Teachers have reported improvements among students in attending classes, attention span, behavior, and levels of concentration in schools where students get a proper nutrition intake on a regular basis (Adolphus et al., 2013). Studies also show the importance of forming healthy lifestyle habits early in life for helping to prevent many of the diseases and disabilities in adulthood and later (Jones et al., 2019; Saffari et al., 2013). Health economists argue that better educated people are more likely to choose healthier lifestyles (Li, 2014). And, last but not least, the rising incidence of new viruses and other diseases, such as COVID-19, has led us to realize the importance of a healthy lifestyle in providing stronger immunity against such diseases (Zimmerman & Woolf, 2014).

As a health and nutrition educator, I've had a long-standing interest in such research on health and the importance of its effects on academic performance. The outbreak of past diseases, but especially the COVID-19 pandemic and fallout, have only reinforced the sense of urgency for better health education. The data keeps showing that better health leads to better academic performance and, vice versa, poor health is associated with poor academic achievement and students missing more classes (Nyaradi, 2013).

A paper by Amy Ross (2010) looked at studies concerning nutrition and its relationship to brain function, ability to learn, and social behavior. The studies showed that proper nutrition has a direct effect on student performance and behavior in school, and confirmed that nutrition has a direct effect on neurotransmitters which are important in sending messages from the body to the brain. Interestingly, obesity contributed to lower achievement in school.

The model below from Chrissy Carroll's study in *Today's Dietitian* shows this cyclical relationship between poor nutrition and educational outcomes (Carroll, 2014).

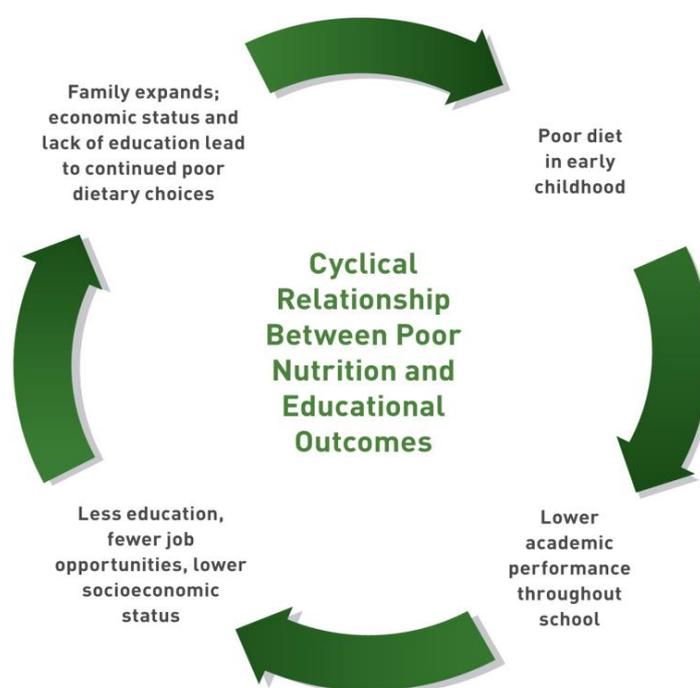


Figure 1: Cyclical Relationship between Poor Nutrition and Educational Outcomes

With this evidence in hand, it is strongly suggested that healthy lifestyle education be a mandatory subject for all students – the younger, the better. However, given time and curriculum constraints, this is not an easy goal to achieve.

Content and Language Integrated Learning (CLIL)

For this reason, Content and Language Integrated Learning (CLIL) plays an essential role. CLIL is a teaching method that involves teaching students about a given subject in a foreign language (van Kampen et al., 2016). It has become the umbrella term for simultaneously learning a content-based subject, such as lifestyle health, through the medium of a foreign language, while concurrently improving one's ability in the foreign language by using it to study the given subject. This dual achievement through a single action is aptly portrayed by the idiom “kill two birds with one stone”. The term CLIL was coined by David Marsh, University of Jyväskylä, Finland (1994): “CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content and the simultaneous learning of a foreign language (Marsh, 2017).”

The concept of CLIL has also been described as ‘content-based instruction (CBI)’, ‘bilingual education’, and a host of other terms; and, for English-specific learning, has been called ‘English for Academic Purposes (EAP)’ or ‘English medium instruction (EMI)’ (Brown, 2018). The advantages of such a dual approach include learning content while developing language skills, being able to integrate language learning into a broader school curriculum, increasing student motivation, fostering thinking and application skills among students who see the importance of language in their areas of interest and real-life situations, and, overall, the potential to create a more natural learning environment (Shraiber & Ovinova, 2017).

Accordingly, with Obihiro University of Agriculture and Veterinary Medicine (OUAVM) being a science university with no language degree program, CLIL becomes an essential tool for ensuring language acquisition among students. OUAVM has incorporated healthy lifestyle education as a content and language integrated learning (CLIL) course in the English program where the two subjects can be studied simultaneously.

The rest of this paper shows how this can be done practically by incorporating the eight laws of health in the NEWSTART Lifestyle program into a health course also categorized as an English III CLIL course.

Eight Natural Laws of Health (NEWSTART)

The challenge of health today is to educate and motivate people to adopt a healthier lifestyle, and to help them realize that one can do more for their own health than any doctor, hospital or technological advance (Berger, 2015). The scientific data confirms that the choices we make, hour by hour, day by day, largely determine the state of our health, the diseases we get, and often even when we will die (American Heart Association, 2015).

But what are the right choices? One day a newspaper ad may promote a high carbohydrate diet, the next day a low carbohydrate diet, and another day a no-carbohydrate diet. Which is correct? So much health information flowing through the media is overwhelming, confusing, and often contradictory. People want information that is reliable, understandable, and scientifically sound.

For these reasons, a course teaching time-tested health principles becomes essential, an attractive course to show students how they can look and feel healthier, stay younger, and gain a clear understanding of how to manage their life for maximum health and wellbeing.

Accordingly, this paper shows how this can be done practically by incorporating the eight natural laws of health in the NEWSTART Lifestyle program. NEWSTART is an acronym for these eight natural laws as shown here: N stands for nutrition, E for exercise, W for water, S for sunlight, T for temperance, A for air, R for rest, and T for trust (NEWSTART, 2021). Following is a more in-depth look at each of these health guidelines.

1. Nutrition

At a global level we see that the majority of deaths are attributed to the category of non-communicable diseases (NCDs); these are chronic, long-term illnesses such as cardiovascular diseases (including stroke), respiratory diseases, cancers and diabetes that collectively account for more than 70 percent of global deaths (Ritchie & Roser, 2018). Yet, research has shown that these diseases are largely avoidable and caused by lifestyle. For example, changing to a simple diet during World War II caused a drop in heart disease and stroke (Esselstyn, 2013). Most cancers could be prevented through lifestyle modification (Barnard, 2004). Unfortunately, the average American diet consists of high-fat and low-fiber content (Prasad, 2019).

The American Cancer Society guidelines for nutrition and cancer prevention advise us to choose foods from plant sources (Kushi et al., 2012). Animal products are the largest source of saturated fat and cholesterol, and have no fiber. So, we should limit our intake of high-fat foods, particularly from animal sources. In fact, whole-grain breads, cereals or rice should be our main source of energy (Jonnalagadda, 2011). This should be accompanied by at least 5 servings of fruits and vegetables each day. Fruits and vegetables have been consistently shown to reduce the risk of many lifestyle diseases (Harvard School of Public Health, 2021). And to ensure an adequate intake of fiber, protein and energy, legumes should be included in our diets as well.

The best diet turns out to be plant-based or vegetarian (Berger, 2018). In fact, more people – especially the well-heeled, actors and sports figures – are choosing a vegetarian, and even vegan, lifestyle (Tanenbaum, 2018). With powerful evidence also showing the positive environmental impact of a vegetarian lifestyle, in addition to the health benefits, it only becomes that more essential for ensuring a healthier and safer future.

2. Exercise

The good news is that greater vitality, better health and longer life can be ours through regular, brisk physical activity. A sedentary lifestyle is a direct route to an earlier grave. Inactivity kills us – literally (Kandola, 2018). It is said that everyone has two doctors: the right leg and the left leg (Trevelyan, 1928). The more we use them, the healthier we will be. Exercise is the second natural law of health that helps us feel good by maintaining a desirable weight, strengthening the heart and bones, lowering blood pressure and the LDL cholesterol level, along with lifting depression and relieving stress (Semeco, 2017). And it even slows down the aging process (University of Birmingham, 2018).

Everyone should choose an enjoyable exercise and participate in it regularly. Walking is the ideal exercise. It's inexpensive, safe, and nearly everyone can do it. You can select your own

speed and you can stop when you want. As your fitness improves, you can gradually add speed and time. Other good exercises are swimming, bicycling, gardening, and even golf – if you don't use a cart.

To be effective, active (aerobic) exercise should be brisk and continuous for at least 15 to 20 minutes. A daily program of 30 to 40 minutes of active exercise will give you maximum benefits (Centers for Disease Control and Prevention, 2018).

3. Water

We all learn early in life that the body is around 45% to 75% water. Our kidneys process more than 175 liters daily. And the body loses about 2.5 to 3 liters daily through the skin, lungs, urine and feces. If this water isn't replaced by drinking plenty of fresh water daily, our body systems suffer and manifest symptoms such as body odor, bad breath, and unpleasant-smelling urine, and eventually more serious complications (Benelam & Wyness, 2010).

Beverages other than water, however, can pose special problems. Many have fat and sugar calories that must be digested like food. Sugar in beverages requires extra water for metabolism. Studies have demonstrated that caffeine and alcohol dehydrate the body because they work as diuretics, contributing to fatigue, dry skin, indigestion and headaches (Stokey, 1999).

How much water should a person drink? Drink enough to keep the urine pale. Since the body loses 2.5 to 3 liters of water a day, and food provides 0.5 to 1 liter of water, we should try to drink 1.5 to 2 liters of water daily. Get into the habit of drinking water throughout the day (Benelam & Wyness, 2010).

4. Sunlight

The fourth natural law is sunlight, which serves an essential role in killing germs, enhancing skin and sleep, boosting the immune system, reducing pain from swollen arthritic joints, relieving certain symptoms of PMS, lowering blood cholesterol levels, and even elevating one's mood, which helps alleviate depression problems. What's more, sunlight on the skin helps the body manufacture vitamin D (Grimes et al., 1996; Raman, 2018).

One must be careful, though, not to get too much. Sunburn destroys healthy, living tissue and is a major risk for skin cancer (Grey, 2018). Even too much of a good thing can often be hazardous. Up to 30 minutes of sunshine a day is sufficient for most people (Nall, 2018).

5. Temperance

Temperance can be defined as, first of all, abstinence - refraining from unhealthy practices like smoking and alcohol abuse (Wikipedia, 2019), secondly, choosing foods in a more natural or wholesome state (less processing) like whole grain bread and brown (unpolished) rice, and thirdly, seeking for balance and moderation, even in important and healthy things like sunlight mentioned earlier.

There is the story about a woman who heard that carrots were rich in beta-carotene, which the body turns into vitamin A and provides protection against certain cancers. So, she started juicing 2 to 3 kilograms of carrots every day. When her skin started turning a sickly yellowish color, her doctor told her she was getting too much beta-carotene.

Too much of a good thing can be a bad thing when it comes to health. Common sense and moderation will do more for your health than any health fad or “miracle cure”. Temperance is an important key to good health that we should learn to apply to all areas of our lives (Nation Online, 2010).

6. Air

Given that air is the backbone of life and all body functions, most people recognize that clean and fresh air is vital to a vibrant life. Air is composed of about 21 percent oxygen, the rest being nitrogen and other gases (Powell, 2018). Since the body operates on oxygen, a steady fresh supply is vital for life. Oxygen is picked up in the lungs from the air we breathe, and delivered to our bodies via the red blood cells. Well-oxygenated cells are healthy and contribute to overall well-being (Cedar, 2018).

Unfortunately, we have little control over the quality of the air we breathe each day depending on where we live and levels of pollution; but, when possible, steps should be taken regarding indoor air quality and ensuring it is refreshed regularly. Another “feel good” technique is to stop where you are and take a few slow, deep breaths several times a day (Harvard Mental Health Letter, 2009). A final way to flush your body with oxygen is regular exercise mentioned earlier.

7. Rest

Life today has become fast-paced, demanding and exhausting, with people constantly on the go. Yet, the inability to sleep has become epidemic with many people resorting to sedatives and tranquilizers. For other people, getting to sleep isn't the problem, but making time for it with their busy schedules.

Rest is the time for the body to renew itself by restoring energy, removing waste, repairing of damaged cells, managing stress and strengthening the body's immune system against disease (Besedovsky, 2019). Insufficient rest means this process is incomplete, leading to adverse effects over time.

People need different amounts of rest, but the average adult does best on 7 to 8 hours of quality sleep each night. Newborn babies sleep from 16 to 20 hours, while young children usually need 10 to 12 hours (Mental Health America, 2019).

Some tips for getting a good night's sleep include going to bed and waking up the same time each day, avoiding caffeine, not using alcohol as a sedative, daily exercise and sun exposure (National Institutes of Health, 2015).

Your body is your most valuable possession. It may be tempting to skip sleep, but in the long run that is counterproductive (Eugene & Masiak, 2015).

8. Trust

Trust is the mental component of the eight natural laws of health. It refers to possessing a good mental attitude and peace of mind with the ability to not worry too much. More and more people are living longer, healthier lives, but surveys show they are feeling less and less satisfied mentally, and the trust component is dropping (Yang, 2013).

It's been said that the condition of the mind affects health much more than many people realize. Anger, fear, resentment and distrust can actually produce effects on the body that weaken its immune system and open the door to disease. On the other hand, positive emotions like love, joy, faith, and trust produce protective substances that strengthen the immune system and protect the body from disease. Scientific research has actually demonstrated that people who trust in God are healthier than people who don't believe in God (Harrington, 2010).

Trust, thus becomes a vital component of good health and a rewarding life (Bhattacharya, 2003; Mental Health Foundation, 2018).

Conclusion

Since it has been studied and reported that an unhealthy lifestyle leads to lifestyle diseases and related problems - more specifically to lower academic performance and achievement among students - efforts must be made to improve their health, especially through education that leads to lifestyle changes. However, given the time and curriculum constraints, this is not an easy goal to achieve. For this reason, an English CLIL course in basic and practical health was developed at OUAVM to ensure that students get the double benefit of improving their health and English skills simultaneously. Feedback has been positive of this approach, especially when employing the eight laws of natural health that encourage students to make practical healthy lifestyle changes for their future.

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Communities' Cultural Capital for Sustainable Community Tourism Development: A Case Study of Charoen Krung Road

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Abstract

This research aims to study the knowledge factors and sustainable community tourism development in the area along the Chao Phraya River from Charoen Krung Road to Yaowarat Road, the charming old district and a multicultural society in Bangkok, Thailand. Primary data were collected from interviews of stakeholders or the people in the community in depth and within real-life context in a qualitative manner. The findings suggested that Thai, Thai Chinese, Thai-Muslim, and Vietnamese people are able to live together, relying on the social capital on two types of identities: 1) The multiculturalism society identity; and 2) The Chinese identity that has five similar dialect languages, such as the Hokkien or Fujian, the Chaozhou, the Cantonese, the Hakka and the Hainan. They have grouped together, built their trust among the community members through cultural and traditional activities of the community. That is until it becomes an important concept to create a multicultural social mechanism through religious systems such as temples, shrines, and mosques to manage the members of the heritage community. Furthermore, they can create strong mechanisms of a multicultural society and will be able to develop into sustainable tourism. The results of the research contribute to a role of the ownership in management in order to provide learning to the tourists visiting the community and indicate an issue of retaining tradition from modernization with its seemingly inevitable erosion of traditional societies.

Keywords: Multiculturalism Identity, The Strengthen Community, Social Capital, The East Bank of Bangkok

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Introduction

Charoen Krung Road with modern construction method is the first main road in Bangkok, Thailand built during 1862-1864 in the reign of King Mongkut (Rama IV). Charoen Krung Road covers the area, starting from the old city centre in Rattanakosin Island, through Bangkok's Chinatown to the end in Bang Kho Laem district. Bangkok's old town is known as "Rattakosin Island" located in the east bank of Bangkok along in the Chao Phraya River bank in a heritage district of Bangkok. Presently, this district has become the historical and architectural heritage. A common misperception about Charoen Krung is its Thai meaning which is typically perceived as "New Road". At that time all the streets or roads were officially unnamed. This new thoroughfare was first called "Tha-non-mai" or "New Road" by Thais. Later King Mongkut named it as "Charoen Krung" which means prosperous city. Charoen Krung was behind embassies, warehouses, and residences in two paralleling sides of Chao Phraya River. During this time the start of foreign ideas and modernization have been introduced to the country and the Thailand government is interested to westernize the country as a counterbalance to regional foreign encroachments in China, Vietnamese settlers and Burmese. This connects the Chinese community of "Sampeng" or "Yaowarat" with little India community of "Phahurat" and western community in "Bang Rak area". In August 1861, Western consuls complained about a lack of roads in which they could transit sick people with horse-drawn carriage. They requested the King to construct a new road on the east side of the river behind consulates and business areas. The King Rama IV agreed with the request of the construction of new roads. The first road, which would serve the European district, was begun in 1862 and officially opened to traffic in March 1864. Charoen Krung Road was one of the major development in the city which transformed from the river of life to the road of the Europeans' life.

Rationale and Context

Community is important key for sustainable tourism development that could be controlled by local people. That is to say, tourists visit, spend time and leave places in a short period of time but local people permanently live in them. Because of that, local people are more aware of the importance of conserving cultural treasures than tourists.

Sustainable tourism is a steady growing phenomenon in global tourism industry. The migration of multiracial and multi-religious citizen such as Chinese, Burmese, Javanese, and Laotian, has established an interesting mixed culture. Charoen Krung Road represents "multicultural" community with diverse ethnic groups, languages, cultures that show differences in the way of life. However, people on the road live peacefully together in a form of multiculturalism.

Purpose of the Study

1. To study the cultural costs of the community for the development of sustainable tourism by the community, a case study of Chao Phraya River in the east of Bangkok, in Charoen Krung area.
2. To study a sustainable community-based tourism route in the area of Chao Phraya River in the east of Bangkok on Charoen Krung Road.

Scope of Study Area

1. Research Setting

The community area is along Chao Phraya River in the east of Bangkok. The research site covers the area from Wat Ratchasingkorn on Charoen Krung Road, Talad Noi Soi Wanit 1 and 2 of Sampeng, Yaowarat Road, Songwat Road, and Ratchawong Pier. The present study explores information of temples, Chinese shrines, mosques, houses and old shops that tell stories in the community.

2. Scope of the Study

This research focuses on a study of body of knowledge, way of life, traditions, and society concerning the old community area. A variety of places on Charoen Krung Road includes historic religious sites, temples, Chinese shrines, mosques, old houses and shops that tell stories in the local community as well as food markets and local products that are unique to the community area.

Data Collection

Primary Source of Data

- 1) **Observation Inventory:** This method requires physical survey of Thai- Chinese community and Thai people of various descent with a mixture of Thai-Chinese-Christian and Muslim cultures that are unique identities in the Thai society. In this particular study, a survey on the old community was conducted to understand the way of life in the community and tourists' behaviours.
- 2) **Questionnaire:** Both demographic data and opinions in the questionnaire are used to observe attitudes towards the community.
- 3) **In-depth Interview:** Sessions were conducted to talk with tourists and owners of the old ancient mission house. The interviewees, for example, include "So Heng Tai", the owner of a vintage pastry shop, the owner of hand-made pillow shop, "Heng Seng" in Talad Noi market community who is in charge of Sampeng or Yaowarat, Chinese shrine attendant, a mosque attendant, a church attendant, a coffee shop owner, coffee shop customers, and board game shop.

Secondary Source of Data

Secondary data basically comprises information from books, articles, journals that are relevant to the context of the study.

Outline of the Study

Charoen Krung Road has a story of life in terms of art and culture, the ways of the community in the area. This eight-kilometre road is interesting place where many people are familiar provokes the idea of happiness. There are different hidden stories with charm of viewing people, multicultural that reflects the coexistence of the intercultural community harmoniously through architecture, lifestyle in Bangkok city. Apart from creating a tourism dimension that could attract tourists, a collection and transmission of time dimension of Charoen Krung Road is also worthy for future generations to study and learn about the Thailand historic place.

Literature Review

A peaceful coexistence in multicultural society with shared cultural skills on Charoen Krung Road consists of people who have different languages, religions, ways of life, ethnic consciousness. However, an understanding of different lifestyles bridges a gap of differences between people so that people live as “brothers and relatives in the community”.

Local economic community-based sustainable tourism as guided and managed by the community takes sustainability of the environment which includes society and culture into account. Thus, the community has an ownership and the right to administer and create learning for the visitors.

When Chao Phraya River is liked the artery, Charoen Krung Road is considered a vein that is parallel to the artery. The 150-year story of Charoen Krung Road is a reflection of the prosperity of Thailand. The two sides of Charoen Krung Road are lined with ancient, historic, and religious sites and full of friendship among people with different nationalities residing in Thailand. Business and trade run by Chinese people and foreign visitors contribute Charoen Krung Road to be a very important district of Bangkok. Charoen Krung is the first road of Siam accommodating the new economic zone, the new way of trade in the colonial era that Siam signed in the Burney Treaty and the Bowring Treaty with Great Britain.

In the early Rattanakosin period, most of trading was done with China. There was also Javanese. In the reign of King RAMA I, Thailand dealt junk trade of royal and private coffin with Malay and Indian that is important and generates a lot of income for the country. This junk ship was made by quality wood in Siam and featured in Chinese style by Chinese crews. However, the Thai people were in charge of the Navy or the warehouse were the guards during the construction in Thailand. Major exports were tin, ivory, wood, sugar, pepper, bird's nest, animal bones, animal skin, cardamom and shellac while major imports were chinaware, stoneware, silver, silk, tea and paper. Until the reign of King Rama IV, Siam had more trading contacts with Western nations that increased international diplomatic ties.

