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SEAAIR
SOUTH EAST ASIAN ASSOCIATION FOR INSTITUTIONAL RESEARCH

FAKULTAS EKONOMI DAN BISNIS UNIVERSITAS TRISAKTI

PROCEEDINGS (FULL PAPER)

The 18th SEAAIR Annual Conference

ASEAN@50: Sustaining Student Competencies and Employability

Universitas Trisakti
September 26th - 28th, 2018

Organized by:

CENTRE FOR FINANCIAL INCLUSION
learning to appreciate a process for a change

Collaboration with:

OTORITAS JASA KEUANGAN

MAGISTER EKONOMI

PROGRAM DOCTOR PUBLIC POLICY UNIVERSITAS TRISAKTI

MESSAGE FOR SEAAIR 2018

On behalf of the SEAAIR Executive Committee (SEC), I warmly welcome you to the 18th Annual SEAAIR Conference in Jakarta, the dynamic capital city of Indonesia. Truly, this will serve as a "meeting place" of novice and seasoned researchers, educators, academicians, and loyal SEAAIR friends and colleagues who will once again engage in a lively discussion of the recent research findings and the implications of such in their work in the academe, to be used for policy formulation or to put it simply, to improve the quality of education each institution is offering to its stakeholders. This is very apt for the theme of this year's conference, "ASEAN@50: Sustaining Student Competencies and Employability." This is in cognizance of the fact that the true measure of education is ensuring the development of the competencies of the students that will guarantee their employment after graduation from the university.

For this year, we have successfully accepted 43 papers out of the original abstract submission of 89 that underwent a rigid double blind review process. These came from 62 authors from Australia, Indonesia, Malaysia, Philippines, Saudi Arabia, South Africa, South Korea, Taiwan, Thailand, and Vietnam. Aside from this number, we will also be joined by 17 other participants, our SEAAIR friends who continue to support us throughout the years.

One highlight of this year's conference is the panel discussion where representatives from Malaysia, Philippines, South Africa, South Korea, and Vietnam will share their thoughts and experiences on what is being done in their respective country and/or institution for the development of the skills and competencies of students and their eventual immersion in the workplace.

This gathering would not have been made possible without the efforts of the administrators and the faculty members of Universitas Trisakti who accepted the challenge of being this year's Local Organizing Committee (LOC). They have not only put together the academic side of the conference but also prepared cultural presentations and city tour that will introduce us to the rich culture of Indonesia.

With this, I say *THANK YOU* to our SEAAIR participants and the LOC for another opportunity to gather together and enrich ourselves academically and culturally.

omlegaspi

Dr. Olivia M. Legaspi President, SEAAIR

OPENNING SPEECH

Prof. Dr. BambangSoedaryono, AK.,MBA Dean of Economic and Business Faculty Trisakti University

Excellencies:

- Distinguished Professors, Speakers, Delegates, Sponsor and Participants
- Distinguished Ladies and Gentlemen,

Good Morning,

It is my pleasure to meet all the distinguished Professors, Speakers, Presenters, Sponsor and also experts and scholars in this **SEAAIR Conference and Call for Papers 2018**. The theme of SEAAIR 2018 is **Asean @50: Sustaining Student Competencies and Employability.**

This morning, we are also watched the presenters who come from various Universities and Organization. I hope, through this conference, we can synergizes and collaborated of our researches, we can produce many ways and problem solver, continuously, in order to anticipate the changing of world evolution especial in Education.

Ladies and Gentlemen, Honorable Delegates, we are Trisakti University, especial Economic and Business Faculty, of course it is very proud for us, organized this **SEAAIR conference in theme of SEAAIR 2018** is **Asean@50:Sustaining Student Competencies and Employability.** Honestly, I said thank you to presenters, moderators, sponsor, committee, and for all of you, for your participation, your attention, your funding, your hard work, for the accomplishment of this conference. Wish to meet you again on the next conference. Thankyou!

Prof. Dr. Bambang Soedaryono, AK.,MBA

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CONFERENCE PROGRAM

Time	Activities
	Wednesday, 26th September 2018
08.00 - 08.55am	Registration + Coffee Break Performance: Band Accoustic (Desak Senja)
08.55 - 09.00 am	Performance (Opening Dance)
09.00 - 09.10 am	Opening by MC
09.10 - 09.15 am	National Anthem: "Indonesia Raya"
09.15 - 09.20 am	Prayer
09.20 - 09.50 am	Speeches :
	Prof. Dr. Bambang Soedaryono, AK.,MBA (Trisakti University) Dr. Olivia Legaspi (SEAAIR President) Prof. Dr. Ali Ghufron Mukti, MSc, PhD (Rector Trisakti University)
09.50 - 09.55 am	Gong beating by Prof.Dr. Ali Ghufron Mukti, MSc, PhD with Prof.Dr.Bambang Soedaryono,AK.,MBA & Dr. Olivia Legaspi)
09.55 - 10.00 am	Performance : Band Accoustic
10.00 - 10.05 am	Performance: Tradisional Dance Indonesia
10.05 - 10.30 am	Keynote Address by Head of the Region III Higher Education Service Agency: Dr.Ir.Illah Sailah, MS
10.30 - 10.40 am	Photo Session
10.45- 12.15 pm	Plenary Session – Speakers: Governor DKI Jakarta: Bpk H. Anies Rasyid Baswedan, PhD Prof. Datuk. Dr. Yahaya Ibrahim Moderator: Prof. Dr. Muhammad Zilal Hamzah Swinburne Univeristy: Mohshin Habib, PhD Editor JIRSEA: Assoc. Prof. Dr. Teay Shawyun
12.15 - 13.30 pm	Coffee Break & Prayer
13.30 - 15.30 pm	Paralel Session
15.30 - 16.00 pm	Coffee Break & Prayer
16.00 - 18.00 pm	Paralel Session
18.00 - 19.00 pm	Break
19.00 - 21.00 pm	Dinner