Sir. John Bowring, appointed ambassador Queen Victoria of Great Britain in order to developed relations with the royal court and negotiated a treaty with the Royal Court of Thailand in the year of 1854 during the reign of King Mongkut. Finally, Bowring treaty was signed on 18th April. In the same year, the treaty resulted in the loss of Siamese sovereignty and extraterritorial rights, but saved Siam from colonization. Later, the Bowring treaty signed in 1855 and became the model for 14 other countries to enter into the same treaty. That facilitated Thailand to cancel Inequality Treaty, which was completed in 1938. In the reign of King Rama V, the culture of living nightlife outside homes like Western life was new to Siamese society. An interesting aspect is that the culture was related to the modern pace of the country. Anna Leonowens postulated that the Siamese usually preferred to sleep during the day like vacation. That was different from the culture of a western walk. A little more special night activity was a temple fair which provided an opportunity for everyone to enjoy entertainment outside their homes.

There was influenced by other countries to adopt a tenement on the road. For example, a model of civilization in the city of Singapore was implemented. Lantern from shop house was initially used with an oil lamp, then switched to gas lights in the year of 1881 and that was the first Siam Electric Company. The street lights therefore shifted to electric system instead. Since then electric lighting made the road beautiful and safer for people to walk at night.

In the reign of King Rama VI, Thailand had more contacts with foreigners in Europe and America. An expansion of the metropolitan Bangkok started in Si Phraya area until the road falls including the areas of Silom, Bangrak, and Sathorn Road. The commercial area expanded on both sides of Thanon Tok. Also, industrial areas expanded along the banks of the Chao Phraya River. This area was called the western area (European section). Bangrak district was like home and commercial operation for the westerner. As a result, this district showed a better progressive growth in the past than other communities in that period.

The House Number One or Captain Bush Alley was next to Si Phraya Pier. The name of the alley came originally from the name of the English Captain John Bush, who previously resided in the area. Captain Bush took over the government service of the foundation in Harbour Department since the reign of King Rama IV. This captain was also an executive and a major shareholder of Bangkok Dog which is now the shipyard on Chao Phraya River.

In addition, Charoen Krung Road during World War II became a Japanese society in Thailand for a time that paid attention to identity. It was unique to be the centre of modern trade prosperity. An interesting fact in the 17th century was that more Japanese products were sold in food categories in Thailand such as soy sauce, dried fish, and seaweed whereas Siam sold rice to Okinawa.

There had been more Japanese people living in Thailand. The cultural dimension of food has changed. Culture of eating food could tell life stories. Changing the way of society from eating food on town's waterfront to commercial buildings on both sides of roads. Food in different cultures is not just for the purpose of survival. In contrast, food was defined with diverse meanings and social implications. For instance, warm white rice porridge was cooked and normally eaten as breakfast in the morning in a Thai-Chinese family. The meaning was different from rice porridge eaten with friends during the early hours until the night. Charoen Krung used to be a famous place called "Foodland" in Bangkok (Chanthavanich, 2020). Individuals who wanted to buy butter, jam, sausage, ham, bacon, western bread or wanted to buy spices, must go to Bang Rak. Other than that, Yaowarat and Phahurat were recommended for Chinese cooking and Indian food respectively. The information indicated the real state of Charoen Krung district where was full of attractive architecture and unique culture of historic places.

Discussion

Religious places with the beliefs of the community served as a fortress of the community camp. At any homes, a child will be born. The dead must come to the shrine, come to the church, come to the mosque, perform religious ceremonies. Nowadays, a place of religion is the centre that holds the minds of people in the community. Many places welcome people from outside the community. In addition, there are activities for welcoming small groups of tourists, as organized by government agencies and private sectors such as walking tours. These created an impact on the people in the same community because normally people in the Sampeng community, as before, had never been called as Chinese people, Thai guests, but used to call them "Sampeng people" while having known each other for 50 years or more.

Conclusion

The Concept of Sustainable Creative Indicator Development for Community-based Tourism

Directions of sustainable community tourism for community management in the community are emphasised to promote a role of ownership, the right of management for ensuring learning for visitors. It is a meaning in a community-based tourism management that relates to participation of villagers. The cooperation of people in the community, which is supportive host to promote conservation, includes a creation of consciousness and responsibility.

In the aspect of cultural resources, local intelligence for tourists is important for establishing perception and understanding of the way of life and cultures. People living in the area on Charoen Krung Road of 8.6 kilometres are diverse in light of religions; Thai Buddhist, Chinese, Islam, Catholic, and Christian. This difference is very interesting in terms of primary principles from different culture sources with community cultural capital for developing sustainable community tourism. This is essential to help bridging the social gap in four aspects: 1) Community management based on the real way 2) Community management for the benefits of life 3) Community management based on the truth, and 4) Community management based on peace of mind. The four aspects are considered as the key of community development for the people in the community.

Models of management communities' cultural capital for sustainable community tourism development in the case study of Charoen Krung Road consist of two models: 1) A model of welcoming tourists that aims to motivate local people to be aware and proud of being the part of the community that were clean and safe for tourists, and 2) A model of administration which supports development of tourist attractions for setting up culture and history learning centre.

Suggestion

The study found that Charoen Krung Road had a variety of cultural learning resources related to long history of a way of life. A multicultural diversity of people appeared in various places of worship, including Buddhist temples, Chinese shrines, Islam mosques, Catholic and Christian churches among others, and they were professional sources of wisdom. The community should be more educated about the needs of tourists and the management style of community tourism. In order for the community to understand the interests of tourists and their roles and responsibilities and for the youth to learn about diverse local cultures in Charoen Krung Road area, educational institutions should organize cultural learning activities in the community.

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The Influence of Immersion Education in China on Students' English Learning Motivation

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Abstract

This study investigated the motivation of English learning among 40 high school students in Huaibei City, Anhui Province, China. Half of the 40 students received traditional English education and the other half received immersion education. The study compared the learning motivations of the two groups and analyzed the differences between the two sets of data. In addition, the research discussed the participants' attitudes and opinions on the two teaching methods, and what differences between the two teaching methods they think. The study collected the data needed for quantitative analysis through questionnaires, and obtained the data needed for qualitative analysis through interviews. The data of questionnaires would be analyzed by SPSS, while the data of interviews would identify the key paragraphs or sentences through transcription. The data analysis showed that there was no significant difference in the motivation of students under immersion education and traditional education, but the results of the interviews showed that students who received immersion education were more likely to have an interest in English learning, resulting in stronger internal motivation. The main reason for this situation is that immersion education has distinct selection criteria in terms of teachers, teaching activities and teaching materials, and these changes may have some positive effects on learners. The self-satisfaction and sense of accomplishment that learners gain in this process may provide continuous motivation for the next learning task.

Keywords: Immersion Education, Motivation, ESL

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Introduction

In China, traditional English education has obvious drawbacks. The most obvious flaw is the excessive attention to student reading and listening. It means learners pay more attention to the English content that can be reflected in the test, thus ignoring the practical application of English. For ensuring that their children could alleviate this problem and improve the quality of teaching while learning English, the group with power and wealth in the society had invested more funds and resources in English teaching, thus giving birth to bilingual education courses in China, especially the most rapidly developed immersion course in recent years (Xiong & Feng, 2018).

Immersion education is a classic model in bilingual education and has been continuously developed and improved worldwide for many years. Nowadays, the status of immersion education in China is gradually rising, and more and more provinces are beginning to introduce immersion courses. Basically, every major city in China has a school that uses immersion courses (Feng, 2007; Hu, 2007; Cheng, 2012; Qiang & Siegel, 2012).

The motivation of students is an important factor of immersion education. It mainly refers to why humans think and behave as they do (Dörnyei & Skehan, 2003, p. 614). Motivation may become the reason that people decide to do something, affecting the time when people maintain an activity or the difficulty of choosing an activity. After years of development in motivation, researchers have gradually proposed some motivation models that can classify learners' language learning motivation. There are three classic models, namely self-determination theory, action control theory and Gardner's Model. Self-determination theory is the target model of this study.

Self-determination theory (SDT) is a classic model of motivation. It is an empirical theory of human behavior and development, and its core is the social contextual factors that support or hinder personal development (Ryan & Deci, 2017). SDT may mean a theory related to human personality and motivation, including the talent and psychological needs of individuals.

SDT primarily includes intrinsic motivation and extrinsic motivation and is related to the degree of self-determination of learners' actions (Ryan & Deci, 2002). Intrinsic motivation is defined as the willingness of learners to participate in tasks for their own benefit, and this willingness is usually enjoyed by learners and can be guided by interest and positive emotions (Oga-Baldwin, Nakata, Parker & Ryan, 2017). For L2 learners, the language learning process may also be a process of self-growth. When learners find positive influences while learning the language, this may give learners a lifelong interest in language learning (Oga-Baldwin, Nakata, Parker & Ryan, 2017), so attracting learners to the foreign language learning process has always been the goal of most teaching programs (Garton, Copland & Burns, 2011).

In contrast, extrinsic motivation is influenced by external factors. According to the degree of self-determination behavior, extrinsic motivation is mainly divided into four parts, integrated, identified, introjected and external regulation (Tanaka & Kutsuki, 2018). The current relationship between intrinsic motivation and extrinsic motivation and the internalization of motivation are also included in the SDT study. Internalization refers to a process of transforming extrinsic motivation into intrinsic motivation.

The main purpose of this study is to discover the impact of immersion education on student learning motivation and the reasons for these effects based on the differences in learning

motivation between traditional and immersive education. To a certain extent, this study can reveal the influence of immersion education on students' L2 learning motivation and its causes, and based on this result, make suggestions for the next adjustment of immersion education to stimulate students' active learning motivation and improve learning efficiency.

Methodology

There are 3 research questions in this study, which are proposed from both quantitative and qualitative aspects. Quantitative question is based on the background and the questions on the questionnaire. The qualitative questions are formulated through subsequent interviews and their transcripts.

Research Questions

Quantitative research questions:

1. Is there any difference in the motivation of learners' English learning between immersion and traditional education as self-reported by participants on the questionnaire?

Qualitative research questions:

1. What is the reason for the change of English motivation in immersion education? Is this change reflected in intrinsic motivation or extrinsic motivation?
2. Do learners think these changes are positive or negative?

Participants

A total of 40 participants were surveyed and divided into two groups, each with 20 participants. All participants are high school students or have taken the college entrance examination. They are between the ages of 17 and 19 and have more than 10 years of English learning experience. They are familiar with the current English teaching model in China. The difference between the two groups of participants is that the English teaching methods used in their high school English courses. One group of participants received the traditional English education, while the other group received an immersion course. Participants in the interview section selected 4 students who have the highest and lowest motivational characteristics from the two groups in the questionnaire. After obtaining their consent, they conducted a short follow-up interview through WeChat.

Data

Data comes from questionnaire investigations and face-to-face interviews. Specifically, for questionnaires, there are 24 questions in them, of which the first two questions are related to the participants' English learning, and the remaining 22 questions are related to learning motivation. These questions are mainly aimed at the learning motivation of participants when they learn English, and they focus on the self-determination theory (SDT) in the motivation which means intrinsic motivation and extrinsic motivation. Among the questions related to learning motivation, the first five questions are for intrinsic motivation, and the remaining 17 questions come from four different categories, integrated, identified, introjected and external regulation in extrinsic motivation. The scale used in this survey was adapted from the language learning fixed vector table (LLOS) developed by Noels (2000). Participants can specifically indicate their level of recognition of the facts stated in the project when answering the items in

such a questionnaire (Ogden & Lo, 2012). Each question is designed with five answers to choose from, which are strongly agreed, agreed, uncertain, opposed and strongly opposed.

For interviews, they were conducted with four participants, two accepting immersion education and two accepting traditional English education. Each time only one participant was interviewed, the questions asked to each participant were the same. Because the participants' English proficiency could not support their fluent expressions, all questions in the interview process were translated into Mandarin, and participants also answered in Mandarin. Interview questions were sent to the participants' mailboxes in advance, giving participants enough time to think and prepare their views on the issue (Brown, 2014). The entire interview process was recorded with the consent of the participants. The recording was transcribed. Participants received a copy of the transcript and had the right to revise their content.

Results

Quantitative Results

In the quantitative analysis section, all the answers in the questionnaire were divided into 5 levels by Likert scales, each level representing a score, which is very agree -5 points, agree -4 points, not sure -3 points, opposed - 2 points and strongly opposed -1 point. The scores of all questionnaires in research question 1 will be summed in Excel to get the total score of each participant, and these scores would be input into SPSS in different groups to get the relevant data tables.

Question 1: Is there any difference in the motivation of learners' English learning between immersion and traditional education as self-reported by participants on the questionnaire?

Whether the two sets of data obtained by SPSS analysis are normally distributed before analyzing whether the two sets of data in the questionnaire are different. In the analysis of data distribution, the most intuitive way is to display the data of immersion education and traditional education in the form of histograms and boxplots. Histograms can show how often different scores appear in the data and how these scores are distributed. Boxplots can show the median spread and interquartile range of scores, and whether there are outliers in the sample data.

After running boxplots and histograms, the following figures 1, 2, 3, 4 and 5 were obtained. Figure 1 shows the boxplots of the two sets of data, Figures 2 and 3 are the histograms of the two sets of data, and Figures 4 and 5 are the related values.

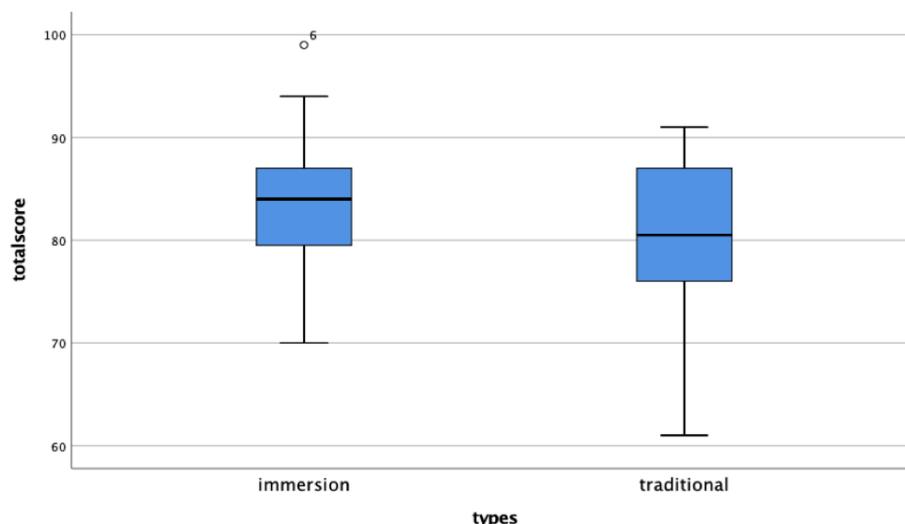


Figure 1: Boxplots

The boxplots show that the data of immersion education has a higher median than the data of traditional education. The median of the immersion group is between 80 and 90, while the median of the traditional group is close to 80. In addition, it can be seen from the figure that outliers exist in the data of the immersion group.

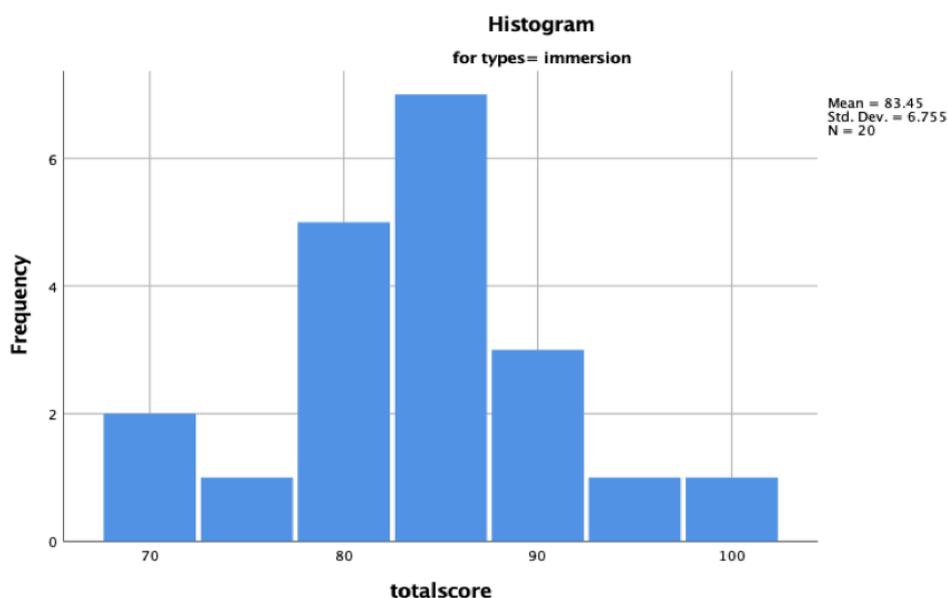


Figure 2: Immersion Histogram

The histogram of the immersion group generally shows a normal distribution, but the vertices of shape are relatively high, indicating that there may be some problems in the data's kurtosis, such as the data between 80 and 90 is too concentrated.

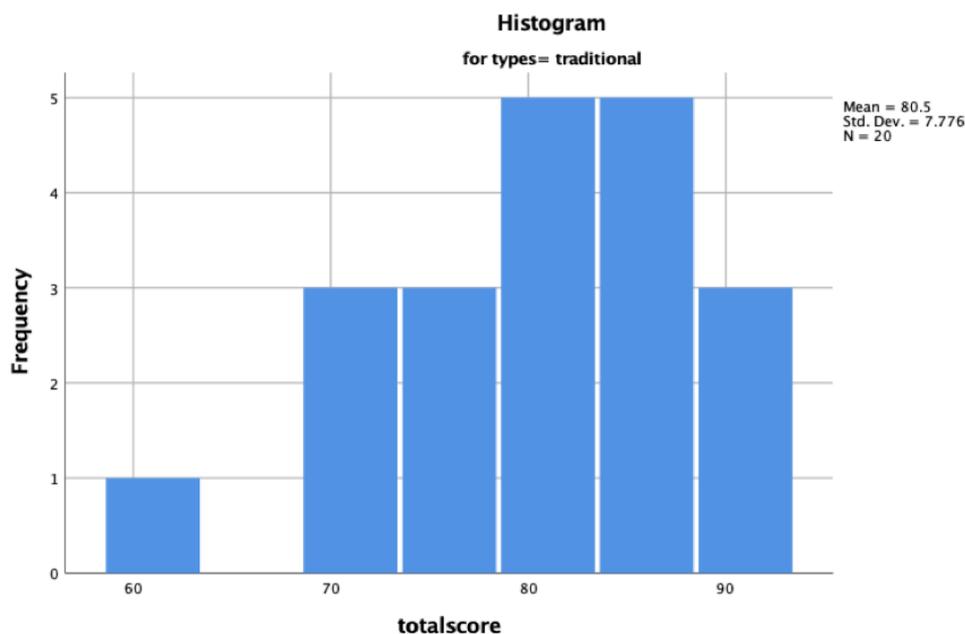


Figure 3: Traditional Histogram

The shape of the traditional group's histogram is not bell-shaped and perfectly symmetrical about its mid-point. It can be clearly seen from the figure that the distribution of the entire shape is biased to the right, indicating that there may be some problems with the skewness of the data. In order to further confirm the situation of these data, it is necessary to analyze the specific values. These values are shown in the table in Figure 3.

		Statistic		Std. Error	
totalscore	immersion	Mean	83.45	1.510	
	95% Confidence Interval for Mean	Lower Bound	80.29		
		Upper Bound	86.61		
	5% Trimmed Mean	83.33			
	Median	84.00			
	Variance	45.629			
	Std. Deviation	6.755			
	Minimum	70			
	Maximum	99			
	Range	29			
	Interquartile Range	8			
	Skewness	.140	.512		
	Kurtosis	.856	.992		
	traditional	Mean	80.50	1.739	
		95% Confidence Interval for Mean	Lower Bound	76.86	
			Upper Bound	84.14	
5% Trimmed Mean		81.00			
Median		80.50			
Variance		60.474			
Std. Deviation		7.776			
Minimum		61			
Maximum		91			
Range		30			
Interquartile Range	11				
Skewness	-.682	.512			
Kurtosis	.389	.992			

Figure 4: Descriptives

The table in Figure 4 shows that the value of skewness in the immersion group data is 0.140, and the value of kurtosis is 0.856. Both values are between 1 and -1, indicating that the data for the immersion group is a normal distribution. The value of skewness in the traditional group data is -0.682, and the value of kurtosis is 0.389, which is also between 1 and -1, indicating that the data of the traditional group is also normal distribution. Since both sets of data are small samples (n=20), the values of skewness and kurtosis can be divided by corresponding standard error to obtain standardize(z) in order to prevent the sample size influence the results. From Figure 6, the standard error (skewness) = 0.512, standard error (kurtosis) = 0.992 of the immersion group can be obtained. After calculation, it can be found that S/SE(s)=0.273, S/SE(k)=0.862 in the immersion group. In the traditional group, S/SE(s)=-1.332, S/SE(k)=0.392. The calculated standardize(z) of these data are < 1.96 and > -1.96, indicating that the data is normally distributed.

types	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
totalscore	immersion	.109	20	.200*	.972	20	.795
	traditional	.119	20	.200*	.945	20	.295

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Figure 5: Tests of Normality

The two sets of data are normal distribution. To further confirm the results, the normality test would be run in the next. Since both sets of data are small samples (n=20), it should choose to run Shapiro-Wilk statistics to get the probability (p) values. In Figure 3, it shows the p(immersion)=0.795, p(traditional)=0.295. Both p values are >.05, then the two sets of data can be considered to be normally distributed. This also means that the two sets of data are parametric data, which can be used for the parametric statistical test. Then the next two sets of data will be analyzed using the independent samples t-test.

SPSS performs the LEVENE test of equality of variances before using a t-test to analyze the data. This step is equivalent to ensuring equal variances of the data, or equal standard deviation of data from the mean.

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
totalscore	Equal variances assumed	.832	.367	1.281	38	.208	2.950	2.303	-1.713	7.613
	Equal variances not assumed			1.281	37.270	.208	2.950	2.303	-1.716	7.616

Figure 6: Independent Samples Test

Figure 6 is a data table obtained after running the independent samples t-test.

		Independent Sample			
		Levene's Test for Equality of Variances			
		F	Sig.	t	df
totalscore	Equal variances assumed	.832	.367	1.281	38
	Equal variances not assumed			1.281	37.270

Figure 7

In Figure 7, $p = 0.367$. It shows that $p > .05$. This means that the LEVENE test to be non-significant, or variance for two populations cannot be significantly different.

Independent Samples Test							
		t-test for Equality of Means				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
7	1.281	38	.208	2.950	2.303	-1.713	7.613
	1.281	37.270	.208	2.950	2.303	-1.716	7.616

Figure 8

According to Figure 8, $p=0.208$. It shows $p>.05$. It can be seen from the data that there is no significant difference between the two sets of data, indicating that there is no statistically significant difference in the motivation questionnaire scores for immersion and traditional education. This difference may not occur or only happens occasionally, but it is not known that the effect is strong or weak (Muijs, 2010), and then further calculation of the effect size is required. First $df=38$, according to the formula, $Cohen(d)=0.203$ can be obtained. Comparing d with Cohen's (1988) guidelines, the effect size is small, which means the difference between the two sets of data is slight.

After using SPSS to conduct a series of analyses on the data of the questionnaire survey, it can be found that the impact of immersion education and traditional education on students' English learning motivation is not obvious. Two different ways of education may occasionally give students some changes in motivation, but there is no significant difference.

Qualitative Results

Question 2: What is the reason for the change of English motivation in immersion education? Is this change reflected in intrinsic motivation or extrinsic motivation?

After analyzing the interview content of the participants, it is found that the change of learning motivation mainly comes from three aspects, teachers, teaching activities and teaching materials. The most frequently cited factor in the interview results was the change in the

teacher's occurrence in immersion education. First, teachers who use immersion education generally have higher levels of English than traditional education teachers, because immersion education requires teachers to use English as a medium of instruction. If teachers are not proficient in using English, it is difficult to fulfill this requirement. The impact of this factor was mentioned in the answer of the immersion education respondent S (interview, 2019/07/14).

“The teacher’s English is very fluent. Although I may not understand what the teacher is saying at first, I will have a sense of admiration for the teacher. I will admire her and want to learn from her. And I will force myself to listen to what the teacher is saying, and slowly understand a part.”

Traditional education respondent Q also expressed similar views (interview, 2019/07/20).

"When the teacher speaks English well, I will think that this teacher is very powerful and can certainly teach me. But if the teacher speaks English badly, I will feel that this teacher is not professional at all. I may have learned it wrong. Then I definitely don't want to spend time in her class."

It can be seen from the respondents' answers that the professional level of the teacher has a significant influence on the learner. High-level teachers may stimulate learners to actively learn English, and actively participate in the classroom, while teachers with lower levels may make the learners resent, even give up learning in this language. This factor mainly changes the learner's interest in learning English and attitude towards English, which affects the learner's intrinsic motivation.

Secondly, respondents repeatedly mentioned that the focus of immersion teachers in class is very different from that of traditional teachers. There is such a passage in the answer of the immersion education respondent S (interview, 2019/07/14).

“When I was answered the question in class. The teacher stopped paying attention to whether there was a grammatical error in the sentence I said, or did I answer the correct answer. The teacher began to pay attention to whether I was fluent when answering the question, whether the answer was logical, and occasionally will correct my pronunciation.”

Next is the immersion education respondent J's answer to this section (interview, 2019/07/18).

“The teacher is very interested in the communication between me and my classmates. In the classroom, we often talk to each other. And the teacher sometimes shares the culture and knowledge of some English-speaking countries with us.”

It can be seen from the two parts of the answer that the immersive teacher is more inclined to improve the learner's thinking logic ability and the ability to communicate with others in English. The traditional education respondent F said: “The teacher pays attention to whether the grammar used to answer the questions is accurate, and whether the answers I give are consistent with the textbooks (interview, 2019/07/21).” Traditional English teachers tend to correct the learner's grammatical errors to get the right answer, thus improving the learner's test score. The change of teachers' focus may influence the learner's learning motivation to a certain extent. For example, learners may change their motivation from improving their test scores to

better communicating with others. It may change the learner's extrinsic motivation from external regulation to integrated regulation, increasing the autonomy of learners' motivation to learn.

Finally, respondents mentioned that the difference associated with teachers is that immersive teachers are more inclined to encourage and praise students. The immersion education respondent S mentioned in the answer (interview, 2019/07/14):

“While there are many students in the class who have poor academic performance, the teachers will often praise them, saying that these students have made significant progress and should continue to work hard. Because these students have poor grades, the teachers will encourage them from their attitudes. For example, when they are very serious in their lectures or they are very timely in their homework. Teachers in traditional classes may think this is a normal thing and a task that students should have done.”

This answer shows that immersive teachers and traditional teachers have distinct differences in the way they treat learners. Immersion teachers may use encouragement as one of the most common means of teaching and try to create psychological satisfaction for learners from all aspects. Traditional teachers believe that it is necessary for learners to complete basic tasks and does not need to be praised. Different teaching methods may have different effects on students' learning motivation. Some students may stimulate their interest in learning because they are encouraged. Some students may also study harder to avoid criticism.

The difference in teaching activities is also a part that has been mentioned many times by respondents. Immersion education has different goals when it comes to teaching English. For example, immersion education is more about improving students' ability to apply English. Traditional education focuses on improving students' English test scores. English-related forms of activity will vary. For example, the answer given by immersion education respondent J in answering this part of the question is this (interview, 2019/07/18):

"We often hold English-related activities, such as English Corner, tongue twister or guessing riddle. Last Christmas we also held an English drama contest, and students specially rented costumes to improve the integrity of the show. And that English manuscript has been backed up many times, fearing that it will affect the performance of the show."

These immersive English activities described by respondent J are largely out of the classroom and have nothing to do with textbooks and syllabuses. The main purpose of these activities is to enable students to apply English to the actual scene, thus stimulating students' interest in English learning. The traditional education respondent F mentioned in the answer: “The school occasionally holds some English speech contests or English knowledge contests, and students with good grades will sign up for the competition award (interview, 2019/07/21).” It is obvious that the related activities in traditional English education are more focused on rankings, mainly for students with a better English foundation. These activities with different purposes and their accompanying praise or affirmation may have an impact on the learner's English learning motivation and change the motivation. Immersion education may be more inclined to improve the learner's intrinsic motivation, so that students may be interested in English learning, while traditional education may be more inclined to improve the learner's extrinsic motivation. It means to allow students to obtain higher rankings in the competition to learn English very hard.

In addition to teachers and activities, the textbook is one of the factors that make a difference between the two English teaching models. In the analysis of interview recordings, it can be found that both immersion education and traditional education use English-language textbooks. The difference lies mainly in the setting of textbook content. The immersion education respondent S mentioned in her description of the textbook: "I feel that the subject matter and design activities in the textbook are very similar to those appearing in foreign life, which is quite interesting (interview, 2019/07/14)." Traditional education respondent Q said: "Our teaching materials should be based on the college entrance examination, the words inside are college entrance examination vocabulary, and then the scenes and stories appearing in the book are also written around those vocabulary (interview, 2019) /07/20)." The reason for these two answers may be that many of the immersion education materials are imported directly from abroad and modified for use, so the content of the textbook is closer to the life and mode of the English-speaking countries. Cultural differences may give students a greater interest in this unfamiliar situation, while traditional textbooks serve the exam syllabus. The vocabulary and knowledge that appear in the syllabus must be included in the textbook. It may change the student's extrinsic motivation. Students may change their motivation from they have to learn from the textbooks for understanding the content of the exams to produce the interest for the textbook itself. This is a process of transformation from external regulation to integrated regulation. The three reasons cited by respondents are similar to the literature review of immersion education in this study. These changes in teachers and classrooms may also be said to be a necessary condition for the successful implementation of immersion education.

Question 3: Do learners think these changes are positive or negative?

In the analysis of the interview content, the answers of the two respondents who received the immersion education showed appreciation and approval of this kind of education. When it talks to the three factors related to the motivational change in teachers, teaching activities and teaching materials in immersion education, the evaluations given by respondents all show positive effects.

Respondents S and J mentioned the following paragraphs when answering questions related to immersion teachers.

Respondent S: "I think she (teacher) is very cool when she speaks English, and I want to be like her. I am very active in her class, and I will write English homework firstly. I am also prepared to learn English at home when I am on vacation (interview, 2019/07/14)."

Respondent J: "Although I feel that my English is not very good, but the teacher often praises me in class, for example, I am fluent in answering questions today, and I said an interesting idea. Sometimes I feel that I am still very talented in learning English. I will be particularly enthusiastic and willing to take the time to learn this language (interview, 2019/07/18)."

The influence of immersion teachers on students is mainly to praise students to stimulate students' interest in learning. In the feedback of students, it is found that such a way may make students have stronger motivation to learn English, and students may have a sense of satisfaction when they have been achieved some difficult aims, which can be a driving force for students in the next learning process. In this way, the whole learning process forms a virtuous circle, and students' motivation for English learning will become stronger and stronger.

When talking about issues related to teaching activities and teaching materials, respondents S and J mentioned that "Every time teacher hold an English activity in a class, everyone is very happy. Even if we need to memorize a long English manuscript, we will not feel tired. And every time after the event, everyone has a special sense of accomplishment (interview, 2019/07/14)." and "The activities and teaching materials are different from what I have learned before. Now it is more interesting. Everyone is more motivated and willing to participate and learn this language (interview, 2019/07/18)." These answers all prove that the changes in immersion education in activities and teaching materials are relatively successful, turning the English subject from a boring compulsory course to a more interesting one. Students began to separate English learning from the exam outline and grades, and instead tried to apply it to real-life scenes. These places of immersion education, which are different from traditional education, may improve students' interest in English learning and have a positive impact on students' learning motivation.

Conclusion

In general, immersion education may have a positive impact on the learner's motivation. Especially it may stimulate learners' interest in language learning from several aspects, and let learners actively complete language learning tasks, such as the English drama competition mentioned in the interview. These effects of immersion education may slowly transform the external regulation of the learner's own extrinsic motivation into a more autonomous integrated regulation or even into intrinsic motivation, allowing learners to enjoy the process of language learning from the heart. However, it is also found that the situation of immersion education in China is still not optimistic. On the one hand, because of its high tuition fees makes many families are discouraged, and on the other hand, because the examinations in China's education system still occupy a very important position. The status of immersion education may not significantly improve student test scores. This also shows that immersion education needs a long-term exploration and development process in China, especially how to adapt the immersion curriculum to China's national conditions and adapt to the Chinese examination system. From the current literature, the impact of immersion education on learner motivation is a slow and time-consuming process, so important factors such as the choice of teachers, the age of learners and the location of the course require educators to further research and exploration. From the research results, teachers may try adding some interesting English activities when they are conducting English education or let students simulate some real situations in which English can be used in the classroom, so that students might discover the fun of learning English and increase their autonomy of language learning. In addition, teachers should encourage students in the learning process so that students may feel satisfied and have stronger motivation to learn English.

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The Effect of Internal Locus of Control on the Entrepreneurial Intention of Vocational High School Students

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Abstract

Internal locus of control is one of the factors that has contributed to the entrepreneurial intentions of vocational high school students. This study aims to reveal empirically the relationship between internal locus of control and entrepreneurial intentions of vocational high school students. The population in this study were all 422 grade XII students of Vocational High School in the field of technology and engineering expertise in the City of Jombang. The sample used was 180 students through random techniques. The data was collected using the entrepreneurial intention scale and the internal locus of control scale. The data analysis technique uses the product moment correlation analysis technique. The results showed a significant positive relationship between internal locus of control and entrepreneurial intention, with a significance level (p) of 0.032. The internal locus of control correlation coefficient is 0.513 for entrepreneurial intentions. It can be concluded from this study that the internal locus of control of students can predict the level of student entrepreneurial intention.

Keywords: Locus of Control, Entrepreneurial, Intent, Vocational

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Introduction

Entrepreneurship has become very important in this modern era, both for the survival and sustainability of society. Entrepreneurship exists with the hope of becoming an economic competition in the global market and providing job opportunities. Entrepreneurship can lead to higher returns and a meaningful career (Kuckertz & Wagner, 2010). A study found that entrepreneurial development has succeeded in improving the welfare of the nation as a whole. The benefits generated from entrepreneurship can contribute to economic development by improving the quality of life, offering new jobs, promoting sector productivity, increasing economic growth, facilitating social mobility, and so on.

One of the first steps to starting an entrepreneur is having entrepreneurial intentions. The entrepreneurial intention represents the individual's commitment to starting a business (Zapkau et al., 2015). Entrepreneurial intention can influence the emergence of entrepreneurial behavior in the future. Individuals with entrepreneurial intentions believe they can successfully start a new business. Entrepreneurial intention is an individual's intention to start their business (Delialioğlu & Yildirim, 2007). Entrepreneurial intent is described as the awareness and belief that individuals use to start new businesses in the near future. It is a state of conscious mind based on experience that directs attention to starting an independent business (Do Paço et al., 2011). The commitment to starting new businesses and the tendency to act as the main strength enable individuals to create new businesses. Entrepreneurial intent can also be described as an individual's state of mind for starting a new business or creating innovation in an existing organization (Remeikiene et al., 2013).

One of the factors that are believed to increase the intention and trust of individuals in entrepreneurship is the internal locus of control. More extensive research on entrepreneurship has explored the significant positive effects of internal locus of control on entrepreneurial intentions (Shane & Nicolaou, 2015). The results of several studies have found that internal locus of control can act as a positive predictor of entrepreneurial intentions.

In addition, these findings also indicate that internal locus of control is very important for building individual intention in entrepreneurship (Baldegger et al., 2017). Personality traits such as locus of control play a decisive role in increasing entrepreneurial intentions, because individuals with internal locus of control believe that they will succeed in entrepreneurship. Internal locus of control is the individual's perception that an event depends on the behavior or characteristics inherent in the individual (Zaidi & Mohsin, 2013). Every individual has full control over the results they get through ability, effort, or skill. Individual behavior will determine events in his life. Every individual has their responsibility to succeed and fail in learning. Individuals with internal locus of control also think that extraordinary experiences are caused by stable behavior or individual characteristics (Sohrabi et al., 2016). Individuals with internal locus of control believe that they can make changes through their entrepreneurial behavior which is built through strong entrepreneurial intentions. This study aims to reveal empirically the relationship between internal locus of control and entrepreneurial intentions of vocational high school (VHS) students. This study focuses on several indicators of internal locus of control for vocational students who are approaching graduation in technology and engineering competencies. These students have carried out learning activities and practices in the industry, so that they are thought to have entrepreneurial intentions based on one of the factors, namely internal locus of control.

Method

The design of this research is ex post facto by processing the research data without treating the research subjects. The data in this study were collected using a questionnaire questionnaire instrument. The scaling model used is the Likert scale model. Entrepreneurial intention is expressed by the entrepreneurial intention scale built by researchers based on the dimensions of entrepreneurial intention according to Van Gelderen, Brand, Van Praag, Bodewes, Poutsma, and Van Gils (2008), namely: wishes, preferences, plans, and expected behavior. The population in this study were all students of class XII Vocational High School in the field of technology and engineering expertise as many as 422 students in the City of Jombang. The sample used was 180 students through random techniques. The data was collected using the entrepreneurial intention scale and the internal locus of control scale. The data analysis technique uses the product moment correlation analysis technique.

Result and Discussion

Result

Table 1 shows that the results of the analysis are in the value of $r = 0.513$, $p = 0.032$ ($p < 0.05$), which means that the internal locus of control has a positive and significant relationship with the entrepreneurial intentions of students at VHS in Jombang. These results indicate that the proposed hypothesis is accepted, namely that the internal locus of control can predict entrepreneurial intentions. Internal locus of control contributes 2.1% to entrepreneurial intentions. Meanwhile, the remaining 97.9% is influenced by other variables.

Tabel 1. Results of Correlation Analysis of Pearson product moment

<u>Variable</u>	<u>R</u>	<u>Rsquare</u>	<u>Sig.</u>	<u>R</u>
Internal locus control <u>Entrepreneurial Intent</u>	0,513	0,021	P=0,032	0,513

Discussion

The results showed that internal locus of control had an effect on students' entrepreneurial intentions. Previous findings indicate that entrepreneurial characteristics significantly influence entrepreneurial intentions (Kusmintarti et al., 2016). Internal locus of control plays a role in building entrepreneurial intentions and decisions to become entrepreneurs, this is in line with several previous studies which found that there is a positive relationship between internal locus of control and entrepreneurial intention. (Brunel et al., 2017). Individuals with an internal locus of control believe that their decisions and actions can influence the success of their business (Karabulut, 2016). One study found that individuals who have an internal locus of control tend to have greater entrepreneurial intentions (Ayodele & Olanrewaju, 2013). These people believe that they can turn their entrepreneurial intentions into successful entrepreneurial behavior. Successful entrepreneurs tend to focus more internally on managing their company. Internal locus of control is one of the characteristics of entrepreneurship.

Internal locus of control can lead individuals to develop entrepreneurial intentions. Some successful entrepreneurs claim that their success is due to the right decisions they have made (internal locus of control), not because of external factors such as fate and luck. Individuals with internal locus of control tend to be more courageous in taking risks in building a business. Individuals believe they can control their environment because they have a clear

vision of their new business. Internal locus of control can help individuals build social networks to obtain information that supports their business. Individuals can actualize their future business ideas after gathering and managing all the information obtained (Kusmintarti et al., 2016).

Entrepreneurial intention tends to increase when individuals are given entrepreneurship education that instills entrepreneurial characteristics of students such as internal locus of control. Individuals with internal locus of control believe that hard work makes it possible to achieve success in business (Kumar & Shukla, 2019). Internal locus of control is one of the important characteristics of entrepreneurship. Internal locus of control can increase an individual's likelihood of becoming entrepreneurs (Goksel & Belgin, 2011). Individuals with internal locus of control characteristics dare to take risks to start a business in the future (Phipps, 2012).

The implications of this study can provide insight, especially for vocational students, regarding the sustainable use of current students' abilities, both the knowledge and skills acquired from schools to foster entrepreneurial intentions. The findings obtained indicate the ability and efforts of individuals in the learning process at school tend to determine individual success in starting a business faster than external factors. Individuals who believe in their abilities tend to have higher entrepreneurial intentions. The results of this study are also useful for teachers. Apart from teaching vocational skills, teachers are also responsible for guiding students to maximize the potential of students' vocational skills. Thus, students can start the entrepreneurial process with maximum effort and results.

Conclusion

Internal locus of control can be a good predictor of student entrepreneurial intentions at VHS in Jombang Regency. There is a significant positive relationship between internal locus of control and entrepreneurial intention ($p = 0.032$). Internal locus of control contributed 2.1 percent in explaining entrepreneurial intentions. Thus, the remaining 97.9 percent is influenced by other variables outside the scope of this study. This research is limited to the analysis of the influence of internal locus of control on entrepreneurial intentions so that continuous research is needed to determine how much the contribution between variables is and determine a valid structural model for students' entrepreneurial intentions.

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Recalibrating Service-learning Program into Pure Online Activity

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Abstract

COVID19 pandemic has forced Higher Educational Institutions to recalibrate their syllabus into online learning. As De la Salle University (DLSU) prepares for online education, the Center for Social Concern and Action-Service Learning Program also must recalibrate its processes. To continuously remain relevant to society and its partner communities' needs, it pursues its Lasallian Mission and, at the same time, effectively carries out its educational work. Relative to this challenge, service-learning, regarded to have effectively brought social awareness and empathy to students that substantially develop the Lasallian core values of faith, service, and communion, deepening their resolve to contribute a life-changing action to the plight of the poor and marginalized, must be conducted online, as well. While apprehensions to E-Service-Learning were due to its being new to DLSU, literature shows that it can be successfully done and can still deliver the traditional service-learning objectives. The "Type IV Extreme E-Service-Learning: Instruction and Service 100% Online", identified by Waldner and colleagues, has been considered through an extensive literature review. This paper presents the recalibrated service-learning processes to match the pure online education setup of DLSU. Employing L.T. Burns' modules of the service-learning program (preparation, action, reflection, and evaluation), I detailed the ESL process flow and its corresponding work instructions for both students and faculty. It carefully embedded the Lasallian Reflection Framework and Kolb's model for experiential learning. ESL successfully emerged in its consistency to deliver student learning, project effectiveness, efficiency, Lasallian values, and program management.

Keywords: eService-learning, Lasallian Reflection Framework, De La Salle University

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Introduction

On 27 August 2020, a Help Desk Announcement from the De La Salle University, Office of the Vice-Chancellor for Academics, addressed to the Academic Community, said: “In line with government pronouncements regarding no in-person classes before January 2021, course offerings have three types: A. pure online (no in-person classes at all); B. hybrid (with in-person classes in one week); and C. predominantly in-person (eight days of in-person classes in two non-consecutive weeks).... in-person deployment in external establishments shall remain suspended. Departments are urged to continue using online modes for such activities.”

As DLSU is set to proceed with its response to face-face education restrictions brought about by the COVID19 pandemic, the Center for Social Concern and Action-Service Learning Program (COSCA-SLP) has also recalibrated its processes. To remain relevant to society and its partner communities’ needs, COSCA-SLP pursues its Lasallian Mission and, at the same time, effectively carries out its educational work (DLSP, 2009). With a firm belief that service-learning effectively brought social awareness and empathy to students that substantially develop the Lasallian core values of faith, service, and communion, deepening their resolve to contribute a life-changing action to the plight of the poor and marginalized, COSCA-SLP persists in learning and adapts to the “new normal”.