Time	Activities
Thursday, 27th September 2018	
08.00 - 09.30 am	Registration + Coffee Break
09.30 - 11.30 am	Paralel Session
12.00 - 13.00 pm	Coffee Break & Prayer
13.00 - 15.00 pm	Paralel Session
15.00 - 16.00 pm	Coffee Break & Pray
16.00 - 16.30 pm	Closing Remark
16.30 - 18.00 pm	Annual Meeting
18.30 pm	Dinner
Friday, 28th September 2018	
08.00 - 15.00 pm	City Tour Museum BI, Kota Tua,Universitas Trisakti & Thamrin City

TABLE OF CONTENTS

Career awareness among first year Information Technology students at a University of Technology

Matome Jack Mashiapata

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ABSTRACT

This paper explores career awareness among first year university students in the Information Technology course at Tshwane University of Technology (TUT). A large number of students usually applies to study for Information Technology and subsequently register for the course. Although the applications close before the end of the year, late registration would be open up to the beginning of the following year. Most of the students who come to register for Information Technology at the beginning of the academic year for that academic year are the students who had not submitted any application the previous year before the closing date the previous year. The question that arises is whether these students have had any career information or awareness when they make Information Technology a choice of career. The researcher used a questionnaire which was distributed to a group of first year Information Technology students for data collection at Tshwane University of Technology. The results showed that students chose to study Information Technology by default. Most of the students had not received sufficient career information or guidance received prior to entering tertiary education. Recommendations for both the school and higher education systems in terms of career guidance and counseling provision and support are made.

Keywords

Career awareness, Career guidance, Career information, Information technology, World of work

Introduction

Making a career choice is probably one of the most significant decisions anyone will ever make and yet it is probably the most difficult one to make (Garrun, 2007:9). A study by Gordon and Meyer (2002) examined the nature of career indecision among prospective university students. The results of the study from a population of N=84 prospective students showed that 50% of the participants described themselves as predominantly uncertain concerning a career choice. The study showed that the participants' indecision was related to their lack of self-awareness and career knowledge.

Rowley and Purcell (2001) explored graduates' perceptions of higher education careers service in the United Kingdom (UK) and found that respondents believed that the career guidance service was helpful only to students who had already made career choices, stating that there was insufficient individual guidance, absence of encouragement and help with practical skills to choose a career.

Another survey conducted among more than 800 high school students in the UK, found that 70% of the participants admitted they had had limited career guidance. Only 10% of those in Grade 11 and Grade 12 said that they had received guidance from someone in the school towards career choices. The survey concluded that the decisions that the students take with regard to careers are often based on scant information (Ferris State University Career Institute for Education and Workforce Development [online]).

When students complete high school they need to know where they are going to study and what they are going to do in terms of careers. Important career decisions have to be taken at this stage, since it is a period that represents the transition from the sheltered environment of the home to a more open, challenging and responsible tertiary education system (Maluwa-Banda, 1998). Among the challenges that the students face as they move from high school to tertiary education is that of relevant and appropriate choice of career or study direction. There is a definite increase in concern regarding the choice of a career among the students when they are about to complete their high school education. This concern is not only about the career the students want to follow, but also about the relevant tertiary education institution that is relevant to prepare them for the kind of career that they wish to pursue. The kind of transition that the high school students are faced with, presents them with problems and challenges of an educational, vocational, social and personal nature (Maluwa-Banda, 1998).

The provision of career guidance in high school is important to assist students to make choices that are based on relevant information. If students are not guided, these students progress through high school by following courses that are not in line with what they actually needed. Many school-going adolescents do not have access to the information that is necessary for rational career decision-making (Warton & Cooney, 1997). This is as a result of a lack of career guidance offered at school level. Dambisya (2003) conducted a study focusing on the career intentions and perceptions of the future of University of Transkei's medical students. It was found that most students had received little or no career guidance when they had to make choices about careers and they indicated that they would have liked to have had more information on career guidance.

When students are registered for the course in the field of study that they did not plan for in advance, or which they did not have any prior knowledge of, they tend to experience academic difficulty and lose motivation since they may not have sufficient knowledge that they are studying. The loss of interest and motivation with the resulting difficulty in learning, accounts for much of the students' drop-out rate in their first year of study. A study by Engelbrecht (1999) indicates that the drop-out rate among first year students at TUT increased from 33% to 35% between 1994 and 1998. He also shows that apart from the students dropping out of courses, there are other factors such as being enrolled longer than the required three years for a diploma or four years for the degree. Another study conducted by Engelbrecht (2001) using 839 first year students in the faculty of Economic Sciences at the then Technikon Pretoria, showed that 50% of the respondents had not had any career counselling prior to their studies and up to 50% were not prepared for the transition from school to tertiary education.

Method

A convenient sample of 203 respondents was selected from among the first year Information Technology students. The demographic profile of the respondents was is represented in Table 1.

Table 1: Demographic profile of respondents in percentages

<table>
<tr><td rowspan="2">Gender</td><td colspan="5">Male</td><td colspan="7">Female</td></tr>
<tr><td colspan="5">67</td><td colspan="7">33</td></tr>
<tr><td rowspan="2">Race</td><td colspan="2">Black</td><td colspan="3">White</td><td colspan="3">Coloured</td><td colspan="4">Indian</td></tr>
<tr><td colspan="2">91</td><td colspan="3">4.95</td><td colspan="3">2.48</td><td colspan="4">1.49</td></tr>
<tr><td rowspan="2">Language</td><td>Afr</td><td>Eng</td><td>Nde</td><td>Sep</td><td>Sot</td><td>Tsw</td><td>Swa</td><td>Ven</td><td>Tso</td><td>Xho</td><td>Zul</td><td>Other</td></tr>
<tr><td>4.93</td><td>9.36</td><td>3.94</td><td>29.06</td><td>7.39</td><td>9.36</td><td>7.39</td><td>4.93</td><td>11.3</td><td>4.93</td><td>3.45</td><td>6.40</td></tr>
<tr><td rowspan="2">Age</td><td colspan="2">18</td><td colspan="3">19</td><td colspan="2">20</td><td colspan="3">21</td><td colspan="2">22+</td></tr>
<tr><td colspan="2">18.2</td><td colspan="3">28.6</td><td colspan="2">25.1</td><td colspan="3">12.8</td><td colspan="2">15.3</td></tr>
</table>

Data Collection Instrument

The investigation into career awareness among first year students in Information Technology was conducted using a questionnaire which was specially developed by the researcher. The thirty seven item questionnaire contained research related questions as well as questions on biographical issues which dealt with age, gender, level of education and home language.