Service-learning, being a practical application of classroom knowledge and learning achieved by assigning students to work on community-based projects, is an effective teaching style fostering interactive learning by integrating classroom activities into communities (Helms et al., 2015). Therefore, service learning’s presence in academics can enhance students’ academics, professional readiness, social orientation, community involvement, and commitment to serving the community (Fiebig, 2014).

At the onset, COSCA-SLP apprehensively asked how it can continue service-learning in this time of pandemic? How can it serve and learn when community visits are restricted? And if ESL will continue to help respond or reach out to the poor and the marginalized? The E-Service-Learning (L. Waldner et al., 2010) was COSCA-SLP’s proposed replacement to its traditional service-learning processes.

ESL, being a new framework and never been deployed in DLSU, was very positive and encouraging but very challenging, i.e., considering the course design and implementation schedule and partner communities’ readiness in communication hardware and software. These are critical to the success of online or e-service projects and student learning (Helms et al., 2015). ESL comes with the primary consideration that it must carefully adapt its traditional SL foundation, the LRF, and its adapted SL definition. LRF serves as a guide for all Lasallian formation and action programs, projects, and activities (Galgo, 2017); and the adapted SL definition, as course-based, reflective, reciprocal in partnership, and civic education, where students serve to learn and learn to serve (Bringle & Hatcher, 1995).

Studies have established SL’s applicability in online courses in terms of project completion, client satisfaction, student satisfaction, interaction, and skill-building of the traditional classroom (Helms et al., 2015; L. Waldner et al., 2010). Accordingly, DLSU-SLP has modeled its strategies for implementing service-learning on the “extreme e-service-learning” type of ESL, where both the course and service are conducted online (L. S. Waldner et al., 2012).

Thus, the need to recalibrate the current syllabus to pure online activity must carefully consider the new SL processes. It must adopt the learning activities and outcomes, active learning and assignments, communication among SL stakeholders, active and collaborative education, and reflection activities (Hathaway, 2013). Vibrant online collaborations and discussions among ESL stakeholders are the critical factors for its success (Shea & Pickett, 2005), including interaction with content, collaboration, conversation, intrapersonal interaction, and performance support (Northrup, 2002). Accordingly, COSCA-SLP embarked on various preparatory activities to guarantee all necessary SL elements are in place in pure online mode.

Although ESL in the United States has been in place for several years due to “online-learning” (L. Waldner et al., 2010a), DLSU’s adaption of ESL is not due to the demand for online-learning but due to the conventional way or “face-to-face” restrictions to SL program.

In the Philippines, though we have some “distance learning” called “Open University Program” in the Higher Educational Institutions that limits “face-to-face” contacts between the faculty and the students, this, however, is not that patronized by Filipino students that would demand the conduct of ESL (Arimbuyutan et al., 2007).

ESL is encouraging because it can still deliver the expected outcomes; however, communication through the internet is acknowledged and is a big challenge in an online classroom. Thus, meticulous preparation and comprehensive organizing of every online course area in advance are vital (Bangert, 2018).

The process of creating the ESL comes with the primary consideration that it must carefully adapt the traditional Service-Learning foundations: the Lasallian Reflection Framework and the Kolb Model of Experiential Learning. Through extensive literature review, one of the emerging types of e-service-learning endeavors, the “Type IV (Extreme) E-Service-Learning: Instruction and Service 100% Online” (L. Waldner et al., 2010b), was deemed to be the new process flow. ESL process flow includes the list of activities and their corresponding requirements and work instructions for all stakeholders. It ensures to suit DLSU academic online activities. It was then presented to the College of Business, Management and Organization Department, who handles the Corporate Social Responsibility and Governance Course for their comments, suggestions, and eventually integration in their pure online course syllabus.

This paper employs Burns’ modules of the service-learning program (preparation, action, reflection, and evaluation) (Burns, 1998) and the Lasallian Reflection Framework (LRF) that serves as a guide for all Lasallian formation and action programs, projects, and activities (Galgo, 2017) for recalibrating to ESL modality. This paper also faithfully framed its processes to Kolb’s experiential learning model (McLeod, 2017). I detail the process flow and all its corresponding work instructions for both students and faculty. I then present the ESL students’ online evaluation process and results. ESL emerged successfully in its consistency to deliver student learning, project effectiveness, and efficiency, Lasallian values, program management.

LRF and Kolb’s Model of Experiential Learning

“E”-Service-Learning” or “Electronic” or “Online”-Service-Learning is the type of Service-Learning being adapted starting Terms 3, AY 2019-2020 at DLSU. ESL is just the result of

the intersection of traditional service-learning and online learning (L. S. Waldner et al., 2012).

DLSU ESL process flow is literature-based and a best practice-based process. Although there were identified challenges and limitations as reported by authors, this, however, has emerged successful in delivering the expected outcomes of the traditional service-learning in terms of student SL project output completion, partner communities and student satisfaction, interaction among stakeholders, and skills building, ESL is doable online (L. Waldner et al., 2010).

Authors have recommended that online courses assist SL that transforms learning while fostering civic engagement (Rutti et al., 2016). When deploying SL in online courses, faculty are encouraged to start with a small project, provide guidance for students, make strategies to contact partner organizations (PO), be ready for sudden outcomes, and have a reflection as an essential part of ESL activities (Strait & Sauer, 2004).

Bearing in mind the ESL best practices, the Lasallian formation component, which is one of the DLSU-SLP components, must be likewise observed throughout the ESL processes. The LRF, which is the pillar of any Lasallian formation in DLSU, is considerably embedded in the ESL process flow. It has likewise emphasized the meaning of why LRF is in a circular movement, i.e., from awareness building, analysis, and planning to a life-changing deployment of actions, which is supposed to repeatedly operate up to the accomplishment of the established objectives of community development intervention.

The LRF is embedded in the Service-Learning Process Flow, primarily because it is anchored to DLSU's core values of Faith, Zeal of Service, and Communion in Mission. It serves as a guide for all Lasallian formation and action initiatives, programs, projects, and activities. The Context of DLSU Service-Learning is deeply rooted in the Principles of Lasallian Education in the Philippines and on the Principles of Lasallian Social Development, which, in summary, are all manifested in the Five Core Principles of Lasallian Schools, i.e., on the faith in the presence of God, Concern for the Poor and Social Justice, Respect for All Persons, Quality Education, and Inclusive Community. It is why the LRF is a must and non-negotiable in the Service-Learning Process.

Another foundation of DLSU service-learning is Kolb's model of experiential learning. It is typically represented by a four-stage learning cycle in which the learner must undergo to achieve the learning, i.e., (1) Having A Concrete Experience where a new experience or situation is encountered, followed by (2) Observation of And Reflection on that experience which leads to (3) the Formation of Abstract Concepts or new idea which the person has learned from their experience, which is then (4) used to test a hypothesis or Active Experimentation where the learner applies their ideas to the world around them to see what happens (McLeod, 2017). Learning here is an integrated process, with each stage being mutually supportive of and feeding into the next. Effective learning only occurs when a learner executes all four stages of the model, i.e., no one stage of the cycle is effective as a learning procedure on its own (McLeod, 2017).

Creating DLSU ESL comes with the primary consideration that it must carefully adapt the traditional Service-Learning foundations: the Lasallian Reflection Framework and the Kolb Model of Experiential Learning.

Before presenting the ESL process flow, the following are the traditional or face-to-face service-learning processes. The first stage is the “see and experience” or “*masid-danas*” activity; the students go through community orientation through community tour and dialogue with the community’s people. It is crucial because the students can never effectively proceed to the next stage if this is not undergone. In the second stage, in the “analysis and reflection” or “*suri-nilay*” activity, the students cognitively understand the context of the community’s culture, environment, and problem crucial for their project proposal and for such to be impactful and life-changing. The third stage is the “commitment and action” or “*taya-kilos*” activity; the students implement and turnover their SL projects.

ESL Process Flow

Following the traditional service-learning process flow, the below table is the DLSU-ESL process flow.

Phases	Activities	Work Instructions
1. Preparator y Phase	1. SL faculty familiarization of e-S-L through orientation	1. SLP orients the Academic departments about ESL;
	2. Identify standard online technologies/platforms to be used	2. SLP Presents possible ways to carry out SL for online courses; and
	3. Assessment of partner communities’ capacity for e-S-L and select partner that is open to online engagement	3. SLP proposes ESL process for T3, AY 2019-2020
	4. Identification of ESL Partner Communities	1. COSCA Partners Network and Development Program (PNDP) prepares Partner Community’s readiness to engage SLP through an online setting
	5. Training of partner communities for ESL	
	6. Pre-testing the technology before live sessions	
2. Orientatio n Phase (See-Experience)	1. Service-Learning Class Orientation using Synchronous and Asynchronous tools	1. SLP sends faculty, (1) the ESL, and (2) the Partner Community Orientation Videos;
	a) AVP of eService-Learning; and b) AVP of the	2. Faculty will share these videos with the class; 3. ESL Project ideas will be crafted by students based on these videos; and 4. Students will submit proposals to the faculty for review and to SLP for evaluation and then sharing with the class assigned PO’s

	Partner Community	approval.
	2. ESL Project Identification and Planning	<ol style="list-style-type: none"> 1. Students create ESL project plan using the “<i>ESL Project Proposal Form</i>” to be submitted to faculty and SLP; and 2. SLP stakeholders keep their communication line open for possible ESL Project-related questions and consultations
3. Service Proper Phase (<i>Analysis-Reflection</i>)	1. ESL Project Update Reporting and Feed Backing	<ol style="list-style-type: none"> 1. Faculty shares with SLP updates of students’ ESL projects, who, in turn, forwards the same to the class’ PC for comments; 2. Updating can be done asynchronously. It can be prerecorded; and 3. SLP can send questions electronically before the updating activity for the groups to answer.
	2. ESL Experience Presentation and Group Reflection	<ol style="list-style-type: none"> 1. Faculty shares GDrive with SLP the groups’ ESL Experience PowerPoint Presentation
4. Post Service Phase (<i>Commitment-Action</i>)	1. Submission of ESL Project Outputs and Reflection Papers/Journals	<ol style="list-style-type: none"> 1. Faculty shares the google drive with SLP the groups’ ESL Final Project Output and Individual Reflection Papers/Journals; 2. With the asynchronous setup, it is vital to establish deadlines, i.e., in agreement with the PO for submission of the final ESL outputs; and 3. Students are provided with reflection prompts that related to academic enhancement, personal development, and Lasallian core values formation.
	2. Administrati on of Online Evaluation on Students’ Satisfaction on ESL	<ol style="list-style-type: none"> 1. SLP shares with faculty the link of ESL evaluation google form for students to accomplish; and 2. SLP discusses evaluation results and integrates them into the next academic term’s processes.
	3. Facilitate Project Turnover	<ol style="list-style-type: none"> 3. A careful evaluation in assessing the quality of the completed ESL project should be done before turning them over to Pos; and 4. SLP shares with PNDP the students’ ESL outputs for turnover to class’ PO

Table 1. DLSU-ESL Process Flow

It has four phases, the same as DLSU traditional SL. As illustrated, recalibrating the service-learning to the pure online course requires COSCA-SLP to prudently prepare and plot all schedules of the course delivery of topics, SL activities, and deliverables’ compliance, and PO availability and readiness to engage SL online. Online platforms for communication must be somehow traditional and user-friendly for all stakeholders, especially for the PO. Everyone agreed and are comfortable with Gmail, Gmeet, Messenger, Viber, and Zoom Apps. Aside from capacity-building activity for the online setup to prepare some of the POs,

connectivity support and devices were also extended. Like the traditional conduct of SL, the preparatory phase is foremost to the success of SL.

ESL

The Orientation Phase (Masid-Danas¹ Activity)

Generally, using synchronous and asynchronous tools, students are introduced to the SL's theoretical backgrounds, Lasallian contexts, definition and elements, process flow, and the LRF through the prerecorded orientation video provided by COSCA-SLP. Another video is the class's assigned PO. It is where students are virtually immersed and exposed to their assigned PO through a center orientation and community tour. The students, grouped into 5-8 students, virtually see and experience their PO's mission-vision, programs, services, and needs from this orientation video. These two videos are crucial because students can never effectively proceed to the next stage of the LRF if this is not undertaken. Directly borne out of these materials, they will create and present their ESL project proposal to evaluate and approve the faculty, SLP, and the PO.

Relative to the ESL project proposal, the following are the suggested information needed: each group is expected to articulate the brief background of the PO; their identified need and its context or the surrounding circumstances that cause the problem for the PO; ESL project proposal itself, i.e., aligned, and responsive to the identified need. Students must specifically develop a unique project name, description, objectives, set of activities, deliverables, and the itemized needed budget; the PO sector, students wish to be their direct beneficiaries (community parents, elderly, women, kids, or the PO itself). They also must identify the expected changes in their ESL projects to the PO; and the desired learning outcomes for them in terms of attitude, skills, knowledge, and values development.

The Service Proper Phase (Suri-Nilay² Activity)

After the proposal stage, students work immediately on their approved ESL projects. Students' activity includes understanding the context of the community's culture, environment, and problem cognitively, crucial for their ESL project preparations. It can make their ESL project more impactful and life-changing. During this time, constant communication and coordination among ESL stakeholders are playing a big part. It is essential along the way so that students' projects can be done correctly.

Before the ESL projects' turnover, each group would present their ESL project's final output and their whole ESL experience, from identifying needs to the group's preparations (in terms of challenges, learnings, and recommendations). They reflect on such experience and direct their attention to ESL's relation and relevance with their academic formation. Another aspect of the reflection activity is for students to share their personal development and the Lasallian values vis-à-vis the Lasallian core values of faith, service, and communion, they believe were enhanced.

¹ The commonly used name Lasallians would call the first stage of the LRF. It is the Filipino translation of the "See-Experience" words.

² The commonly used name Lasallians would call the second stage of the LRF. It is the Filipino translation of the "Analysis-Reflection" words.

The Post Service Phase (Taya-Kilos³ Activity)

The last stage or activity of the LRF is the students' implementation and turnover of their ESL projects to the PO. The faculty collates all ESL final project outputs and students' ESL reflection journals and shares them with COSCA-SLP, who turnovers the final projects to each class's assigned PO via Emails, for some information and educational materials, and via courier services, for the collated goods and supplies.

A week before the end of the academic term, students and faculty are requested to accomplish the online ESL Activity Evaluation Forms via Google Forms. SLP then collates and discusses the evaluation results and considers some of them for integration to the next academic term's ESL processes.

The last stage of the LRF emphasized that students should still be mindful of their PO now that their ESL project has been turned over already. It is stressed that *Taya-Kilos* is another form of *Madid-Danas* that can further explain or show the PO's realities and problems for another round of service activity and implementation strategy. Although it is no longer part of the class requirement, they are encouraged to be observant still of their PO's needs as suggested by the LRF's nature to continuously improve its social engagements until the PO's identified needs are fully addressed. We call the complete process of the cycle of improvement (Cole, 2016), where they determine the first ESL approach based on their *Masid-Danas*, deploy their activity, evaluate and look for some learnings. Then they integrate those learnings and recalibrate their original approach. It goes on and on up to the time PO's needs are entirely addressed.

Usually, ESL concludes in an ESL experience presentation and group reflection sharing that can be done either synchronously with COSCA-SLP and the PO via Zoom Meeting or asynchronously via a prerecorded presentation. It is one of the significant components of the total grades of the students. The reflection aspect is essential to deem the ESL experience not futile. Reflection activity is the only way that can make ESL enriching and meaningful. Through reflection, students gain a deeper understanding of course content, a broader appreciation of their discipline, and an enhanced sense of civic responsibility.

The reflection can extend learning beyond the online classroom. Service learning helps foster the development of a sense of caring for others. It is also a means by which colleges and universities can promote the civic engagement of students. The reflection process allows students to assess their service-learning achievements and determine their contributions to the community and beyond (Helms et al., 2015).

ESL Evaluation Process

Students' ESL performances are evaluated based on the ESL activities, i.e., the ESL project proposal submission, project preparation, coordination with the PO, final output presentation submission, and reflection journal submission. The faculty assess preparation activity based on students' eagerness towards the project, contributions, cooperation, coordination, communication, and documentation. It makes sure that everyone in the class is equally participating in their ESL activity.

³ The commonly used name Lasallians would call the third stage of the LRF. It is the Filipino translation of the "Commitment-Action" words.

The ESL program itself is also subjected to stakeholders' evaluation in its consistency in delivering student learning, project effectiveness and efficiency, Lasallian values, and program management. It is performed online, through google form, towards the end of the academic term, adapting the 4-point Likert-scale evaluation process, with scores ranging from 1 (strongly disagree) to 4 (strongly agree).

ESL Evaluation Result

The student ESL online evaluation results had 55% of students under the Corporate Social Responsibility and Governance Course for Term 1, AY 2020-2021. Based on the students' honest opinion, using the Likert scale, if they "Strongly Agree" to "Strongly Disagree" with the statement. Generally, students "Strongly Agree" on the ESL evaluation relative to the following questions on Student Learning: 75% said that the e-SL is relevant to the course they are taking; 71% were able to see and understand the situation of the community/partner organization virtually; 73% were able to analyze and reflect on the symptoms and causes of the community issue/problem being addressed; 76% said the online project activity with the community/organization they did were appropriate and relevant to their own needs; 64% said that they had proper and smooth coordination, communication, and cooperation with the representatives of the partner organization; 63% were able to implement their e-SL project with minimal technical/connectivity problem; 80% said that their class/group received clear, relevant, and immediate communication from our Faculty in-charge for class online project-related concerns; and 75% said that they are happy and satisfied with their overall e-SL experience.

Relative to the most important lessons students learned from ESL, where they were asked to mark at least three choices that apply to them, the following were the three choices that have the highest marks: 83.6% marked on the "Understanding of Social Issues"; 75.8% marked on the "Collaboration and Teamwork"; and 65.5% marked on Civic responsibility.

Relative to the most significant challenges they faced in their ESL experience, where they were again asked to mark two choices that apply, the following were the three choices that have the highest marks: 62.4% on the "Technological gaps/challenges"; 55.8% on the "Internet Connectivity"; and 48.8% on the "Limited Engagement."

Three open-ended questions were also asked from the students. The following are some of the highlights written in the Google Form: on how they were able to overcome challenges: *"making sure to communicate well with my constituents to provide excellent output"* and *"committing to the whole process of the ESL project"*; on what are the impact/benefits of their ESL to the Partner Organization: *"improved education opportunities"* and *"the kids (in the community) became more knowledgeable about what COVID19 is, and they will practice proper hygiene and sanitation during this time of pandemic"*; and on their recommendations on how to improve ESL in the future: *"maybe make sure that each student group's project is not overlapping so that there will be a wide variety on the output for the partner communities"* and *"to broaden the range of possible partner organizations. Students can help because there are many social issues the students are actively concerned with."*

Generally, I can say that students not only were able "to link theory to practice, which deepens their understanding of course materials, they also enhanced their sense of civic responsibility. The recalibrated Service-Learning Program designed to match the pure online educational setup of DLSU has established itself to deliver the expected outcomes

continuously. It has continued to reach out and extend various projects to our Partner Organizations. ESL Student Online Evaluation results validated ESL; thus, it is deemed effective and worth continuing as an option when education returns to its normal operation.

Conclusions

The blessings of ESL projects are undeniable among its stakeholders: students, faculty, the DLSU, and the POs. Though ESL is new to DLSU and apprehensions are unavoidable, the COVID19 pandemic, ESL processes itself, and its known challenges did not prevent COSCA-SLP from continuing its Lasallian mission and educational work. SLP took these challenges as enablers to further its resolve to be of service to the students and their academic, social, and values formation, and, more so, to the greater communities.

ESL-the marriage of online learning and service-learning (L. Waldner et al., 2010) appeared to be continually reciprocal among its stakeholders in terms of their respective expected outcomes: the students get to be service-driven and steeped in community service; the faculty gets to be socially engaged, the University becomes more socially responsible; and the POs get to be more empowered.

Though ESL was successful for DLSU, it also shared the same limitations and challenges experienced by other foreign universities. These, however, are all noted and extensively considered for integrations in our ESL processes, along with our efforts for continuous quality improvement.

DLSU will continue to increase its capacity to ensure effective and meaningful ESL program deliveries vis-à-vis training of faculty, POs, and even students. Bearing in mind the importance of collating all ESL experience learnings to develop ESL pedagogy in the pure online course, ESL's success will remain.

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Investigate the Difficulties of Indonesian Learner During Electronic Portfolio

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Abstract

Normal learning stopped, project delayed, school shut down. The universe seemed to have a halt because of Novel Coronavirus. On the other hand, students must continue their education through online learning which was currently the best alternative as keeping schools opened but safe for them. This study aimed to investigate how electronic portfolio as part of ICT tools could be used to facilitate course during Covid-19. It concerned with researcher's own teaching experiences due to the growing demand for lecturers' competence to integrate technology to support students' learning. It was applied for one semester through CAR. This research drew on ethnographic case study. In generating data, the researcher applied some methods, involved questionnaires, interviews, teacher's teaching journal, and an analysis on online portfolio entries. The research results showed that the online course during pandemic was good 52,4%; Course timing was somewhat convenient 39,5%; the course materials was very useful 54,8%; lecturer or instructor's explanation was very clear 43,8%; lecture or instructor's speed was the right amount 78,6%; the ability in answering students' questions was very well 51,9%; and students' voicing their opinion was very comfortable 43,3%. Therefore, it could stimulate students to reflect on their experiences; also serves as the main key in providing information on student learning progress; and they can still be active in informing the progress of the assignment, can receive feedback, and plan self-competency development based on the analysis that has been made previously.

Keywords: Indonesian Learner, E-portfolio, Course during Pandemic

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Introduction

Novel Coronavirus made a big change in every single factor in our life - education system too. Since it happened, education sector is prepared to face teaching learning process. Then try to find the best and safe method, to keep the school open moreover keep the students away from that virus. The higher education and university in Indonesia prepare a learning system which fully support by the use of Information and Communication Technology (ICT). It could be a leading method to support teaching learning during pandemic.

Indonesia's diversity is the next challenge that must be faced by education units. Its vast territory, separated by the ocean, again the areas that are in the vicinity of dense forests be a challenge for this country. Problem arises during applying the e-portfolio such as technical problems, difficulty connecting to the internet, lack of suitably located computer and various shades of personal reaction to computer use¹. The internet availability which can serve as a source of thousand materials, it could be a dream for some regions. The lack of investment and also some problems faced when laying the necessary submarine cables due to Indonesia's geography as an archipelago. Those are not easy to be solved.

Now, look what happened, even with unequal conditions, the education unit must struggle to keep the quality and competitiveness of institutions stable. Especially for vocational institutions, for example Health Polytechnic, which must maintain the qualifications of students, so that they remain skilled and professional in providing health services to the public. Therefore, to keep this matter on track, lecturers must apply careful and detailed assessments. So that it can measure the success of learning and also become a control function for students.

We believe that the use of electronic portfolios has been increasing rapidly especially in universities lately. In its application in the classroom, lecturers can design and develop learning and assessment activities. Lecturers can adjust the curriculum according to student needs while learning during the pandemic. Creating innovative learning activities while promoting measurable assessments at the end of each lesson. From here, lecturers can see the developments and obstacles that students have. This is a teaching and learning support for students. Because from the electronic portfolio, lecturers can classify students who can learn well, and those who experience obstacles.

Basically, the electronic portfolio is an appropriate home for such experimentation, for such new texts, and certainly for new exploration and understanding². By applying it in learning can create disciplinary expertise and professional development which will create students who are more skilled and professional according to the cognitive level that has been designed at the beginning of learning. With its massive used in learning during pandemic, it will direct learning towards educational leadership. Formerly it has been artistic compilations of documents for presentations, but recently covered the collection, management and presentation of a far greater diversity of material for increasing array or professions³. Long distances are an obstacle in learning so that it can influence the lesson plan. The lectures have to change their teaching

¹ Dornan, T., Carroll, C., & Parboosingh, J. (2002). *An electronic learning portfolio for reflective continuing professional development*. *Medical Education*, 36(8), 767–769. doi:10.1046/j.1365-2923.2002.01278.x

² Yancey, K. B. (1996). *The electronic portfolio: Shifting paradigms*. *Computers and Composition*, 13(2), 259–262. doi:10.1016/s8755-4615(96)90014-6

³ Tochel, C., Haig, A., Hesketh, A., Cadzow, A., Beggs, K., Colthart, I., & Peacock, H. (2009). The effectiveness of portfolios for post-graduate assessment and education: BEME Guide No 12. *Medical Teacher*, 31(4), 299–318. doi:10.1080/01421590902883056

approach to obtain student's best results or let say change it to make them happy. There were a lot of training attended by lecturers in order to maximize and elaborate teaching strategies and approach which will be treated in her/his class.

The number of students is not small, different learning attitudes and habits will affect the learning process. Then it will give impact on learning outcomes. Therefore, electronic portfolio's function of being able to compile student work results in a sequence will make it easier for lecturers to understand how students learn, at least be able to improve teaching techniques based on the results of portfolios filled in by students. It allows for authentic formative evaluation by providing students with the opportunity to learn while being evaluated⁴. Authentic means real, valid, and reliable. Authentic assessment covers marking, measurement, testing and evaluation of three (3) aspects, namely attitudes, skills, and knowledge. It has a strong relevance to a scientific approach in learning, because it is able to describe an increase in student learning outcomes, both in the context of observing, reasoning, trying and building networks. Of course, it allows for the evaluation to be structured and criterion-based⁵. Again, it focuses on difficult and contextual assignments, so that students can demonstrate their competence. Assessment with an electronic portfolio, considers student involvement as the significance. It can be assumed that students will perform better learning activities when they know how they will be assessed. It is in line with its aim which often as an instrument with which to stimulate students to reflect on their experience⁶. Based on the explanation given, the purpose of this study is how the electronic portfolio facilitate course during pandemic.

This study was conducted on a health campus with vocational education background. Electronic evaluation portfolios may play a role in learning and evaluation in clinical settings and may complement other traditional evaluation methods⁷. The health education provided to students requires a big effort, especially in pandemic situation like this. The distribution of subjects dominated by practical activities rather than theory presents its own challenges. This makes lecturers and students work harder than usual. Interestingly, this assessment model recapitulates history of individual experiences and performance colored by personal interpretation⁸, simple and easy to use⁹. But concerns still arise among students who have direct contact with humans as their patients. For example, students in nursing, dental hygiene, and midwifery. Detailed practical learning is hampered by the prevailing regulations, about not allowing face-to-face lectures. This forces lecturers to work more innovatively by utilizing all media that can optimize learning. Such as self-recording which will then be uploaded on YouTube, making it easier for students to watch recordings over and over again. In addition, several lecturers made limited meeting schedules with several students in the laboratory. These

⁴ Des Marchais, J. E., & Vu, N. V. (1996). Developing and evaluating the student assessment system in the preclinical problem-based curriculum at Sherbrooke. *Academic Medicine*, 71(3), 274–83. doi:10.1097/00001888-199603000-00021

⁵ Tiwari A, Tang C: From Process to Outcome: The Effect of Portfolio Assessment on Student Learning. *Nurs Educ Today* 2003, 23:269-277

⁶ Driessen, E. W., van Tartwijk, J., Overeem, K., Vermunt, J. D., & van der Vleuten, C. P. M. (2005). Conditions for successful reflective use of portfolios in undergraduate medical education. *Medical Education*, 39(12), 1230–1235. doi:10.1111/j.1365-2929.2005.02337.x

⁷ Duque, G., Finkelstein, A., Roberts, A., Tabatabai, D., Gold, S. L., & Winer, L. R. (2006). *Learning while evaluating: the use of an electronic evaluation portfolio in a geriatric medicine clerkship. BMC Medical Education*, 6(1). doi:10.1186/1472-6920-6-4

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⁹ Torras, M. E., & Mayordomo, R. (2011). Teaching presence and regulation in an electronic portfolio. *Computers in Human Behavior*, 27(6), 2284–2291. doi:10.1016/j.chb.2011.07.007

meetings are regular, but still, students who are outside the region cannot attend due to the high cost.

There were 210 participants in this study which aimed to investigate how electronic portfolio as part of ICT tools could be used to facilitate course during Covid-19. It concerned with researcher's own teaching experiences due to the growing demand for lecturers' competence to integrate technology to support students' learning. It was applied for one semester through classroom action research. This research drew on ethnographic case study. In generating data, the researcher applied some methods, involved questionnaires, interviews, teacher's teaching journal, and an analysis on online portfolio entries. Besides, portfolio becomes the key instrument that fully services learning information¹⁰, it also contributes to self-regulated learning (SRL)¹¹. Because of that, with this method student can do self-assessment. Adding a self-assessment section in the electronic portfolio assessment will enrich the data. Lecturers can do many things from this self-assessment. Students can report on work done, feedback received, progress made and their plans for improving competence¹². From this, lectures can classify the students base on their report made in e-portfolio entries. Then give the, more attention and help to students who need it.

In the questionnaires, there were some questions to gain student's learning condition during pandemic. The researcher only took the top 3 data from it. The first question was, "*Overall, how would you rate the course during pandemic?*". There were 110 students chose "Good", 47 students chose "Very Good", and 21 students chose "Fair". From this statement, students enjoy doing lectures boldly by applying electronic portfolios. Because actually by studying at home, the concentration decreases a little, and the assignments given are often forgotten. But with the application of e-portfolios, students who feel that learning remains focused, they can re-access learning, get feedback, and of course get more attention for those who experience difficulties than other students. Students can feel responsive transparency. In conducting the middle test or final test, they can see the advantages and disadvantages of the project they are working on. Everything is recorded neatly and coherently. Portfolio assessment, either formative or summative, was the norm amongst higher quality studies¹³.

Second question was, "*How convenient was the time that course was held?*". Student's response was 83 students chose "Somewhat convenient", 60 students chose "Very convenient", and 35 students chose "Extremely convenient". The results of the interview showed that students felt happy because the lecturer divided the types of lectures into several methods. Among these are Synchronous, Asynchronous and Hybrid Learning. This of course helps alleviate student problems as they really were at the beginning. Different internet connections make it difficult for some students to have membership to do synchronous learning continuously at each meeting. The unstable internet made it difficult for them to join Zoom Meeting or Google Meet. Because as we know that lectures who using the e-portfolio faced challenges regarding access to and reliability of technology and the amount of time and effort

¹⁰ Driessen, E. (2016). Do portfolios have a future? *Advances in Health Sciences Education*, 22(1), 221–228. doi:10.1007/s10459-016-9679-4

¹¹ Van der Gulden, R., Heeneman, S., Kramer, A. W. M., Laan, R. F. J. M., Scherpbier-de Haan, N. D., & Thoonen, B. P. A. (2020). How is self-regulated learning documented in e-portfolios of trainees? A content analysis. *BMC Medical Education*, 20(1). doi:10.1186/s12909-020-02114-4

¹² Babovič, M., Fu, R.-H., & Monrouxe, L. V. (2019). Understanding how to enhance efficacy and effectiveness of feedback via e-portfolio: a realist synthesis protocol. *BMJ Open*, 9(5), e029173. doi:10.1136/bmjopen-2019-029173

¹³ Buckley, S., Coleman, J., & Khan, K. (2010). *Best evidence on the educational effects of undergraduate portfolios*. *The Clinical Teacher*, 7(3), 187–191. doi:10.1111/j.1743-498x.2010.00364.x

involved in the process¹⁴. Therefore, Hybrid learning is a way out. Lecturers can record the lecture, which then the link will be shared with students. So, students who cannot join directly in lectures can access learning videos at any time.

The third question was, "*How useful was the course material?*". This question was designed because there are several materials that are made simpler. So that even with the explanation via video, students can understand and achieve the desired competence. Certain material requires students to make video recordings related to interactions with several patients when they practice at the health center to see their communication style. But because of the pandemic, students can replace these patients with their family members, so that role plays are carried out in accordance with the learning objectives.

How useful was the course material?

210 responses

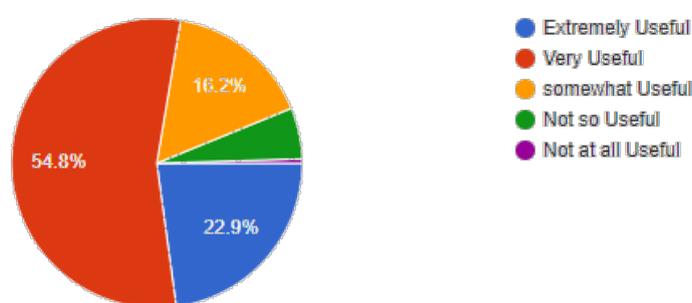


Figure 1. Chart of course material usefulness

The upcoming questions were, "*How clearly did your lecturer or instructor explain the course material (using LMS. eg Google Classroom, Edmodo, Others?)*". There were 92 students chose "Very clearly", 58 students chose "Somewhat clearly" and 49 students chose "Extremely clearly". The fifth question, "*was the speed with which instructor presented the course material too fast, too slow, or about right?*". This question is related to a different internet connection, which in the future will cause a delay to the sound that is heard. So, if the explanation is too fast, students will have difficulty understanding it. There were 165 students chose "The right amount", 29 students chose "too fast", and the other 13 students chose "Much too fast". In connection with the previous question, "*How well did your instructor answer student's questions?*". The response to this question can describe how the situation during the lecture took place, whether the interaction occurred well between the lecture and students or not. The activeness of asking students is also a benchmark for whether they pay attention to lectures, and whether the method of delivering the material works well. The response given was, 109 students chose "very well", 54 students chose "Extremely well", and 41 students chose "Somewhat well". A variety of purposes have been associated with the use of portfolios in teacher education, including a) documenting students' work; b) providing opportunities for reflection; c) developing student understanding of relevant competency levels¹⁵.

¹⁴ Wetzel, K., & Strudler, N. (2006). Costs and benefits of electronic portfolios in teacher education: Student voices. *Journal of Computing in Teacher Education*, 22(3), 99– 108.

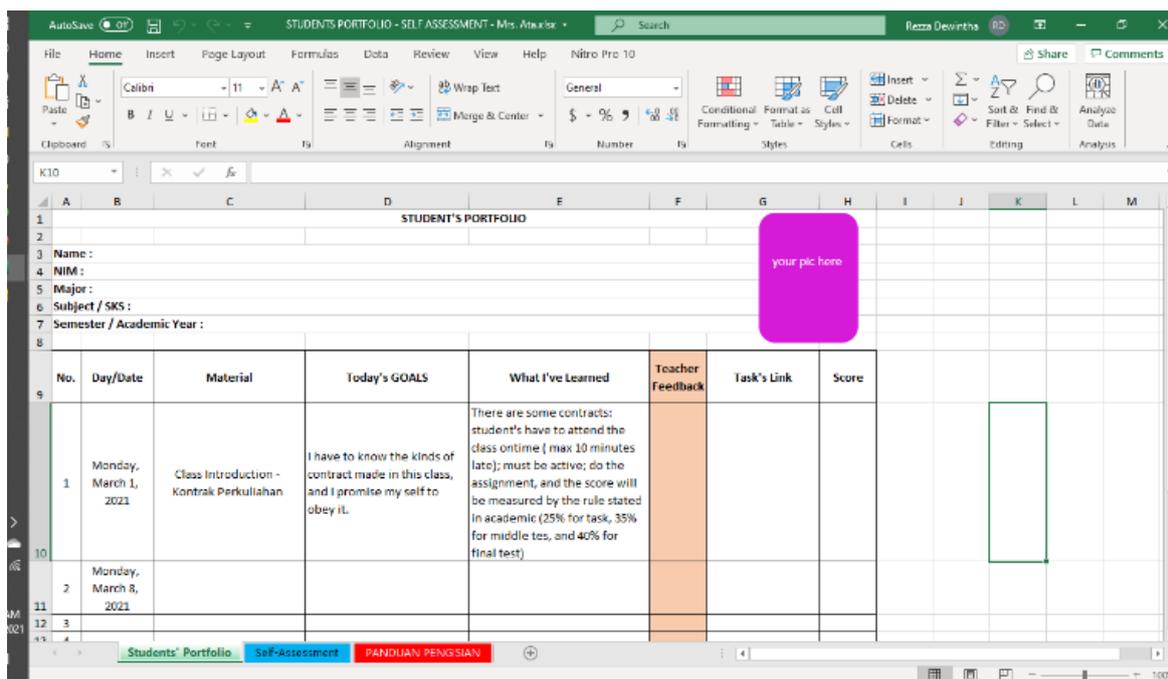
¹⁵ Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass

The next question was, “*How comfortable did you feel voicing your opinions in class?*”. There were 91 students chose “Very comfortable”, 77 students chose “Somewhat comfortable” and 30 students chose “Extremely comfortable”. Feeling comfortable in the course during pandemic also proves that learning is very friendly, which can combine teacher and student-centered learning. Not being monotonous, or being impressed by the lecturer is everything in course.

There were some obstacles faced by students during laboratory practice. Some argues that, “*yes, I experienced some problems in practicing, starting from the tools and materials, I don’t understand how to use it properly, and don’t understand the procedure also*” (S17); “*I got many obstacles while doing a lab practice at home, inadequate facilities for example, and I can’t understand while the lecturer teach me virtually about its steps*” (M24); “*It’s very hard. Moreover, if you asked to do group practice, can you imagine how could it run well? We need to manage the other person, focus on the task, then your internet connection got trouble!*” (S72); “*What I hate doing a lab practice during pandemic is, you have to do 2 different tasks in a day, but you just got once explanation from the instructors*” (S116), and the last is, “*Lab practice is hard, and the unstable internet connection make it harder*”. Here are some responses that are representative of the many other responses from students. This is what is happening now, the main obstacle is the internet connection that is not stable and uneven in each region. Besides that, the students' own ability to understand the material and explanations given, task complexity and limitation, learners’ ability to use technology¹⁶ could be another obstacle arose course during pandemic.

The researcher designed the e-portfolio by herself. It was in excel format, consists of three (3) parts: students’ portfolio, self-assessment, and the guidance. Each student has to put her/his photo on it, intended to make it easier for lecturers to recognize it. In this e-portfolio, there are several subsections that students must fill in. Each meeting, students must write down the learning targets they want to achieve. This is written when they have heard the learning objectives conveyed by the lecturer. After that, they wrote down and adjusted it to their current condition - are they able to achieve the minimum target of learning or can even exceed the limit? The next column is related to “*What I’ve learned*”, in this section the students write down what they have learned at this meeting. Which will then be corrected by the lecturer, on the teacher feedback. At this stage the lecturer writes down what needs to be added and whether the student has succeeded in achieving learning objectives. This of course does not necessarily rely on student opinion, but is evidenced by structured assignments and projects that are in accordance with the material given. To measure learning achievement in accordance with the rubric that has been set. Students will send it to Google Classroom, and then will be assessed by lecturer.

¹⁶ Oblender, T. (2002). A hybrid course model: One solution to the high online drop-out rate. *Learning and Leading with Technology*, 29(6), 42–46.



Picture 2. Students' Portfolio

Many people may doubt the use of self-assessment, because it is difficult to generalize the results. Moreover, this is filled directly by students, who basically always want the best grades. However, the use of self-assessment is actually very good so that students can recalculate what things they have done and where their shortcomings are. This method is also supported by peer-reviewed on the tasks that have been done. In this table contains *What should I prepare?* ; *My feeling* ; *My Expectation*; and *Score* which is focused on before and after middle and final test.

SELF-ASSESSMENT					
Name :					
NIM :					
Major :					
Subject / SKS :					
Semester / Academic Year :					
		What should I prepare?	My feeling	My Expectation	Score
9	BEFORE Middle Test (UTS)				
10	AFTER Middle Test (UTS)				
11					
12					
		What should I prepare?	My feeling	My Expectation	Score
13	BEFORE Final Test (UAS)				
14	AFTER Final Test (UAS)				
15					
16					
17					
18					

Picture 3. Self-Assessment

Lecturers must be able to create missed and fun learning. Lecturers must strive to create learning tricks so that all learning objectives and other important things in the curriculum are well conveyed. If we go back to contemplating our many shortcomings, we won't be able to get better. Like the availability of LMS, not all institutions have it. When an institution is deciding which program should be used to create the electronic portfolio – cost is the overriding factor¹⁷. But what about these limitations we can still give our best, and do our functions well too. Therefore, creating an e-portfolio that can be accessed by anyone is a way out of all the problems that exist on the course during the pandemic.

Conclusion

This study proved that e-portfolio can be used effectively for education and help to enhance its quality in terms of its process and results¹⁸. The research results showed that the online course during pandemic was good 52,4%; Course timing was somewhat convenient 39,5%; the course materials was very useful 54,8%; lecturer or instructor's explanation was very clear 43,8%; lecture or instructor's speed was the right amount 78,6%; the ability in answering students' questions was very well 51,9%; and students' voicing their opinion was very comfortable 43,3%. Therefore, it could stimulate students to reflect on their experiences; also serves as the main key in providing information on student learning progress; and they can still be active in informing the progress of the assignment, can receive feedback, and plan self-competency development based on the analysis that has been made previously.

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¹⁷Luera, G., Brunvand, S., & Marra, T. (2016). Challenges and Rewards of Implementing ePortfolios Through a Bottom-Up Approach. *International Journal of ePortfolios*. Vol.6, No.2, 127-137, ISSN 2157-622X

¹⁸Fuglik, V. (2014). *Electronic Portfolio in Counselling and Guidance*. *Procedia - Social and Behavioral Sciences*, 159, 340–344. doi:10.1016/j.sbspro.2014.12.384

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The Influence of Soft & Hard Skills on the Graduates Competence Vocational High School Students

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Abstract

Statistics Indonesia (BPS) released about unemployment in Indonesia in February 2020. The highest open unemployment rate (TPT) occurred in residents with Vocational High School (SMK) graduates, reaching 8.63%, followed by Diploma I/II/III and high school (SMA) levels, respectively 6.89% and 6.78%. This becomes very ironic because the aim of SMK is to produce competent graduates who are ready to work in the industrial world (DUDI). Therefore, SMK graduates are expected to have the competencies needed by DUDI. The purpose of this study was to determine soft skills competencies, including the ability to communicate, adapt and hard skills competencies, namely technical skills such as drawing, calculating costs and others required by the industry. This type of research is qualitative and the data collection technique is carried out by using questionnaires and focus group discussions with DUDI actors. Data analysis uses Affinity diagrams (K-J method), which makes it easier to analyze data from brainstorming. The results of this study can identify soft skill competencies: honest, thorough, able to solve, adaptable, able to work as a team, able to work under pressure while hard skill competencies: survey, mapping, drawing, structure and construction cost estimation, and project scheduling.

Keywords: Skills, Graduates, Competence, Vocational

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Introduction

In the current era, the industrial world has grown very rapidly. Because this requires a workforce who is able to manage skillfully and with high knowledge. For this reason, the importance of HR planning by an organization is to anticipate long-term losses due to the result of workers who are not ready to face change and work demands (Benjamin, et al. , 2017). Industrial era 4.0 all emphasizes the conditions of the digital economy, artificial intelligence (Artificial Intelligence), big data, robotic data, and others, otherwise known as disruptive innovation. To fulfill this, the need for skilled human resources in their fields is needed, software engineering (RPL) is one of the most important parts of Industry 4.0, and the need for experts in the field of digital technology is getting higher along with the development of the digital and e-industry. commerce in Indonesia. Moreover, with the Internet of Things, the need for IT personnel is very high (Ristekdikti, 2018).

Jombang is one of the cities that has become a trendsetter for young Indonesian startups, there are 92 studio or startup companies and this number will increase with time or the development of the industry itself (BE-KRAF & PMK3, 2017). Vocational High School (SMK) is an institution engaged in the field of Vocational Education and its purpose is to prepare prospective middle class workers in the world of work, and to develop professional attitudes. based on a survey conducted by the Central Statistics Agency (BPS) in 2018, the Open Unemployment Rate (TPT) based on education is occupied by SMA / SMK graduates, namely at 52.31 percent and this is very worrying, many industry players criticize the quality of the graduates who Not ready to use, these things show that SMK is not in accordance with what is expected by the industrial world and proves that the quality level of SMK is less relevant to industry demands, besides not being absorbed by SMK graduates (BPS, 2018).