Data Analysis and Results

The collected data were interpreted for the purpose of drawing conclusions that reflect interests, ideas and theories that initiated the inquiry (Mouton, Wildschut & Boshoff, 2000). Data analysis means editing and reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques (Cooper & Schindler). Responses to the questionnaires were analysed and the categories that emerged are presented in table 2 below:

Table 2: Results

A.	*KNOWLEDGE OF CAREERS*	*PERCENTAGES*	
		YES	*NO*
1	Sufficient career information before application for the course	26.6	73.4
2	Knowledge of typical work in the IT field	54.7	45.3
3	Enquiry from people in the field on nature of IT work	37.5	62.5
B.	*CAREER GUIDANCE AT SCHOOL*	*PERCENTAGES*	
		YES	*NO*
4	Career guidance after Grade 12	52.9	47.1
5	Career guidance in Grade 12	48.2	51.8
6	Career guidance in Grade 11	35.2	64.8
7	Career guidance in Grade 10	33.7	66.3
8	Career guidance in Grade 9	25	75
9	Career guidance in Grade 8	25.3	74.7
C.	*CAREER EXPLORATION*	*PERCENTAGES*	
		YES	*NO*
10	Visit to career exhibition before applying to study at university	32.5	67.5
11	Career exhibition information sufficient for career decision-making	55	45
12	Gathering of information to clarify the choice of career	39.9	60.1
D.	*INFLUENCES ON CHOICE OF CAREER*	*PERCENTAGES*	
		YES	*NO*
13	Choice of the course because is what was always on the mind	56.4	43.6
14	Influenced by friends to choose the course of study	25.4	74.6
15	Parental influence	17.3	82.7

Discussion

A total of 73.4% of the respondents indicated that they had not received sufficient career information before they applied for Information Technology at the university. If such a large number of the students in the class had not planned to do the course of study that they were registered for, then one can wonder what level of motivation they have to study for the course. Students who study for the course which they know is in line with their own goals are likely to perform better academically because they know that by achieving good results, they are moving closer to their goals (Salami, 2008; Smith, 2002 & Ting, 1997).

Of the respondents, 54.7% indicated they had knowledge of a typical workday in the field of Information Technology. Only 37.5% of the respondents indicated that they have consulted in some way or the other with people already employed in the Information Technology industry in one or other way.

The process by which an individual develops his or her vocational identity involves exploration of the self and the actual world of work (Whiston & Keller, 2004). Exploration of the world of work means that prospective students obtain more information about a career and gain an understanding by enquiring from others employed in the field. People who are already employed in the field of Information Technology would be seen as role models.

According to Okocha (2001) students could face a challenge in choosing careers due to a lack of visible positive role models in the field. A significant number of the first year students in Information Technology had not consulted with people involved in the Information Technology industry. They have had no prior practical or concrete experience of the field and their first encounter with the discipline was through the course of study they had enrolled for.

Career Guidance at School

As pointed out by Maluwa-Banda (1998), students who complete Grade 12 need to know where they are going to study or what they are going to do in terms of careers. The decisions that have to be taken regarding careers and further study are crucial and must be based on adequate information.

Students who are afforded accessibility to career information and proper career guidance are able to choose a suitable occupation or career path with ease (Seligman, 1994). Of the respondents in this study, 52.9% indicated that they received career guidance after they had completed their high school education.

To summarise, 74.7 % of the students had never been exposed to career guidance when they were in Grade 8. This means that these students moved from Grade 8 into the next level without even realistically considering and consciously what the subject fields they were entering would lead to. The same applies when they were in Grade 9, as 75 % indicated that they had never been offered any career guidance at school.

In Grade 10, 66.3% that were not offered career guidance. In Grade 11 64.8 % and in Grade 12, 51.8 % of students who were not offered career guidance at school.

The above data shows that the importance of career guidance is realised only as students proceed to higher grades at school and at times it may just be too late. The number of students who were offered career guidance increases with the level of grades they are in. The higher they move from one level of study to another, the more they start to learn about careers. Figure 1 shows the comparison of the number of students who had career guidance from Grade 8 to Grade 12.

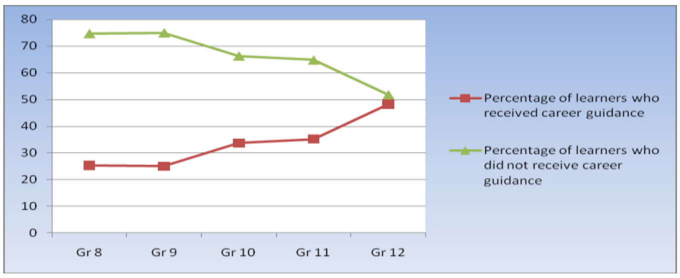

Figure 1: Summary showing career guidance from Grade 8-12

Career Exploration among First Year Students in Information Technology

Only 32.5% of first year students had been to a career information centre to obtain more information before they applied to and enrolled at the university, whilst the rest had never been to a career information centre. The number of first year Information Technology students who had never been to a career information centre to receive career guidance is high and constitute almost two-thirds of the sample. A career exhibition is one of the available sources of career information and first year students who have never been to such an event have missed an opportunity that would have provided them with the necessary information for a career choice.

The question that may arise here is, how did the respondents arrive at the decision to choose Information Technology as a course of study if they had never been to a career information centre where they would have had an opportunity to compare a variety of careers?

Of the respondents who had been to a career exhibition, 55% found the information they had received sufficient to make career choices and 45% found that the information received was not sufficient for them to make a career decision

The results show that 60.1% of the respondents indicated that they did not understand what the field of Information Technology involved when they registered for the course. Forty percent indicated that they had an understanding and clarity of the field of study. The question here is how these first year students come to register for a course about which they do not have a thorough knowledge. If they had had career guidance, it would have exposed them to acquiring information, helping them to reflect on their ambitions, interests, qualifications and abilities (Smith, 2002). Through guidance they would be able to understand the labour market and education systems, and to relate this to what they knew about themselves. If students did not have clarity about the Information Technology field, then one wonders on what basis their choices were made (Salami, 2008).

Respondents who agreed that they had always wanted to study in the field of Information Technology constituted 56.4% and the rest indicated that although they were studying Information Technology, that was mot what they had always planned for.

Conclusion

The findings of this study indicate that most of the first year Information Technology students make career choices without adequate information and awareness of the career fields that they choose. These first year students have a limited knowledge of careers. The lack of sufficient career information makes students underprepared for correct career choices.

School career guidance services influence the students' choices in that if career guidance is offered at school, students gain information and important skills necessary for career decision-making. The school has an important role to play in helping students with educational and vocational knowledge which is the basis of any career choice as they transit from high school to university. In this study, 42.2% of the respondents did not have career guidance offered at school. Those students who had had career guidance offered at school received very little career information in the earlier grades and only received more information once they progressed to Grade 12.

These findings indicate that first year students enter the university or higher education with limited career awareness. There is insufficient provision of career counselling and students come to university not well prepared. Recommendations that can be made relate to school career guidance services and the services that the university can render to mediate the problem of a lack of career awareness. Career interventions should not be left until students reach Grade 12 or when they apply to study at university but it should rather be a continuous process starting from as early as primary school and continuing through to university and beyond university.

From the findings of this study, the following conclusions can be drawn with regard to the preparedness of the first year Information Technology students:

- Students complete high school, apply for university study and register for their studies without the necessary information regarding a career choice.
- Students come to the university without any exposure to relevant sources of career information that would assist them in their career decision-making.
- Some of the first year students applied for and registered in Information Technology, but this was not what they had planned to study previously. The decision about study in Information Technology was based on other factors other than the career-relevant reasons.
- There are first year students who are not clear about what to do in order to search and obtain further information regarding careers. They do not have the skills required to assist them do a career exploration.
- The university tends to focus mainly the Grade 12 results as the basis for admitting applicants into the study programmes. It seems that as long as the applicants have the required results and grades, then they are accepted into the course. The prospective students' personality, interest and other attributes are not necessarily considered.

Recommendations

The school system is an important element that serves as a feeder for higher education in that students who register at universities are from these schools. It is therefore important not to separate the two levels of education provisioning when it concerns career guidance and counselling. What created career problems in the past and also currently is the gap that exists between schools and higher education institutions.

Recommendations for the School System

It is recommended that career counselling and guidance be implemented as a compulsory offering in the school system from as early as primary school, progressively through to high school. Since the inception of the new post-1994 curriculum, the traditional school subject offerings have changed and school guidance metamorphosed into Life Orientation.

The provision of career guidance and information for the students in the school system will not only enhance their knowledge about the possible career opportunities but also leads to a reduction of anxiety about the future, creates motivated learners, and increase self-efficacy. Prior to entering higher education, universities and colleges, students in the school system would benefit greatly from relevant career guidance information, school activities that increase self-awareness and career awareness, and literal exposure to a variety of careers and curriculum contexts that addresses their future.

Career guidance and counselling need to be prioritised in the school system and should not be omitted until students are in Grade 12 when it is too late as they are already faced with the task of making future career choices at the end of schooling. Turner and Lapan (2005) indicate that from the age of twelve, young people undergo a change in the way they view the world by moving away from concrete thinking toward more abstract, logical thinking. It is important to expose the students at that early age to career guidance and counselling issues at an early age as they start to envision not only what they will resemble in the future but also how they will implement what they conceive themselves to be.

Teacher development and training programmes should be introduced to empower teachers to deliver these career guidance services to assist students to gain sufficient career knowledge. The training of teachers should not only be limited to the curriculum development issues but specialised content such as career education should be given due considered.

Recommendations for Higher Education

Gordon and Meyer (2002) stated that it is common practice for a number of universities in the United States of America to provide career assistance to students through credit courses. There is a concurrence among researchers that university students, including those that have already decided on a career, would benefit greatly from career counselling.

As the schooling system does not offer sufficient career counselling necessary for the provision of information to help students make choices, it then depends on universities and colleges to render this service. Students entering university would benefit from exposure to self-awareness opportunities as a component of creating a strong person-environment fit in their new educational environment.

Prospective students should be given an opportunity for an assessment of self that leads to an understanding of their level of need for career information, personality characteristics and awareness of the career world prior to registering at the university. This should be part of the application process where students work through a career guidance process to help clarify their career goals and their choice of course of study.

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Career and Opportunity Awareness among Rural High School Students Preparing for Post-school Studies

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ABSTRACT

By the time students leave high school, they need to be able to make career choices that determine which type of university study to follow. Literature show that there is an increasing concern regarding the choice of career among students when they complete high school and move into universities. This concern is both about the career and the choice of institutions that would best serve their interests in terms of chosen fields. This exploration of post-school career options is therefore seen as one of the major tasks of the high school students. Proper career choice results in highly motivated individuals as they engage in courses that are in line with their personality, interest, aptitude and other attributes. However, the rural context is characterised by environmental deprivation that does not provide for adequate exposure and career exploration to students in high school. As a result students go through high school and may enter post-school education without being fully prepared. Some students in high school in these remote rural areas lack exposure to the post-school opportunities. The issue of under- prepared students from high school is the challenge that the higher education sector is faced with as this impacts on throughput and success rates. This paper explores the readiness among students in high school in a rural setting as well as the factors that impact on their transition from high school to post-school institutions. Recommendations on how the higher education can play a role in dealing with this challenge are presented.