According to McMurchie in Agustin (2009) in the world of work not only choosing prospective employees / workers who are smart in academic abilities (hard skills), but also must pay attention to other skill values including honesty at work, having a high sense of responsibility, being polite. polite in acting, disciplined, able to commit, have self-confidence, ethical, able to work together, have high creativity, communicate, and leadership (soft skills). Someone has high hard skills, but does not have soft skills, so the human resources that are created are not optimal. SMK (SMK) graduates are not only required to master hard skills, but also must be able to have soft skills skills as a supporting tool for hard skills so that later they are able to work productively and with quality.

Based on the opinions of experts, the researchers used the measurement of soft skills as stated by Sharma in Wardani (2012), there are five indicators in measuring soft skills including: communication, ethics, motivation, leadership and problem solving. Meanwhile, based on the results of interviews, the soft skills taught at school include: discipline, communication, teamwork, critical thinking, leadership, responsibility, ethics, creative thinking, professionalism and morals.

Hard skills are a person's ability to master science and technology as well as technical skills that have a close relationship with their field of knowledge. Hard skills are skills that are technical in nature, these skills are inherent and needed for certain professions, for example a programmer is required to master techniques in programming using a certain language (Kadek, 2012).

According to the Ministry of Education and Culture (2017) competency skills (C3) taught in Vocational High Schools with Software Engineering expertise include Software Modeling, Database, Object-Oriented Programming, Web Programming and Mobile Devices, the latter being Creative Products and Entrepreneurship.

The purpose of this research is to find out the expectations of the information technology industry and the reality of the hard skills and soft skills of software engineering SMK graduates, to see the gap between the expectations and reality of the graduates' hard skills and soft skills and to know which competencies are prioritized and need attention in improving the quality of education in SMK .

Method

The first thing to do is make observations at 3 state Vocational High Schools in the City of Jombang, schools that contribute, namely SMKN 5, 11 and 12 Malang, observations are made to obtain information about the soft skill components of RPL Department Vocational High School graduates, as well as the Hardskill components that are taken. of the basic competencies needed by the world of work in the field of information technology majoring in Software Engineering.

Furthermore, designing a questionnaire in the form of a questionnaire grid, which is then developed into items, then validated by the expert, the number of participating experts is 2 people, then the questionnaire is ready to be distributed in information technology companies with software engineering expertise in the City of Jombang. After distributing the questionnaire, data is obtained which is then processed and analyzed, after which a conclusion can be drawn which is the answer to the problem formulation.

This type of research is used, namely evaluation, this research is made to answer questions and test or prove a hypothesis. The research approach used is a quantitative approach which is then supported by a qualitative approach. Quantitative is used in analyzing data, while qualitative is used as the basis for considering that symptoms in research are the processes used, namely through studies on the behavior or activities of the actors who take part in it.

Result and Discussion

Result

In table 1 is a table of the average expectations of IT companies with the soft skills ability of SMK RPL graduates, the average reality in the competency field of SMK graduates, and the value of the gap that occurs between the expectations of IT companies and the reality of the competencies possessed by graduates. The average expectation shows the most expected abilities, namely discipline, leadership and creative thinking, each percentage is 10.30%, critical thinking percentage is 10.20%, communication percentage is 9.99%. for ethics and morals each percentage was 9.89%, team cooperation the percentage was 9.78%, and for responsibility and professionalism each had a percentage of 9.68%. Overall, the average company expectation on the soft skills ability of SMK RPL graduates is 4.86, this indicates that the company's expectations indicate a very satisfied category. The average reality in the field of soft skills skills of SMK RPL graduates shows that the ability to think creatively with a percentage of 12.02%, for the ability of responsibility it has a percentage of 10.87% while moral has a percentage of 10.30. Furthermore, namely discipline, critical thinking, ethics and

professionalism, each of which has a percentage of 10.01%, teamwork and leadership respectively 9.16% and communication percentage of 8.44%. Overall the average reality in the soft skills field of SMK RPL graduates is 3.50, this indicates that the reality in the field of graduates shows that the category of being satisfied has not met the expectations of the company which expects to be very satisfied. Communication skills show the highest GAP score with a score of 1.9, this shows that the level of company expectations for the capabilities of company employees is very high, but it is not balanced with the reality in the field of company employees, company employees are aware of the importance of communication skills but employees are unable to demonstrate good communication skills, both with fellow employees and superiors.

Tabel 1. Expectations, Realities and GAP Analysis on Soft Skills Variables

Indicator	Average Expectations	Average Reality	GAP
Discipline	5	5	1,3
Communication	4	3,3	0,5
Teamwork	4,3	3,1	1,5
Critical thinking	4,6	3,7	1,8
Leadership	4,3	3,6	1,2
Responsible	4,1	3,8	1,3
Ethics	4,7	3,1	1,24
Creative	4,6	3,7	1,53
Thinking	4,8	3,6	1,29
Professionalism	4,6	3,8	1,28
Moral	4,4	3,4	0,26
Average	4,86	3,50	1,36

For the average reality in the field of hardt skills skills of SMK RPL graduates shows that the ability of Web Programming and Mobile Devices with a percentage of 21.85%, then the ability of Databases with a percentage of 20.87%, for Object Oriented Programming the percentage is 20.41% while Software and Creative Product Modeling and Entrepreneurship each had a percentage of 18.42%. Overall, the average reality in the hard skills field of SMK RPL graduates is 3.50, this shows that the reality in the field of graduates shows that the category of being satisfied has not met the expectations of the company which expects to be very satisfied.

In the hard skills variable, it can be seen that the ability of Creative Products and Entrepreneurship shows the highest GAP value with a value of 1.75, this shows that the level of company expectations for the capabilities of company employees is very high, but it is not balanced with the reality in the field of company employees, while the lowest GAP occurs in the Web Programming and Mobile Devices indicator with a GAP value of 1.2, this shows that the gap in the ability of Web Programming and Mobile Devices is slight, meaning that employees can implement the knowledge gained during schooling at SMK, this is evidenced by the abilities that employees have. meet expectations although not 100% meet. The existence of the GAP value on the hard skills variable indicates that the knowledge taught at SMK has not met the criteria expected by the company, and for that vocational high schools in the future to improve the learning system or manage knowledge of hard skills properly, so that in the future there will be gaps in SMK graduates of the Device Engineering Department. Soft can be minimized.

Discussion

Based on the results of research on the soft skills variable, there are 10 indicators, these indicators are the knowledge or abilities taught by Vocational High Schools with the field of Software Engineering expertise, all indicators contained in the soft skills variable are the company's expectations of the abilities possessed by SMK graduates with the field of expertise. Software Engineering expertise. Overall company expectations of the knowledge or soft skills of SMK RPL graduates in the industrial world show high expectations, this is because the industry's ability to think that success in companies is not only based on hard skills, but also on soft skills. skills with a larger portion than the ability of hard skills.

For the reality in the field of the ten indicators of soft skills taught in Vocational High Schools with Software Engineering expertise show satisfied competencies, this shows that SMK graduates with Software Engineering expertise are able to implement competencies obtained during school in SMK, the above statement is supported by research conducted by Yuminah et al. (2020) explains the results of the assessment using the Usual Criterion type with a decision result of 55% of the employees' abilities on soft skills and 45% of their abilities are not good, the data uses an accuracy rate of 93%.

For the gap (GAP) in users of Software Engineering SMK graduates on the soft skills variable based on the results of the research that has been done shows a low average result, this shows that there is still a gap between expectations and perceptions of graduates, the existence of the GAP value in the soft skills variable indicates that the knowledge taught at SMK has not met the criteria expected by the company, and for that, vocational high schools in the future will improve the learning system or manage soft skills knowledge properly, so that in the future the gap between SMK graduates in the Software Engineering Department can be minimized. This is supported by research by Nani et.al (2017) which explains that the User Assessment of Alumni there is a low gap between expectations and perceptions of graduates such as discipline, honesty, motivation, work ethic, ability to apply skills in work, work productivity,

problem solving, adapting to the work environment, communicating, being able to express opinions or ideas, teamwork, social skills, being able to take advantage of information technology, being able to self-development, openness in accepting criticism and suggestions, self-confidence. For the results of the science analysis that has been carried out, it can be seen that, in the soft skills variable, it shows that in quadrant I the ability that IT companies really expect, while the perception fulfills expectations, namely leadership abilities, it would be nice for schools to be more able to explore and instill the spirit of leadership that graduates have. so that in the future graduates can meet company expectations of the leadership abilities of IT company employees who are graduates of SMK RPL. This is confirmed by research conducted by Widarto et.al. (2012) which states that the ability of the workforce needed by the industry, namely the aspect of soft skills, including leadership skills, personality and motivation are the most dominant abilities as the main requirements needed in the industrial world. Furthermore quadrant II, on disciplinary skills, critical thinking and creative thinking, indicators expected by the company, and graduates are able to carry out their work or graduates are able to implement the knowledge gained in SMK on IT companies disciplinary skills, teamwork and ethics should be maintained, or even be improved again. The discipline indicators are strengthened by the results of research by Liyas & Primadi (2017). Based on the results of the study, it is explained that the level of magnitude has an influence on the attributes or variables of work discipline on the performance level of employees in the company with a percentage value of 74.8%, because the percentage obtained is large. , then discipline deserves to be

maintained and improved because the discipline ability of employees has a strong influence on employee performance, so that later employees are expected to be able to show discipline within.

Furthermore, quadrant III is an indicator that is not expected by the company, in addition to that, the fact is that the ability of employees does not master the knowledge gained in SMK, and also is not able to implement it in the company. Therefore, the indicators in this quadrant should be reviewed or reconsidered, whether these indicators are improved or not, these indicators are the ability to communicate and the ability to work together in teamwork. Communication skills are in accordance with the research conducted by Putri & Hariawan (2015). Communication indicators in quadrant III, in his research, show the factors that do not really matter to customers. In its implementation by the company it is normal or unsatisfactory. There are two attributes included in quadrant III, namely communicating in the delivery of information processes. Furthermore, quadrant IV is an indicator expected by IT companies, but in reality in the field of graduate employees are able to implement the knowledge that has been obtained in SMK, as for indicators of ethical ability, responsibility, professionalism and moral. The company hopes that these abilities are not really expected by the company, but actually the abilities possessed by employees of SMK RPL graduates are able to implement their knowledge, therefore schools do not need to worry about the soft skills abilities of SMK graduates, because employees already have good abilities. The evidence on ethical indicators is in accordance with research conducted by Chandra (2011). Company ethical standards are considered to be good mastery by employees, but in fact they consider these attributes less important. Therefore, companies do not need to worry about this attribute because employees already have a good competitive advantage. For the attributes of company ethics, employees have mastered it well so that consistency is needed in maintaining it.

There are 5 indicators for the hard skills variable, these indicators are the knowledge or abilities taught by SMK with the field of Software Engineering expertise, all indicators contained in the hard skills variable are the company's expectations of the abilities possessed by SMK RPL graduates. Overall company expectations of the knowledge or hard skills of SMK RPL graduates in the industrial world show high expectations, this is because the industry considers hard skills as the main ability needed, but based on this research shows that the average expectation of soft skills skills is greater. Rather than the ability of hard skills, this is supported by Firdaus (2017) which states that the process of achieving success in the world of work requires several factors. Academic ability is not enough. Non-academic ability is a fundamental factor in success in the world of work. Hard skills and soft skills are a combination that must be well integrated. Based on the results of the research for the realities of the field on the hard skills competency of SMK RPL graduates in the world of information technology industry, the ten indicators of hard skills taught in Vocational High Schools with Software Engineering expertise show satisfied competencies, this shows that SMK graduates with Software Engineering expertise have been able to implement competencies obtained during school in SMK, this is confirmed by Sulistianingsih's opinion in the journal Agung Panji S, et.al (2015) which states that mastery of high productive subjects shows that students master educational and training materials that have been taught at school well.

Conclusion

The company hopes for the soft skills and hard skills competencies of SMK RPL graduates with a very satisfied level of expectation and the reality in the field shows that the ability is satisfied but has not met expectations. The existence of a gap between company expectations

and reality in the field of soft skills and hard skills of SMK RPL graduates, this occurs because graduates do not master the knowledge and are not optimal in developing their skills. Abilities that are prioritized are soft skills, namely leadership, whereas in hard skills there is no priority, but schools need to pay attention to the soft skills variable, namely discipline, critical thinking and creative thinking, while hard skills variables are databases and Web Programming and Mobile Devices.

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Study on the Use of Speech Recognition Function to Practice Speaking English Using the Voice Translator “Pocketalk”

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Abstract

Although some speech recognition software is highly developed, few studies have focused on how this technology should be adapted for foreign language learners with various proficiency levels, including Japanese students. Thus, this study explores the use of speech recognition to support the practice of English speaking by using the voice translator “Pocketalk.” English sentences spoken by 95 Japanese university students were identified by Pocketalk’s speech recognition function. Afterward, a five-point Likert scale was used to measure the usefulness of the activity with Pocketalk and the affective factors related to speaking English. The results indicated that students tended not to distinctly pronounce the difference between the /n/ sound and the /m/ sound. In addition, when the end of the words such as “terribly” and “stooped” were not pronounced distinctly, they tended to be incorrectly recognized as “terrible” and “stupid.” Questionnaire results showed over 70% of the students expressed a positive attitude toward their interaction with Pocketalk, and over 90% of them paid more attention to their pronunciation. Using its recognition function, we could identify how the spoken sentences were actually recognized, which provided clues for correcting their pronunciation. Regarding the affective factors, no significant relationship was found between students’ responses to the usefulness of their interaction with Pocketalk and their nervousness in speaking English or their negative feelings toward pronunciation. These results suggest a positive potential for Pocketalk’s speech recognition function regardless of their affective factors.

Keywords: Speech Recognition, Voice Translator, Speaking Practice, Language Use

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Introduction

According to the English proficiency promotion plan for students by the Japanese Ministry of Education, Culture, Sports, Science and Technology (2015), comprehensive development of the four core language skills: listening, speaking, reading, and writing is required more than ever in English education, and increasing emphasis is being placed on strengthening the ability to output in English. However, it has been reported that many students feel that they are not proficient at speaking English (Kashiwagi, Kang, & Ohtsuki, 2018). When examining the English learning environment, students do not have much opportunity to use English outside of English language classes; they need a practice environment where they can become familiar with speaking English. Using speech recognition technology could be one such way to facilitate their English-speaking practice, especially when natural opportunities to practice are scarce.

Some speech recognition software or applications are highly developed, and they are very accurate for native speakers; they often use their voice dictation functions to type documents or emails. However, few studies have focused on how this technology could be adapted to foreign language learners of various proficiency levels, including Japanese students. Research regarding to what extent foreign language learners' speaking is accurately recognized is needed. Further, it is also important to determine how foreign language learners perceive speech recognition, as some learners with low English-speaking abilities may demonstrate negative attitudes toward this technology.

Thus, this study explores the use of speech recognition to support the practice of English speaking through the voice translator "Pocketalk" (Pocketalk Home Page, n.d.). Pocketalk is a two-way translation device that provides consistently accurate translations across 82 languages. To investigate the following research questions, we conducted an experiment in which English sentences spoken by Japanese university students were identified by the speech recognition function of this translation device. Afterward, a feedback questionnaire was administered measuring the usefulness of the activity with Pocketalk and the affective factors related to speaking English.

1. To what extent are the students' spoken sentences recognized accurately, and which words or parts of speech are not spoken accurately by the students?
2. How do the students feel about the speech recognition function of Pocketalk to practice speaking English?
3. Is there any significant relationship between students' responses to the usefulness of their interaction with Pocketalk and their nervousness in speaking English or their negative feelings toward pronunciation?

The rest of this paper describes the existing literature and our experiment's methodology. It then discusses the results, along with our conclusions, the study's limitations, and recommendations for additional research.

Literature Review

In recent years, speech recognition technology has evolved to enable native speakers to apply its voice dictation function to type documents or emails. However, although speech recognition technology has become highly developed, it is not yet sophisticated enough to recognize English speech by all levels of English language learners (Chapelle & Voss, 2016).

According to Blake (2016), oral dictation activities in language learning can take advantage of speech recognition software, for example, through word recognition or short sentence repetition. Further, according to McCrocklin (2016), the introduction of this technology helps students become more autonomous in their pronunciation practice. Yoon and Zechner (2017) proposed to combine human and automated scoring for the assessment of non-native speech, and with advances in automatic speech recognition, more accurate feedback can be expected (O'Brien et al., 2018).

Building on the previous research reviewed above, we consider how we should adapt this technology to foreign language learners with various levels of proficiency, with a specific focus on Japanese students.

Experiment

Participants

Participants were 95 first-year students who were learning English at a university in Japan. They took a review quiz in their English language classes using Pocketalk, then they answered a post-practice questionnaire.

Procedures

We first provided students with 20 Japanese sentences and their English translations in advance of the review quiz. The same exact sentences were used in the quiz. We instructed them to practice speaking the English sentences without looking at the textual information. The sentences were expressions related to “poor physical condition” and “illness and injury.” Next, we administered the review quiz individually to each student. There were three versions of the review quiz, and five sentences were provided in each version of the quiz. Fifteen sentences in total among 20 sentences were used in the quiz. The sentences used in each quiz and the number of participants taking each quiz are shown in Table 1. Students were asked to translate the Japanese sentences into English. They orally answered each question twice. The answer sentences spoken by the students were recognized by the speech recognition function of Pocketalk. The device translated the student’s spoken English sentence into English text through the voice-to-text translation function. Two doctoral students who were international students checked whether the students’ recognized sentence matched the correct given sentence. These doctoral students were not native speakers of English, however, they were highly advanced ESL (English as Second Language) speakers who had sufficient English proficiency level to deal with international academic settings. We calculated the percentage of correct answers based on whether the recognized sentence matched the correct given sentence. For example, if a student missed one word in a sentence, that was not considered correct. After the quiz, a questionnaire was conducted to gather students’ responses regarding the usefulness of the activity with Pocketalk, their nervousness in speaking English, and their negative feelings toward pronunciation, shown in Table 2. The values were scored using a five-point Likert scale (1= agree, 2= moderately agree, 3= neutral, 4= moderately disagree, and 5= disagree).

Quiz version	English sentences	Number of participants	Percentage of spoken sentences recognized as correct answers (%)
Version 1	He might be depressed.	31	45
	I have terribly stiff shoulders.		19
	You grind your teeth so loudly.		23
	My eyes are a bit irritated.		84
	Your snoring disturbed my sleep.		23
Version 2	I strained my back. It hurts so much.	31	68
	Can you prescribe a Chinese herbal medicine?		35
	It's a throbbing pain.		71
	Do you have medicine for hay fever?		81
	She dresses neatly.		6
Version 3	My eyes are itchy.	33	82
	I want to fix my stooped shoulders.		6
	I toss and turn a lot in my sleep.		52
	Don't push yourself too hard.		91
	Please give me a compress for my sprain.		30

Table 1: English Sentences of The Review Quiz

Results and Discussion

RQ1: To what extent are the students' spoken sentences recognized accurately, and which words or parts of speech are not spoken accurately by the students?

First, we analyzed to what extent Pocketalk identified that the recognized spoken sentences were the correct given sentences by calculating the percentage of students' spoken sentences that matched the correct given sentences. Table 1 shows the results of the 15 sentences that were provided in the three versions of the quiz. The percentages of the sentences recognized as correct vary widely, from 6% to 91%. While four sentences among 15 were spoken accurately by more than 80% of the students, the three sentences highlighted in yellow in Table 1 were spoken accurately by fewer than 20% of them.

Next, based on the observation of the doctoral students, we analyzed the recognized sentences that fewer than 20% of the students answered correctly in more detail. The sentence "I have terribly stiff shoulders" tended to be recognized as "I have terrible stiff shoulders." The sentence "I want to fix my stooped shoulders" tended to be recognized as "I want to fix my stupid shoulders." From these results, it appears that the end of the words "terribly" and "stooped" were not pronounced distinctly. Regarding the sentence "She dresses neatly," the students' spoken sentences were often recognized as sentences that were more dissimilar than those for the previous three sentences, such as "She dresses me today," "She dresses in Italy," or "She dresses nearly." The results suggest that students tend not to distinctly pronounce the difference between the /n/ sound and the /m/ sound.

Using the recognition function of Pocketalk, we could identify how the spoken sentences were actually recognized, which provides clues for correcting students' pronunciation.

RQ2: How do the students feel about the speech recognition function of Pocketalk to practice speaking English?

Here, we investigated how the students felt about the speech recognition function of Pocketalk to practice speaking English by using a post-practice questionnaire. Q1, Q2, and Q3 in Table 2 concern students' interaction with Pocketalk, Q4 is regarding their nervousness in using spoken English, and Q5 concerns their negative attitudes toward English pronunciation.

Questionnaire items	Agree	Moderately Agree	Neutral	Moderately Disagree	Disagree
Q1: Pocketalk is useful when I practice speaking English for self-study.	35 (36.8%)	36 (37.9%)	11 (11.6%)	11 (11.6%)	2 (2.1%)
Q2: Pocketalk helped me pay more attention to my pronunciation.	63 (66.3%)	26 (27.4%)	4 (4.2%)	2 (2.1%)	0 (0%)
Q3: I noticed the words and phrases that I have trouble pronouncing by using Pocketalk.	34 (35.8%)	39 (41.1%)	14 (14.7%)	6 (6.3%)	2 (2.1%)
Q4: I feel nervous when I use English in spoken communication.	46 (48.4%)	33 (34.7%)	7 (7.4%)	6 (6.3%)	3 (3.2%)
Q5: I am not good at English pronunciation.	35 (36.8%)	36 (37.9%)	11 (11.6%)	12 (12.6%)	1 (1.1%)

Table 2: Questionnaire Results. ($n = 95$)

According to the results of Q1 in Table 2, a total of 71 students (74.7%) showed agreement with Q1 (i.e., "Pocketalk is useful when I practice speaking English for self-study"), which indicates that almost three-quarters of the students found this device useful. Further, 89 students (93.7%) showed agreement with Q2: Pocketalk helped almost all the students pay attention to their pronunciation. Regarding Q3, 73 students (76.9%) showed agreement, indicating that many students noticed their weak points in English pronunciation thanks to the recognized results of the device.

It is important to note that the correlation coefficient between Q1 and Q3 ($r_{Q1Q3}=0.40$) in Table 3 (addressed in the next section as part of RQ3) shows a weak relationship between students' responses regarding Pocketalk's usefulness and their awareness of their English pronunciation weaknesses with this device. In the review quiz, the students orally answered each question only twice, which was not enough to conclude whether there is any relationship between them; however, noticing the weak points in pronunciation through interaction with Pocketalk can be regarded as one of this device's useful features.

The analysis of students' responses supports the idea that students have a positive attitude toward their interaction with Pocketalk. Particularly, its speech recognition function can show

students not only whether the spoken sentence is correct but also where the error is in the spoken sentence. This device has the potential to give students an idea of how their pronunciation is actually perceived, which helps to make them aware of where their deficiencies are. This result is also consistent with the results of RQ1.

Meanwhile, from the results of Q1, 13 students (13.7%) showed a negative attitude toward the usefulness of Pocketalk. Although further investigation is needed concerning their reasons and factors contributing to the negative attitudes, other approaches for English speaking practice need to be considered for these students.

RQ3: Is there any significant relationship between students' responses to the usefulness of their interaction with Pocketalk and their nervousness in speaking English or their negative feelings toward pronunciation?

For RQ3, we investigated the relationship between students' responses about Pocketalk's usefulness and their affective factors in speaking English. To analyze the relationships between the variables, Spearman's rank-order correlation coefficients on the questionnaire data were determined; results are shown in Table 3.

	Q1	Q2	Q3	Q4	Q5
Q1	—				
Q2	0.16	—			
Q3	0.40*	0.12	—		
Q4	0.13	0.06	0.13	—	
Q5	0.06	-0.13	0.17	0.45*	—

Table 3: Correlations among Questionnaire Items * $p < .05$

From the correlation coefficient between Q1 and Q4 ($r_{Q1Q4}=0.13$) in Table 3, no statistical relationship exists between students' responses to the usefulness of Pocketalk and their nervousness in speaking English. Additionally, the correlation coefficient between Q1 and Q5 ($r_{Q1Q5}=0.06$) shows no statistical relationship between students' responses to the usefulness of Pocketalk and their negative feelings toward pronunciation.

These results suggest that even if students get nervous when speaking English or have negative feelings toward English pronunciation, it does not mean they also have a negative attitude toward using Pocketalk. In addition, because of the weak relationship between Q4 and Q5 ($r_{Q4Q5}=0.45$), it is suggested that students who become familiar with English pronunciation by using Pocketalk can reduce nervousness regarding speaking English.

Limitations and Recommendations

Certain limitations of the current study should be mentioned. First, in this study, we could observe how the sentences spoken by the students were actually recognized; however, further investigation is needed to determine more details related to common pronunciation errors by preparing more and varied sentences. Pocketalk saves the logs of the recognized results, which can be downloaded as a CSV file. Using these logs, we could identify in more detail how the spoken sentences were actually recognized and provide feedback for correcting students' pronunciation. Second, we found a weak relationship between students' responses

on the usefulness of Pocketalk and their awareness of their weak points in English pronunciation through this device; however, the students orally answered each question only twice, which did not provide sufficient data for analysis. Further studies are needed to investigate this relationship. Third, 13 students showed a negative attitude toward the usefulness of Pocketalk. Although further investigation is needed to determine the reasons and factors behind this response, other approaches for English speaking practice should be considered for these students. Lastly, incorporating speech recognition into speaking practice usually focuses on pronunciation, but it is also important to consider how we can incorporate this function in other ways. We hope to consider some task-based activities with the speech recognition function in the future.

Conclusion

This study explored the use of speech recognition to support the practice of English speaking by using the voice translator Pocketalk. We conducted a study in which English sentences spoken by 95 Japanese university students were identified by the speech recognition function of this device. Afterward, a five-point Likert scale was used to measure the usefulness of the activity with Pocketalk and the affective factors related to speaking English.

The results indicated that students tended not to distinctly pronounce the difference between the /n/ sound and the /m/ sound. In addition, when the end of the words “terribly” and “stooped” were not pronounced distinctly, they tended to be recognized as “terrible” and “stupid.” Results from the questionnaire showed that more than 70% of the students expressed a positive attitude toward their interaction with Pocketalk, and more than 90% of them paid more attention to their pronunciation from using the device. With its recognition function, we could identify how the spoken sentences were actually recognized, which provides clues for correcting their pronunciation. Regarding the affective factors, no significant relationship was found between students’ responses to the usefulness of their interaction with Pocketalk and their nervousness in speaking English or their negative feelings toward pronunciation. These results suggest the potential to use its speech recognition function in English classes regardless of students’ affective factors.

As a continuation of this study, we hope to prepare more sentences to identify how the spoken sentences are actually recognized, using the aforementioned data logs. We also will investigate further how we should incorporate the speech recognition function into speaking practice by considering some task-based activities.

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Content-Based Language Teaching in International Liberal Arts Education

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Abstract

The growing international interdependence has increased the importance of knowledge about and proactive reaction to new global changes. Approaches to language teaching that focus on aspects besides the language itself, such as CBLT, are becoming an ever more valuable tool. In this research we define the important points that should be considered in the application of Content-based Language Teaching (CBLT) in International Liberal Arts (ILA) education. Based on our own experience of teaching and the analysing the arguments stated in the literature, we suggest how to conduct CBLT lectures effectively, how to make CBLT lectures active-learning style, and how to keep the students involved even outside of the class. In particular, we explain the important points related to the general context or environment where learning takes place, parts of the teaching under the full control of the teacher, parts that could be partially controlled or affected by the teacher, and parts that are less controlled by the teacher (learning out of class). Our research and shared experience contributes to the development of CBLT.

Keywords: Content-based Language Teaching, International Liberal Arts, Effective Teaching

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Introduction

In this research, the researchers attempt to define the most important points that should be considered in the application of Content-based Language Teaching (CBLT) in International Liberal Arts (ILA) education. The research team members have long-term experience of teaching ILA courses in more than two countries in more than two languages. Based on our own experience of teaching and analysing the arguments stated in the literature, we suggest how to conduct CBLT lectures effectively, how to offer CBLT lectures in the active-learning style, and how to keep students involved even outside of class.

Growing international interdependence has increased the importance of knowledge about and proactive reaction to new global changes. When it comes to preparing students for an ever-evolving global future, approaches to language teaching that focus on aspects besides the language itself, such as CBLT, are becoming an ever more valuable tool. We hope our research and shared experience contributes to the development of teaching in ILA education.

In this paper, instruction is separated into three areas; areas of teaching under the full control of the teacher, areas that could be partially controlled or affected by the teacher, and areas that are least controlled by the teacher (i.e. learning out of class). Ideas for improving the effectiveness of instruction in each area will be proposed.

In the next section, we analyse the important arguments stated in the literature. After that, our suggestions for effective implementation of CBLT lectures are proposed. At the end, we conclude the important points of this research.

Literature Review

In the current international climate, bilingual communication is not just desirable, but critical (Cammarata et al., 2016). Since the 1970s, there has been more of an attempt at having students pick a target language up incidentally, rather than through classroom activities alone (Juan-Garau & Salazar-Noguera, 2015). Naturally, this places a huge demand on language education providers the world over, and as a result English-medium instruction (EMI) is becoming increasingly commonplace worldwide, including in Japan (Galloway & Rose, 2015).

Cammarata et al. (2016) rightly doubt whether the learning of foreign languages alone is enough. The authors question the underlying goals of foreign language teaching in general, and instead propose placing an emphasis on developing critical thinking and advanced literacy skills, stimulating development of high-order thinking skills, fostering intellectual sensitivity, and nurturing student motivation and active participation in their learning adventure (pp. 9-11). An example of this method of teaching that has seen some success is content-based language teaching (CBLT) that combines both language learning and the learning of content, in a way that is designed to have each element complement the other (Creese, 2005).

As opposed to the traditional L2 classroom in which the focus is almost solely on students developing language skills in isolation, content-based approaches to language learning aim to develop language, academic, and cognitive skills together (Oba, 2019), 'to promote a dynamic interplay between language and content' (Lyster, 2018). This view sees language in less of a traditional foreign language learning sense, and 'toward a view of language as a

means with which to explore content, that is, the realization that both language and content are two equally important instructional foci' (Cammarata et al., 2016, p. 11).

In two of the researchers' context, Japan, the governmental policy for English teaching education has corresponded to the growing demand for cultivating globalized citizens, particularly the youth (Oba, 2019). These views are reflected in the Japanese Ministry of Education, Culture, Sports, Science and Technology revision of curriculum guidelines in 2017 where the three primary goals include: 1) developing oneself, envisioning lifelong learning; 2) increasing solid subject knowledge; and 3) acquiring cognitive, evaluative, and expressive skills (Yasunaga, 2018).

CBLT is seen as a good option for English educational reforms in Japan following the 2017 revision of curriculum guidelines (Yasunaga, 2018). Here, theme-based language programs can also be useful, centered on a theme that allows repeated opportunities for recycling language, expanding domain knowledge, and increasing critical and reflective thinking. Such programs could easily be integrated into ILA instruction.

Effort to teach students in the classroom is going to be exerted, so being able to teach both language and content at the same time, with the added benefit of developing advanced critical thinking skills, could be seen as a win-win for all. However, focusing on multiple aspects of learning at the same time risks diminishing the outcomes of all. Especially when, as Oba (2019) describes, CBLT and other content-based programs have not been fully tested in Japanese settings, and there has not been sufficient development of content and language integration, despite their apparent attractiveness.

The effectiveness of CBLT is seen as dependent upon program setting and the curriculum, the characteristics of teachers involved, the characteristics of learners, and the availability of resources (Butler, 2005; Andrade, 2014).

In the case of content-based courses, teachers and curriculum developers are in charge of deciding how much of an emphasis to put on language, and how much to put on content. This can be thought of on a continuum from content-driven to language-driven approaches. Approaches to language teaching at each end of the continuum have different titles in the literature. For clarity, CBLT is when there is a more of a focus on learner acquisition of language, whereas Content and Language Integrated Learning (CLIL) places more of a focus on content.

Careful consideration of the context and student aims must be taken during the needs analysis when it comes to deciding to take an approach focusing on content, one focusing on language, or one somewhere in the middle. In this paper, we leverage years of experience in teaching International Liberal Arts courses in Japanese and Russian universities in both foreign and second languages to students from broad international contexts to propose a model for effective implementation of CBLT.

Suggested Model

General Idea

We separate learning into three areas determined by the amount of control the teacher has in the situation, namely, during the lecture when the teacher has full control over what goes on,

when the teacher has partial control as the students partake in their own activities during class time, and out of the class where the teacher has the least control (Fig. 1).

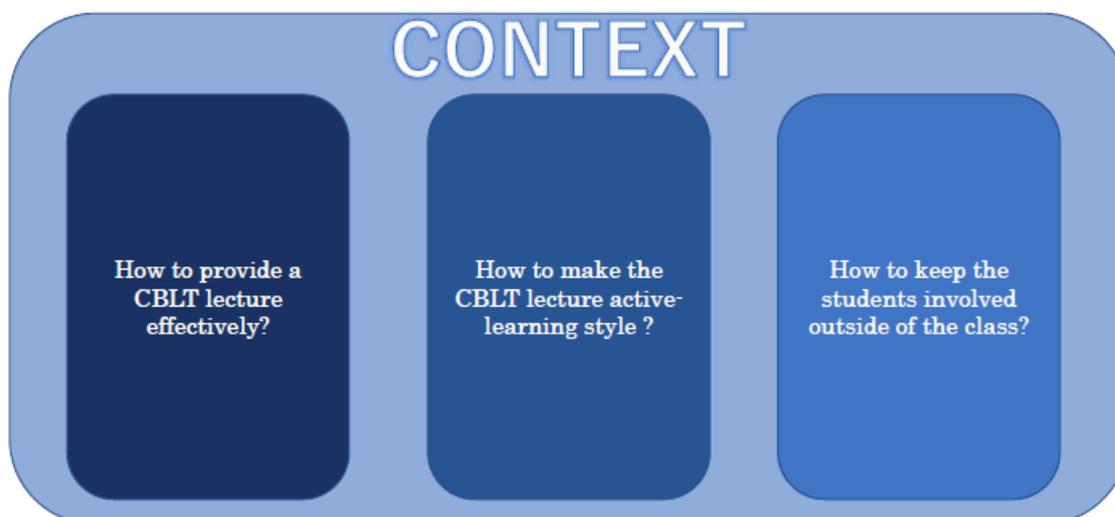


Figure 1: Important Points to Be Considered in CBLT.

Context

As with all instruction, context dictates approach. To gather a good understanding of the context, the first port of call should be a thorough needs analysis. When it comes to CBLT, the needs analysis needs to consider the amount of emphasis to place on language and content outcomes respectively, in addition to other important factors such as the medium of teaching and the type of assessment that best fits the learners' needs. To ensure the safety of the students due to COVID-19 or other such factors, the curriculum designer may be limited in their options for the medium of teaching, but any medium, online, offline, or a hybrid, can be used for CBLT.

CBLT can be used in certain courses and in certain classes to increase the effect of learning, not just in terms of language, but in terms of content acquisition as well. The focus of CBLT on cognitive development of the students is an attractive proposition when it comes to ILA, however students come with different backgrounds, and different abilities in the target language, as well as with different levels of knowledge and interest in the topic or content to be taught.

The teacher could be a native speaker of the students' native language, a native speaker of the target language with or without language capability in the students' native language, or a non-native speaker of the target language with or without language capability in the students' native language. Depending on this make-up, the teachers may adjust their instruction to take advantage of their relative strengths in a certain context. At a minimum, to be able to learn the content well enough some ability of the language of instruction is necessary. A CBLT approach should be used at late A2 and higher levels of language capability, or additional language lessons should be provided to allow for this.

How Can We Provide CBLT Lectures Effectively?

If the teacher has sufficient knowledge of both the students' first language and the target language, transitional classes that incorporate both languages may be more effective for the

students. If the students' language capability is not so high, or if the students lack confidence, it is often better to discuss the topic in the target language, summarize in the native language and then again address the topic in the target language.

Students should be encouraged to try discussing the content in their second language, with additional support in their first language if required to increase their confidence. In cases where the students' command of the target language is not strong, excessive use of the target language is best avoided to maintain student motivation. This is a balance that is best decided by the teacher. In either situation, teachers should always respond to students in a positive way while they are sharing their own opinions on the content to further stimulate use of the language.

Even students with a good background in the target language may not be familiar with the keywords for different topics. Furthermore, different teachers use different words. One good way to address this is to ask students in advance to let the teacher explain the words they cannot understand during the lecture, or teachers can try many strategies such as repeatedly using paraphrasing, examples, synonyms, visualization, expressions or gestures.

Likewise, changing the speed of speech and repeating the points that are not easy for students to understand increases uptake. Using similar content or content that repeats a lot of the same type of phrasing further increases the chance for incidental learning of vocabulary. This is where theme-based learning can be an effective tool. In addition, providing a list of keywords to be used in discussions in advance is very effective.

How to Make the CBLT Lecture Active-Learning Style?

No matter what the teacher does inside or outside class, whether the learner learns is entirely up to them. Therefore, rather than teaching, the role of the teacher should be thought of as facilitating learning through the establishment of a conducive environment. In CBLT-type classes, the teacher has a number of levers they can pull to ensure the proper environment is provided. This is where active learning, where students are engaged and in control of their learning, comes into play.

The main levers the teacher can pull to provide a conducive environment for learning are in the assessments and tasks used in class. Assessments should be decided in accordance with the needs analysis, and in the case of CBLT, this could be based on language outcomes and content knowledge obtained during the class. At the same time the student interests, goals, and motivation should be kept in mind when deciding what to assess and how to go about assessing it.

Students could have better communication skills in the target foreign language, but less accuracy in grammar. In order to keep up student use of the target language, teachers have to be careful to keep students attentive in class and not bore students with too much of a focus on accuracy. This means when designing assessments and tasks to use in class, less of an emphasis should be placed on grammatical accuracy, and tasks and assessments should provide ample opportunity for a focus on production in the target language, as well as chances for fluency development.

Goal setting is an important area the teacher can employ to increase student motivation. By providing students the opportunity to set clear goals for the class, both in terms of language

and content acquisition, the teacher can encourage a positive attitude towards learning, and utilize the students own stated goals to motivate them further down the line if necessary.

In regards to tasks, teachers can increase student motivation by giving students agency in their learning by giving them a choice on what to learn and in what way. The teacher can curate a number of different resources for students to source content, or make the content choice completely open for students. Likewise, the teacher can suggest a number of tasks for students to do to choose from, or leave it up to the students to do the learning as they wish, given that the students are motivated, provided with proper support when necessary, and have some understanding of how they learn well.

The tasks students perform in class should be decided according to these assessments as a form of external motivation. Tasks based on student interests, and tasks that involve an active research element further incentivize students to be engaged even out of the class. To make the class more interactive, frequent use of presentations, discussions, and questions are very effective.

Teachers can choose tasks that force students to think deeply about their subject, such as writing an essay on their opinion of a point, or tasks that focus entirely on reproduction of target language, such as shadowing. In the case of ILA, tasks that involve critical thinking skills and expression of opinion should be encouraged. To increase student motivation, teachers can propose multiple tasks for students to choose from that have clear objectives and language development incentives. In addition, teachers should be flexible to respond to how the students themselves respond to the activities at hand.

For the success of the CBLT approach, we should choose themes that evoke broad public discussion. This ensures a variety of content related to the topic is available, and means students can get information in different forms from different sources. In public discussions, many socially significant questions are raised, which help to formulate questions for discussion in the class.

How to Keep the Students Involved Outside of the Class?

In the university setting, basically everything the students do throughout the course needs to contribute towards their grade. In terms of keeping students involved outside of class, besides setting tasks and assessments that provide external motivation, developing learner autonomy that encourages internal motivation is essential. In order to do so, the teacher needs to provide activities that students are able to do on their own, or with their peers, without the direct supervision of the teacher. If done successfully in class, it is then a natural progression for students to take this work outside the classroom. This can be as normal homework, or as part of the students' grade.

This does require a level of responsibility from the teacher, however. Such tasks require the teacher to give clear expectations of what is expected of students, ample opportunity for practice during class time, and they also require the teacher to be constantly available for support when necessary.

Conclusion

Based on the recent literature findings and our own experience of teaching at the university level, we stated some important features of effective ways of CBLT in ILA education. We split the control of the teacher into three areas; where the teacher has full control, where they have partial control, and where they have a minimal amount of control, to propose ideas of effective teaching in each area. We hope our research contributes to the development of teaching CBLT.

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REVAMP: Transforming Technology-enhanced Education to Cater for Learners' Dispositions

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Abstract

The integration of technology into an education system is a precarious affair that prompts educators and policy-makers to refer to various technology implementation guidelines including but not limited to Technology Acceptance Models, Gilly Salmon's 5 Stage model, Puentedura's SAMR model, or Koehler's TPCCK model; to name a few. The integration of technology involves the aspects of management systems, digital tools, the learners and the learning process – creating an intricate nexus of exponentially evolving components requiring 21st century skills. The increasingly rapid development of technology contributes to digital obsolescence; and the unquestioned belief (doxa) that learners are able to shift their use of technology for learning when predominantly their uses are for entertainment and social purposes predisposes them to selective technology types (hysteresis). One challenge of implementing new learning technologies is thus in identifying which tools or systematic collections of tools are applicable to the target learners and their dispositions to using technologies for learning. Concurrent to the body of literature focusing on online learning technologies, there is a prevalent trend in social science research that puts focus on the learner. This paper proposes a new model, called the REVAMP model, to establishing educational technologies that significantly contribute to transforming education to cater for learners' dispositions by providing systems and approaches that are (1) realistic, (2) engaging, (3) virtual, (4) adaptive, (5) multimodal, and (6) personalised.

Keywords: Digital Transformation, Technology-Enhanced Learning, Dispositions, REVAMP

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Introduction

The digital transformation of education is an increasingly deliberated discourse among policy-makers, education agencies, educators and researchers alike; and has become a developing research interest rushed and expedited by the current global pandemic – Covid-19. For the education sector, digital transformation occurs in the aspects of (1) education management and (2) teaching and learning.

The education management aspect involves matters concerning policies, decision-making, legal, human resource, and the financial management constituents of integrating new technologies. Factors that attribute to education management include policies, big data and data analytics, data protection and governance, decisions on return of investment and/or equity, and research on the state-of-the-art that result in white papers and blue papers. In educational research, these fundamental components of how educational agencies operate are often overlooked in educational research as they are less relevant responsibilities of teachers and educators.

Areas where teachers and educators are more invested and involved in reside in the teaching and learning, and for which digital transformation encompasses the selection and use of learning management systems, standalone educational applications and software, digital curriculum content, technology-enhanced learning solutions and the pedagogical approaches to delivering them; matters that are more exhaustively covered in the body of educational research literature. Notable examples include but is not limited to Mishra and Koehler's TPACK Model (Koehler and Mishra, 2008), Puentedura's SAMR Model (Puentedura 2010; 2013) and Salmon's 5-Stage Model (Salmon, 2013).

Regardless of the distinction between the two responsibilities undertaken by an education agency, more so an agency that regulates education at a state level such as a Department or Ministry of Education, the factors of education management is expectedly concomitant to the success rate of teaching and learning that occur in schools, classes and lessons. Despite this concomitance, a large portion of research related to addressing the digital transformation of education is not only far more inclined towards developing solutions to schools, classes and lessons, they are for the most part detached from these requisites that occur on the macro-level. These requisites are the decisions made in ensuring cost-efficiency, resiliency, reliability, longevity, sustainability and agility of newly introduced technology and technology systems, concerns that inherently educators and researchers may not be privy to.