Keywords

Career awareness, Career information, Rural context, Technology, environmental deprivation

Introduction

Making a career choice is probably one of the most significant decisions anyone will ever make and yet it is probably the most difficult one to make (Garrun, 2007). When students complete high school they need to know where they are going to study and what they are going to do in terms of careers. Important career decisions have to be taken at this stage, since it is a period that represents the transition from the sheltered environment of the home to a more open, challenging and responsible tertiary education system (Maluwa-Banda, 1998). Among the challenges that the students face as they move from high school to tertiary education is that of relevant and appropriate choice of career or study direction. There is a definite increase in concern regarding the choice of a career among the students when they are about to complete their high school education. This concern is not only about the career the students want to follow, but also about the relevant tertiary education institution that is relevant to prepare them for the kind of career that they wish to pursue. The kind of transition that the high school students are faced with, presents them with problems and challenges of an educational, vocational, social and personal nature (Maluwa-Banda, 1998).

The rural area is usually a location peripheral to an urban settlement with a small dispersed population. It is usually characterized by a lack of amenities such as water, electricity, telecommunications, and if available only limited to a small sector of the community. These rural areas are further characterized by dispersed patterns of settlements whereby school-going children may have to travel long distances on foot to gain access to schools and other social services. Because of the lack of economic activity in the rural areas, the working generation mostly finds jobs in the cities as migrant workers separated from their families. Because of under-development, the rural areas are virtually deserted because of the rural-urban migration which is happening at an alarming rate in recent years.

The provision of career guidance in high school is important to assist students to make choices that are based on relevant information. If students are not guided, these students progress through high school by following courses at universities and colleges that are not in line with what they actually needed or compatible with in terms of their personality, potential, psycho- social attributes and other factors. Many school-going youth especially in the rural areas do not have access to the information that is necessary for rational career decision-making (Warton & Cooney, 1997). This is as a result of a lack of career guidance offered at school level. Dambisya (2003) conducted a study focusing on the career intentions and perceptions of the future of University of Transkei's medical students. It was found that most students had received little or no career guidance when they had to make choices about careers and they indicated that they would have liked to have had more information on career guidance. There is a particular challenge for the students in the rural contexts and whereas the secondary schools have the responsibility of providing the best education to the learners, there is an unfortunate South African past of under-resourced schools that are coupled with teachers that are under-qualified in the South Africa today which is especially evident in the rural communities (Naidoo, et.al. 2014).

In order for the students to be successful in school and to make successful transition into higher education, students need access to information in order to make career and study choices leading to appropriate choice of institutions and being generally ready for the challenges of post-school education.

Method

A quantitative non-experimental design was used in this study with a convenient sample of 108 respondents was selected from among the students who attended the career exhibition event in the Motswedi district in the North-West province of South Africa. The participants were selected through a random sampling. Random sampling is described by Cresswell (2010) as a process whereby participants are selected in a study with each individual having and equal opportunity to be selected as all others. The sample comprise of 44 (41%) male and 64 (59%) female students. In terms of age, 59% of the respondents were aged between 16 and 17 years with 41% of the respondents over 17 years.

Data Collection Instrument

The investigation into career awareness among high school students was conducted using a questionnaire which was specially developed by the researcher. The questionnaire contained research related questions as well as questions on biographical issues which dealt with age, gender, level of education and home language.

Data Analysis and Results

The collected data were classified, tabulated and summarised. This data were interpreted for the purpose of drawing conclusions that reflect context, ideas and questions that initiated the inquiry (Mouton, Wildschut & Boshoff, 2000). Data analysis means editing and reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques (Cooper & Schindler, 2001). Responses to the questionnaires were analysed and categories that emerged are presented in the following figures:

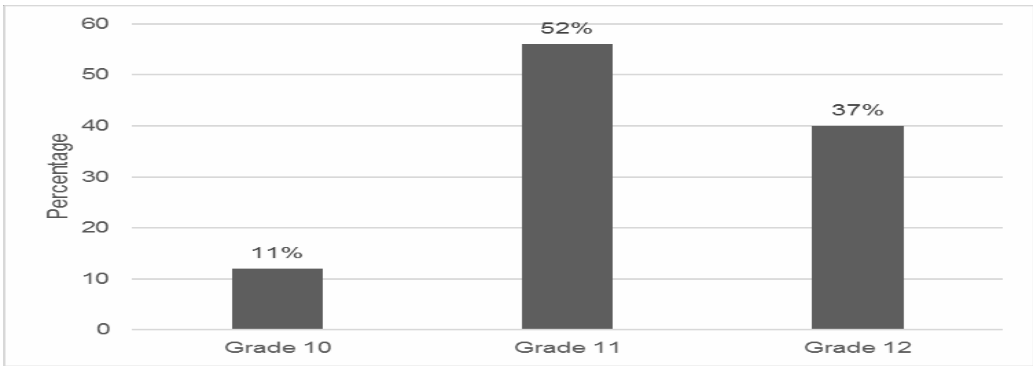

Figure 1: Participants' current grade at school

52% of the participants were in grade 11, 37% in grade 12 (37%) and 11% in grade 10. This means that a total of 89% of the leaners were in a critical stage of making decisions regarding on their post-school education since universities rely of the grade 11 results to provisionally admit first year students.