Nevertheless, for many years' state education agencies remain focused on assisting teachers and students to develop digital competency and inculcate the use of technologies to then expect them to improve learning performance and learning experience, various experts have developed fascinating models as mentioned earlier to guide teachers and educators on the components that make a functional digital learning environment or ecosystem. These models emphasise on learning platforms and processes that are interactive, authentic, conducive and attractive. They aim to further enhance or replace the learning dynamics that already have proven success in the traditional classroom, such as groupwork, problem-based learning, student-centred learning and so forth.

Given the context whereby the digital transformation of education is a binary of either education management transformation or teaching and learning transformation, this early-

stage research and consequently literature review paper elucidates on the creation of a digital transformation framework that considers both sides of the equation.

1. Preliminary Research

Prior to developing the framework based on preceding literature, this paper employed a meta-analysis consisting of a series of quantitative studies that were conducted since 2016 in measuring learners' dispositions towards learning using technology (Omarali 2016; 2017a; 2018; Omarali and Motteram, 2017).

The studies all employed an online closed-ended questionnaire instrument that contained 26 5-point Likert-scale items that were found to reveal aspects that align with learners' diverse dispositions. In previous studies, the said instrument was used as part of a mixed-method research with a qualitative data collection instrument (either interviews, focus groups or Netnography), designed to be analysed using multivariate analysis such as Factor Analysis and Correspondence Analysis with the objective of identifying the learners' dispositions toward their preferred method of online learning delivery. This paper flips the focus from identifying the learners' dispositions to identifying the design of the online learning ecosystem itself.

Data from all the referred studies were meta-analysed based on frequency descriptive analysis. Combining 5 separate studies, the sample comprised of learners from multiple demographics and countries, notably (1) postgraduate students (n=149), (2) technical vocational education students (n=407), (3) online students (n=20 + n=16), and (4) middle school students, and high school students (n=263). Every sample group attempted the same 26 items. Altogether, the sample for this paper is n=855. The meta-analysis unearthed thematic patterns on which a learning ecosystem can be described, viz. the level of learner engagement (E), content multimodality (M), learning adaptiveness to learner dispositions (A), personalisable learning experience (P), and virtualisation (V) of the user interface for the previous four themes.

Upon positioning these five themes against the requisites of education management, an additional theme (Realistic Deployment (R)) was added to the five themes to represent decision-making governed by policies, resources, data analytics, data protection, finance and other operations that would differentiate any digital transformation proposal from being idealistic to being realistic and achievable. At this research juncture, the themes were referred to as Aspects and the 26 items of the instrument reorganised based on the six Aspects – REVAMP (Table 1).

A majority of these items cut across several aspects but the purpose as temporary placeholders in progressing towards a systematic literature review, the items were listed under the aspect that they would align with the most. For this study, the items were rearranged according to the REVAMP framework.

Aspect [Item]	<i>x</i>
Realistic (the deployment)	R
01. [Sufficient money to spend on what I need]	2.26
Engaging (the platform)	E
02. [Skip information that I don't like or find boring]	4.11
03. [Concentrate better when doing activities online]	3.45
04. [Online groups]	3.03
05. [Never get lost in the large amount of internet information]	1.68
06. [Am always calm and stress-free]	2.76
07. [Browsing the internet for information]	4.01
08. [Use it continuously throughout the day]	3.81
09. [Interactive software]	3.24
Virtual (existing processes that are virtual)	V
10. [Am motivated to learn when using the internet]	3.24
11. [Consulting my teachers]	2.28
12. [Seek the opinions and advice of others]	2.61
13. [Watching how others do their work]	2.94
14. [Communicate with people easier online]	3.28
Adaptive	A
15. [Strong ICT skills due to the support I have]	2.10
16. [Do multiple things at the same time (multitask)]	2.52
Multimodal	M
17. [Reading printed books or notes]	1.84
18. [Mobile apps for activities and accessing notes]	4.17
19. [Online notes that are readable/ downloadable]	3.85
20. [Watching videos]	3.92
21. [Group work]	3.33
Personalised	P
22. [Firstly plan on how I will do my work]	3.44
23. [I first go to websites that I am most familiar with]	3.20
24. [Choose the easiest/ most convenient internet feature]	3.98
25. [Work at my own pace]	3.08
26. [Expect to quickly find the information I need]	3.19

Table 1: Mean Scores Per Item of REVAMP

Out of the 6 aspects, the Aspect ‘Realistic’ was least represented with only 1 item attributing to it. This is in part because the 26 items were used in studies that collect the opinions of learners, and as mentioned earlier in this presentation, learners and teachers would have more idealistic expectations of what makes a successful learning system. Which is why a better measure of the Realistic Aspect would be through using question items directed to policy-makers.

The intention of this meta-analysis was to first and foremost discover if any patterns exist that supports REVAMP based on responses to 26 items. In terms of educational research, this

absolutely falls short of fulfilling the considerations in producing statistically significant results. The statistical evidence to support this REVAMP framework is after all an early-stage research; a work-in-progress. At this juncture, conducting studies to understand, to map, and to frame the digital transformation of education that considers both education management and teaching and learning would benefit from a complementary systematic review of the literature.

A literature review that supports the development of a framework to guide the digital transformation of education based on the six identified aspects is a good starting point to develop further research studies with more in-depth data analyses of data from the end-user stakeholders and the policy-maker stakeholders; using the same framework and data collection instrument that befits the REVAMP model. As the research build towards a digital education system that integrates inseparable singularity, the more prepared will stakeholders be in making that large-scale transformation seamless, less disruptive, and fulfilling for all involved.

2. A Review of the Literature

In 2011, Selwyn stated that “digital technology is a key element in sustaining the long-established links between the needs of a country’s economy and the nature of a country’s education system”. Fast-forward several years, the World Economic Forum in their The Future of Jobs Report 2018 predicted the loss of 75 million jobs by 2022 with the four main drivers of change in the job market being ubiquitous high-speed mobile internet, artificial intelligence, big data analytics and cloud technology (WEF, 2018). Nevertheless, the future world of work is not as bleak provided that societies transition into the new digital world, with digital technologies expected to create 133 million job opportunities. They key catalyst for these jobs is an enhancement to the digital revolution - the 4th industrial revolution - and the process to reaching this 4th industrial revolution is Digital Transformation.

2.1. Digital Transformation and Education

However, despite the emphasis on digital transformation as the conduit to new professions, the main custodian of employable skills and knowledge - i.e. the education sector - rarely aligns its decades of initiatives under the nuances of educational technology and technology-enhanced learning with digital transformation. Perhaps, teaching and learning are more often handled at granular level that transformation occurs at ground-level in these microcosms of schools, classes and lessons. What is evident from literature is that digital transformation is rarely associated with education.

It wasn’t until the year 2008 that a journal article on digital transformation was first published. And two years after in 2010, the phrase ‘digital transformation in education’ was used by then US Secretary of Education Arne Duncan in his address during the State Educational Technology Directors Association Education Forum. But other than these two recorded references, the concept of digital transformation in education was hardly ever mentioned, in comparison to for example – e-learning, online learning, technology-enhanced learning or computer-assisted learning. These were the terms that resonated more, because the idea of education and technology becoming an inseparable singularity was not a research priority at the time, because technology in learning transpiring then did not yet immensely contribute to creating a gap, a dissonance in performance and access to knowledge that is increasingly digital.

Hence, the digital transformation of education is nothing new. It is just that the movement was never coined before as ‘digital transformation’. The body of literature that refers to the integration of digital technology and internet technology into teaching and learning, into schools and lessons, oftentimes refer to it as e-learning, computer-assisted learning and technology-enhanced learning or some phrase similar to these terminologies. Examples include Mishra and Koehler’s TPCK Model since 2006; Ruben Puentedura’s SAMR Model since 2010 which addresses transformative applications of information technology into education; several educational technology acceptance models (TAM) dating back to 2002 with the study of TAM in evaluating the efficacy of internet-based education systems. Faculty and educators have embraced Gilly Salmon’s five-stage model. Before the turn of the 21st century, Dr. Gilly Salmon was already researching on online technology in regard to online learning environments, moderation of learning, computer-mediated communication. Certainly, various experts have made great strides in preparing practitioners, whether it be teachers or policy-makers, on what makes digital technology effective in teaching and learning.

These models of enhancing learning dynamics tend to have a top-level. For the TPCK, the central model TPCK is its top level. For the SAMR model, the Redefinition Stage is the top level, but in order to reach it the system has to fulfil the stages of substitution, augmentation and modification. The same can be said for Salmon’s 5-step model, the top level is the 5th Stage (the Development Step) and to arrive to that stage entails the fulfillment of the previous 4 stages in the model.

2017 was the year when the topic of digital transformation in education finally became one of education sector’s main discussions. Whether the Industry 4.0 declaration in 2016 instigated it or whether respective societies are being instinctively awakened by new observations of how more dependent societies are to technology, the idea of transformation finally trickled into educational research. In 2016, less than 10 published research papers were dedicated to the topic. In 2017, 39 papers were published on digital transformation in education. In 2018, 47 papers. In 2019, 84 papers. In 2020, more than 120 papers. Indeed, educational researchers are more aware that education and technology will likely become an inseparable singularity. However, ‘awareness’ is merely diagnostic data. What is more important is predictive data – preparedness. Preparedness is a whole different proposition, and one that will benefit from a framework for both policy-makers and educators to work together towards seamless transformation. The REVAMP Model, informed in the future with predictive data, intends to prepare education agencies handling both education management and teaching and learning with an insight on digital transformation that caters for learners’ diverse dispositions while in tandem realistic deployment of projects that constitutes the digital transformation.

2.2. The REVAMP Framework

2.2.1. Keeping it Realistic

The first REVAMP Aspect is Realistic. It is easy to be fascinated by the idealistic features of emerging technologies. Certainly, the affordances offered by gesture-interface, algorithm-based learner diagnosis, or augmented reality interaction are for example strong reasons for deploying them in lessons. From the policy-maker perspective however, the reality of the situation is that there exist limitations to how far idealistic solutions can be realised. The first limitation is resources, and resources can be further broken down into financial resources, human resources, time resource and infrastructural resource.

On financial resources, most emerging technologies are costly to deploy. The cost increases based on the uniqueness the technology offers. For example, a Google Cardboard kit may cost less when compared to an HTC Vive Pro headset. In reality, an HTC Vive Pro headset offers far more features than a Google Cardboard, relative to their price points. On human resources, superior emerging technologies tend to have more complex hardware, firmware and codebases. In turn these complexities require considerable human resource as technical support. Adding to this, to account for making different technologies work together in singularity, with the ability to be interconnected and interoperable, with technologies such as API, SCORM, LTIs and Single-Sign On. Another variable is the end-of-life of technologies. Any human resource dedicated to handling digital transformation have to be a few steps ahead in terms of planning, migration, development and implementation of replacement technologies, or even better, the prospect developing learning technologies in-house.

The second limitation is access. There exist pertinent concerns on inequity and inequality, and many reports and literature have supported that digital technologies, when not implemented properly, exacerbate inequity and inequality. Bridging the digital gap and digital dissonance that emerging technologies bring should be considered as a main part of the REVAMP framework. Limited access can be caused by an agency not having the resources mentioned, but also that an agency has less control of end-users' access limitations and ownership of required technologies. For example, High-Definition videos may be a more engaging immersive experience, but do the user demographic all have access to devices that accommodate high definition? Do the user demographic have secure economic resource to sustain the high bandwidths needed? Would the agency be willing to demand from users to equip themselves with technologies that they cannot afford? These are questions that the REVAMP framework intends to address.

The third limitation is Return of Investment. Education agencies are expected to have the best interest of the students in mind. However, any agency that wants to remain systematically operational would still want a well-run business. Implementing technologies require budgeting and financial commitments, and for organisations they regard the cost-benefit of implementing or procuring or spending human resource to develop these technologies, in terms of Return of Investment. Monetary returns asides, returns are rather in terms of having students experiencing quality education which in turn produces graduates who have diverse and future-ready skillsets, which in turn contributes back to the education system with new knowledge and new innovation.

Currently, there is a dearth in research on the significance of maintaining the realistic educational technology deployment. Even when referring to the models of what makes successful technology-enhanced learning, the role of realistic solutions is often overlooked. The search only unearthed 7 publications on realistic implementation of educational technology (Fisher, 1996; Garba and Garba, 2008; Eggins, 2011, Hanlon, 2015; Xianmin et al., 2017).

2.2.2. Engaging

The second REVAMP aspect is Engaging, and specifically 'engaging' as an adjective for learning rather than 'engage' as in the verb 'to use' because in the literature the verb engage has been overly used as a synonym to the word 'use' when in fact engaging as an adjective defines productive interaction, defines that the learner is engrossed, is absorbed in the interaction, defines that it activates the learner's cognition whether it be higher order

thinking, metacognition, experiential learning, problem-solving, enquiry-based, discovery learning, authentic learning, action learning, human-computer interaction, constructivist learning, or any combination of these engagements.

Based on this definition, a scoping search of the literature since the advent of the Internet found 20 articles dedicated to engaging learning systems (Hawkes et al; 1999; Kearner and Maakrun, 2020; Lawrence, 2011; McEvoy and Cowan, 2016; Oulaich, 2019). These comprise of engaging interactions such as gesture-based interactions (Tootell et al., 2013), gamification (Annetta et al., 2011; Lamrapoulos et al., 2019; Mageswaran Sanmugam et al., 2015; Sanmugam et al., 2015; Talbot et al., 2012), digital storytelling (Bromberg et al., 2013; Sadik, 2008), e-learning tools (Cherner et al., 2019; Mehlhorn et al., 2011; Rohrbach et al., 2014; Uhomoibhi et al., 2019), and learning by play (Ernst et al., 2015, Levesque, 2006; Stieler-Hunt, 2016).

A measure of engagement is when the type of content piques the interest and curiosity of students. However, measuring this by observation can be deceptive. Moreover, activities where students passively sit or watch or listen can be engaging but is passive engagement itself productive? Students today have developed different and diverse patterns of attention span, multitasking and memory retention, and it is thus the best interest of the REVAMP framework to figure out if the technologies being deployed indeed align to these patterns.

2.2.3. Virtual

The third REVAMP Aspect is Virtual or Virtual-Ready. The virtualization of learning experience and/or environment is subjective to what is considered virtual. A virtual learning environment for example, is regarded as virtual presence even when that presence is reduced to text-based representations such as posts in discussion forums and text comments on work exercises (Omarali, 2017b). At the other end of the spectrum is virtual presence in the form of avatars in virtual worlds such as Secondlife, AltSpace VR, VRChat, Facebook Horizon, and other similar platforms.

In between the two extremes exists virtual labs (Xin, 2008) where hands-on virtual practicals can be simulated, and virtual tours where students acquire a virtual first-person point of view. Webinars and teleconferences are often associated with virtual learning or virtual classrooms, but considering that users represent their true form in online face-to-face communication, webinars are no more virtual than the depiction of people on television. For digital presence and experience to be virtual, the user has to be digitally represented as a virtual twin. Likewise, the landscape has to be digitally represented as a virtual twin. On 1st March 2021, the ECMWF announced a project called DestinationEarth which is a replica of planet Earth.

Virtual reality technology has been an exciting prospect that it is commonly portrayed on television and movies since the 1980s. It is thus not surprising that a scoping review of the literature on virtual reality itself found more than 900 papers, more than 100 of these were on virtual reality and education (Pantelidis, 1991; Read and Sykes, 1999; among many others), and more than 300 of these on virtual learning environments (Cunha et al., 2008; Farrell, 1999; 2001; Keller, 2005; Metes et al., 1995; among many others).

2.2.4. Adaptive

The fourth REVAMP Aspect is Adaptive. A scoping search of the literature found more than 180 papers on adaptive learning whether it involves technology or no technology. Of the 180, 32 papers associated adaptive learning with education technology. Of the 180, 51 papers associated adaptive learning with technology-enhanced learning. Of the 180, 25 papers associated adaptive learning with digital education.

In the traditional classroom, an observant teacher constantly assesses each learner's satisfaction and learning effectiveness through formative input, performance scores and their learning behaviour. This approach is called differentiated instruction whereby it involves "a teacher attending to the learning needs of a particular student or small groups of students, rather than teaching a class as though all individuals in it were basically alike" (Tomlinson and Allan, 2000, p. 170).

An alternative to teacher-based differentiation is having a digital learning system that adapts to the preferences and abilities of the learners. An adaptive learning system is quicker in formatively assessing learners, and the repetitive matching of similar learner types with learning processes results in a profiling database that can be reused and referred for future learner cohorts. Ghorbani and Montazer (2015) has demonstrated through their Automatic Learners' Personality Identifying System (ALPIS) prototype that adaptive systems are more systematic in their assessment of a learner's current learning need. The experimental ALPIS technology uses an intricate fuzzy inference algorithm that formulates profiles based on learners' patterns of engagement with the system.

The substitution of the teacher with digital technology however is not the easiest of tasks, for the technologies that are comparable to teacher presence are either based on complex algorithms that require technical expertise (e.g. ALPIS), or the still developing field of artificial intelligence to replicate the expected humanistic sensitivity when teachers subjectively and holistically assess their learners needs. These challenges however should not thwart the option of adaptive learning management systems as according to Bayne and Ross (2016) the technology of intelligent systems is a new frontier in teaching that should be embraced (p. 125). An adaptive learning system is expected to be an automated technology that tailors the learning based on its impression of the learner, whereby "[the] gathered information about learners can help system designer to develop a matching, relating and inferring mechanism with digital resource of learning object repository, and then generate the content, context and information that learners need" (Lin and Kuo, 2005, p. 2). The realisation of adaptive learning technology has been enhanced with the advent of artificial intelligence, business intelligence and data analytics in education management.

2.2.5. Multimodal

The fifth REVAMP Aspect is Multimodal or Multimodality. This paper's scoping literature review found that between 2015 to 2020, 22 papers on multimodality and digital learning have been published. From the 22 pieces of literature, six were specific to technology-enhanced learning, and one was specific to educational technology. The literature revealed that the multimodality of a learning system is represented through several forms. Mahfouz and Ihmeideh (2009) conceptualise that, "in multimodal learning environments, learners exert more control over the learning situation, and the multimodal synchronous interactions allow

learners to combine text chat, audio chat and even graphics, thus working collectively at a distance in a multimodal and multidimensional learning environment” (p. 210).

Firstly, multimodality can refer to content. There is the multimodality of how content is delivered and in what format it is being offered. Studies on multimodal online notes included the use of different multimedia, in particular verbal and non-verbal forms (Moreno and Mayer, 2007), and the multiple formats of learning via text, video, audio, images and interactive elements (Sankey et al., 2010). Secondly, multimodality can refer to the learning technology. This exists in the form of the various technologies that are used to interact with learners and teachers. Studies include the use of different narrative approaches in gamified learning environments (Dickey, 2006), the use of several communicative features such as chat rooms, forums, audio and video conferencing to interact (Hampel and Hauck, 2006), the combining of audio, text and graphics (Hampel, 2006), webcasting and online text-chat (King and Fricker, 2007), and the likely discipline-specific use of gestures, speech, facial expressions and graphical inputs (Bunt and Romary, 2002).

Thirdly, there is the multimodality in instruction and pedagogy. Several studies include having alternative instructions to reach a shared outcome or end objective (Whittington, 2010), and the human-computer interaction based on multimodal instructions delivered by a robot (Wolf and Bugmann, 2006). This form of multimodality is the least researched, and it may be due in large part to reliance in algorithms or artificial intelligence to deliver tailored instructions.

2.2.6. Personalised

The sixth REVAMP Aspect is personalisability. A scoping review of the literature found 20 papers on personalisable digital learning, 11 papers on personalisable technology-enhanced learning, and 6 papers on personalized educational technology

Personalised Learning is a relatively new concept that was first mentioned in 2006 in conferences on learning technologies. Van Harmelen (2006) defines a Personalised Learning Environment as “a single user’s e-Learning system that provides access to a variety of learning resources, and that may provide access to learners and teachers who use other PLEs and/or VLEs” (p. 815). The main difference between this system and pure VLEs is that the affordances, artefacts and tools involved are selected and structured together by the learner to create his/her own system.

Attwell (2007) describes Personalised Learning Environment as a system that “comprised of all the different tools we use in our everyday life for learning [and that] many of these tools will be based on social software” (p. 4). The use of social software is prevalent in learners for social and entertainment purposes, which is why the idea of Personalised Learning Environments has been an attractive proposition. However, not all studies advocate the suitability of social software for learning. One main concern of using personalised learning systems and why despite it being an attractive option it is still rarely prescribed as a standalone system over structured learning management systems is because of its association with the use of social software.

Nevertheless, a study by Conole et al. (2008) argue that the perception of disruption has changed and that learners are able to integrate these disruptive technologies into their learning without much disruption, so much so that learners professed of learning more

effectively compared to using exclusively prescribed learning management systems which was disliked by 9 out of 10 learners (Conole et al., 2008). Thus, personalisable systems have a strong advantage over non-personalisable systems as they seamlessly complement learners' lifestyles.

Conclusion

This paper proposes a framework that accounts for both education management and teaching and learning. Its six aspects represent solutions that are relevant to both sides of digital transformation on education. In addition, unlike existing models, the REVAMP framework has no top-tier level. It follows a flat holocracy of six aspects of digital transformation that is all-or-nothing. The REVAMP model draws from the agility and scalability of each of its six aspects depending on the developing trends of learning technologies in the foreseeable and perhaps distant future. Educators and schools may have ideas on what makes successful digital learning ecosystems, but the external variables and factors to implementing them, particularly when it is a full-scale implementation, should account for factors that ensure teacher workload is not overburdened in the long-run with perennial training on new technologies, and teaching is not disrupted by abrupt changes in technologies due to digital obsolescence.

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