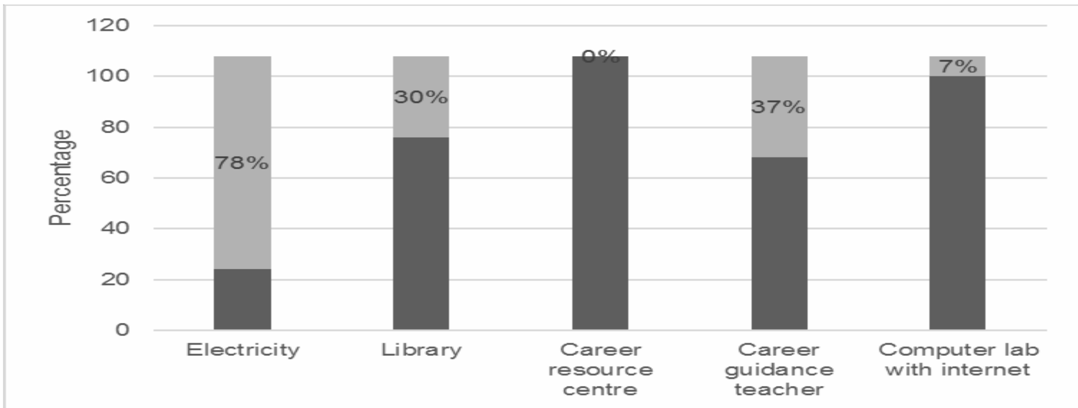

Figure 2: Participants' access to resources related to career guidance

In terms of access to resources related to career guidance, although majority (78%) had electricity at school where they could study after hours, it is concerning to see that 22% did not have electricity at school. 70% of the students did not have a library at their school and none of them have a career resource centre. Only 7% reported to have computers at schools that are accessible to students for career research. 63% of the participants reported that they did not have any career guidance teacher.

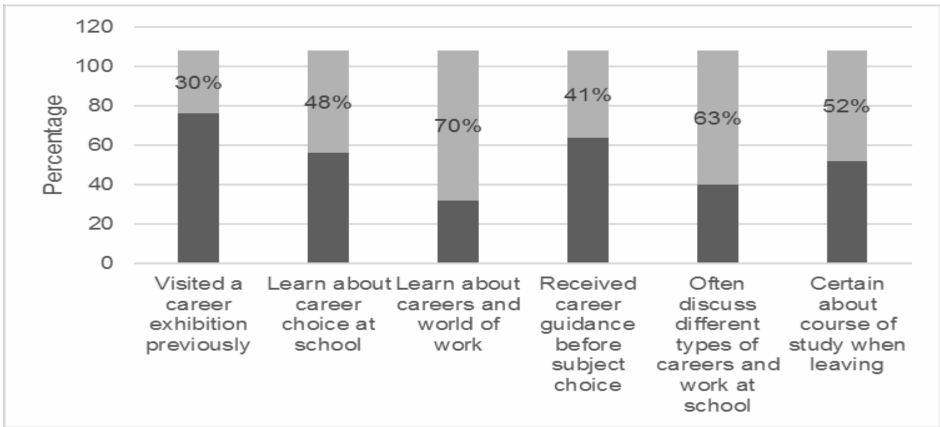

Figure 3: Participants' access to career information

Only 30% of the participants had been to a career exhibition previously. 48% and 70% have learned about careers and the world of work at some stage at school respectively. 59% of the participants did not receive any career guidance even when they made subject selections at the end of grade 9. 63% of the participants agreed to have often discussed different types of careers and work at school. Only about half of the participants (52%) indicated being certain about course of study when leaving school.

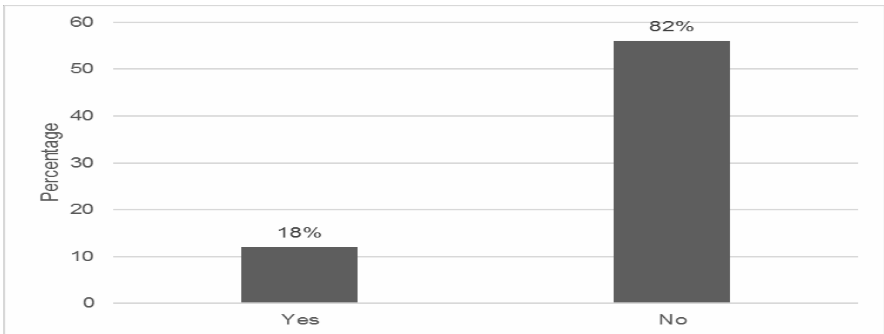

Figure 4: Participants' preparation for university study

When asked whether they have already applied for university or any post-school study, 93% of the participants had not. Considering that majority of the participants were in grade 11 and 12, this would be a point of concern.

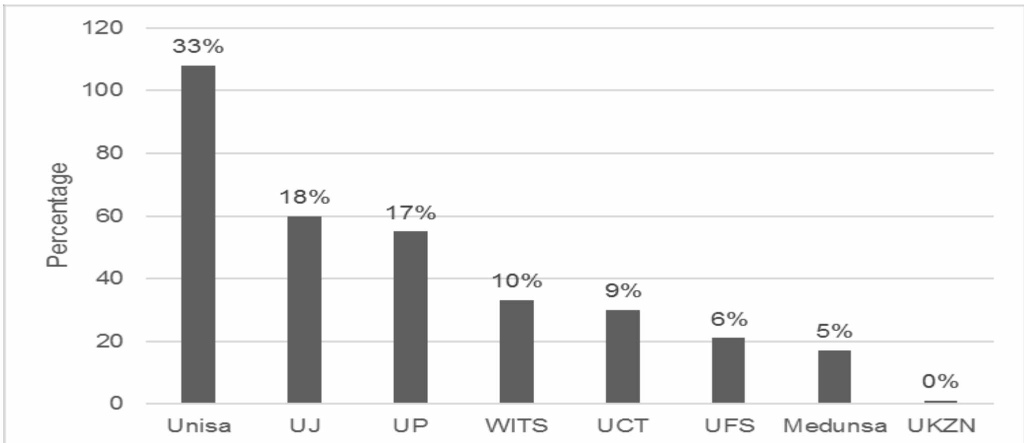

Figure 5: Participants' knowledge of universities in South Africa

The participants only mentioned knowledge of eight of all the universities in South Africa with University of South Africa (Unisa) as the most known and University of KwaZulu Natal as the least known.

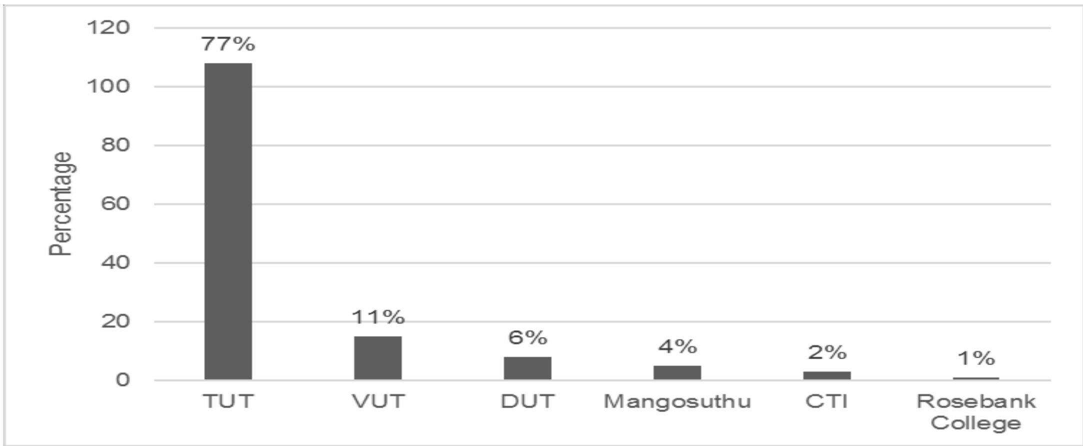

Figure 6: Participants’ knowledge of universities of technology and other colleges

Participants could mention only six of the Universities of technology and colleges among those that exist in South Africa with Tshwane University of Technology as the most known.

Discussion

The process by which an individual develops his or her vocational identity involves exploration of the self and the actual world of work (Whiston & Keller, 2004). Exploration of the world of work means that prospective students obtain more information about a career and gain an understanding by enquiring from others employed in the field. The students in the rural context do not have access to this information

As pointed out by Maluwa-Banda (1998), students who complete Grade 12 need to know where they are going to study or what they are going to do in terms of careers. The decisions that have to be taken regarding careers and further study are crucial and must be based on adequate information. Students who are afforded accessibility to career information and proper career guidance are able to choose a suitable occupation or career path with ease (Seligman, 1994). Respondents in this study indicated that a lack of career information in their high school education.

The students in the rural community have never been adequately exposed to career guidance even when they were choosing subjects in grade 10. This means that these students moved from Grade 9 into the next level without even realistically considering and consciously what the subject fields they were entering would lead to. This will then impact on their choices of careers and study fields as these would have to be aligned to particular subjects.

Only a small number of the students had been to a career information centre to obtain more information. Events like career exhibitions are some of the available sources of career information and rural students who have never been to such an event have missed an opportunity that would have provided them with the necessary information for a competent career choice.

Conclusion

The findings of this study indicate that most of the high school students in the rural areas may have a challenge to make career choices. These students do not have adequate information and awareness of career fields and study opportunities. They showed a limited knowledge of careers. These findings indicate that rural students, with limited career knowledge are likely to enter the university or higher education with limited career awareness. There is insufficient provision of career counselling and students come to university not well prepared.

From the findings of this study, the following conclusions can be drawn with regard to the career preparedness of the rural students:

- Students complete high school, apply for university study and register for their studies without the necessary information regarding a career choice.
- Students come to the university without any exposure to relevant sources of career information that would assist them in their career decision-making.

Recommendations

The school system is an important element that serves as a feeder for higher education and therefore it is important that schools and universities should collaborate to bridge the career awareness gap among students.

Career counselling and guidance should be implemented as a compulsory offering in the school system from as early as primary school, progressively through to high school. The provision of career guidance and information for the students in the school system will not only enhance their knowledge about the possible career opportunities but also leads to a reduction of anxiety about the future, creates motivated learners, and increase self-efficacy.

Career guidance and counselling need to be prioritised in the school system and should not be reserved or elevated only until students are in Grade 12 when it is too late as they are already faced with the task of making future career choices at the end of schooling. Turner and Lapan (2005) indicate that from the age of twelve, young people undergo a change in the way they view the world by moving away from concrete thinking toward more abstract, logical thinking.

Teacher development and training programmes should be introduced to empower teachers to deliver career guidance services to assist students to gain sufficient career knowledge. As the schooling system does not offer sufficient career counselling necessary for the provision of information to help rural students make choices, then universities should step in to assist schools in this regards.

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Development and Validation of 21st Century Skills Scale for College Students

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ABSTRACT

The world is changing at a rapid pace such that learners need to possess the knowledge and skills necessary to thrive in the increasingly diverse, interconnected, and innovation- oriented societies of the 21st century. The goals of education can no longer simply be to provide basic literacy skills but it should also develop the so-called 21st century skills and competencies to the students. However, there is still lack of consensus as to exactly how to define and prioritize these 21st century skills and competencies. Much more, there is an enormous gap how students are currently measured on large-scale educational assessments. This study aimed to develop a scale to measure the extent to which college students have developed and demonstrated the 21st century skills. Specifically, the study was conducted in five phases, as follows: (1) Conceptualization, (2) Item Writing, (3) Content Analysis of the Items and the Scale, (4) Item Analysis, and (5) Reliability and Factor Analyses. An examination of the list of skills identified by various frameworks on the 21st century skills indicate that the 21st century skills can be categorized broadly into six dimensions, namely Problem Solving and Decision-Making, Creativity/Innovation, Communication, , Adaptability/Flexibility, Self-Management and Initiation, and Collaboration/Team Work. Items were then developed based on these six dimensions. Going through the various steps in scale development resulted in a 30-item 5-factor scale. The final form of the scale showed good psychometric properties as indicated by its reliability and factor structure. Continuous validation studies should be conducted, particularly, confirmatory factor analysis and concurrent and predictive validity.

Keywords

21st century skills, Scale development, Exploratory factor analysis

Introduction

The world is changing at a rapid pace such that learners need to possess the knowledge and skills necessary to thrive in the increasingly diverse, interconnected, and innovation-oriented societies of the 21st century. The goal of education can no longer simply be to provide basic literacy skills but also to develop the so-called 21st century skills and competencies to the students. However, there is still a lack of consensus as to exactly how to define and prioritize these 21st century skills and competencies. Much more, there is an enormous gap how students are currently measured on large-scale educational assessments (Stewart, 2018).

Many educational institutions have started exploring ways to integrate 21st century skills into their curricula in order to meet the thrust of developing future-ready learners and leaders. Among the strategies that schools take is to move away from traditional academic approaches that emphasize memorization and recall and move towards educational systems that foster higher-order thinking including critical thinking and problem-solving, research, collaboration, and communication (Rice, 2011). Similarly, while the focus in the past was meeting the course learning objectives, attention is now geared towards developing expected learning or student outcomes.

Outcomes based education has become the fundamental framework of teaching and learning in the Philippines. In 2012, the Commission of Higher Education issued a memorandum wherein it signifies its commitment “to developing competency-based learning standards that comply with existing standards…” (CHED, 2012). The commission defined outcomes based- education as “an approach that focuses and organizes the educational system around what is essential for all learners to know, value and be able to do to achieve a desired level of competence” (CHED, 2012). It mandated that all higher educational institutions (HEIs) review and revise their curricula to integrate the 21st century skills and other competencies responsive to the needs of both national and international labor markets.

Given the mandate of the higher education commission, it is important to determine how well HEIs are able to develop among the students the desired learning outcomes. An important question to be addressed is: “To what extent do graduating college students demonstrate the 21st century skills and competencies?”

As mentioned, assessing students’ development and application of the 21st century skills is quite challenging. First, there still appears to have disagreements as to which skills and competencies matter for the 21st century. Numerous skills frameworks are available and each has identified different set of skills as important (Lai and Viering, 2012). Second, except for general education courses, desired learning competencies differ in each academic program. For example, development of technical skills is more desired for engineering programs than for humanities or liberal arts programs. And lastly, there is lack of consistency in the operational definition and indicators of the skills. For examples, behavioral indicators for creative and innovative skills in business courses are different from those in the arts-related courses.

Objectives of the Study

This study aimed to develop a reliable and valid scale that can be used by colleges and universities to measure the extent to which their students have developed and demonstrated the 21st century skills.

Method

This is a scale development study consisting of five phases: (1) Phase I: Conceptualization, (2) Phase II: Item Writing, (3) Phase III: Content Analysis of the Items and the Scale, (4) Item Analysis, and (5) Phase IV: Reliability and Factor Analyses. The study included: (1) eight experts on scale development who content validated the items and the scale, and (2) junior and senior college students. Cluster random sampling was used to identify student respondents. There were two sets of student participants: the first set included 100 students who took part in the pilot-testing of the prototype instrument and whose data were used for item analyses while the second set was composed of 300 students who were included for scale validation study and whose data were used to establish the reliability and factor structure of the scale.

The prototype and final scales were distributed to the students in their classroom at different points of scale development. Data were analyzed using means and standard deviation, item-total correlation, Cronbach alpha, and exploratory factor analysis (EFA).

Results

Phase I: Conceptualization

Literature offers no single definition of the term "21st-century skills". Various advocates provide different definitions or conceptualizations of the term. Generally, it is used to refer to “certain core competencies such as collaboration, digital literacy, critical thinking, and problem-solving” to help students thrive in today's world (Rich, 2010).

For this study, in order to identify the competencies and skills are important to succeed in college and eventually in professional life in the 21st century, different frameworks were reviewed. These included the frameworks of the National Research Council (NRC), Partnerships for 21st Century Skills (P21), and the Assessment and Teaching of 21st Century Skills (ATC 21). The National Research Council identified three broad clusters of skills and these include: (1) cognitive competencies, (2) interpersonal competencies, and (3) intrapersonal competencies (National Research Council, 2011; Soland, Hamilton, & Stecher, 2013). The cognitive category includes mastery of core academic content, critical thinking and creativity. The interpersonal category covers the competencies that students need in order to relate to other people, such as communication and collaboration, leadership, and global competence and awareness. The intrapersonal category includes the competencies that reside within the individual and aid him or her in problem solving and includes having a growth mindset, learning how to learn, being motivated to succeed, and showing grit in pursuing goals.

The P21 Framework for 21st Century Learning Framework defines and illustrates the skills and knowledge that students need to succeed in work, life and citizenship, as well as the support systems necessary for 21st century learning outcomes. It identifies the following as the 21st century student outcomes: (1) mastery of the fundamental subjects and the 21st century themes, (2) learning and innovation skills which include creativity, critical thinking, communication and collaboration, (3) information, media and technology skills, and (3) life and career skills, covering flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility (Partnerships for 21st Century Learning, 2007).

The Assessment and Teaching of 21st Century Skills (ATC 21) organization has also offered a framework for organizing different types of 21st century skills (Binkley, et al., 2010). This framework includes four classes of skills: (1) Ways of Thinking, which encompasses creativity and innovation; critical thinking, problem solving, and decision-making; and metacognition or learning to learn, (2) Ways of Working, which includes communication and collaboration or teamwork, (3) Tools for Working, which addresses information literacy and information and communication technology (ICT) literacy, (4) Living in the World, which includes citizenship, life and career skills, and personal and social responsibility.

Comparison of the competencies identified by these three frameworks in the areas of education and psychology revealed a great deal of overlap in terms of the broad skills categories and the specific skills under each category (Lai and Viering, 2012). Table1 presents the cross mapping of the broad 21st century skills for the three frameworks.

Table 1: Mapping of Broad 21st Century Skills Based on the Three Frameworks

P21 Framework Categories	**NRC Framework Categories**	**ATC21 Framework Categories**
Learning and innovation skills	Cognitive skills	Ways of thinking
Life and career skills	Intrapersonal skills	Ways of living
IT and media skills	NA	Tools for working
Learning and innovation skills	Interpersonal skills	Ways of working

Likewise, the Educational Testing Service (ETS) conducted a study to identify the most important competencies for college students to succeed in the 21st century workforce by conducting an analysis of the Occupational Information Network (O*NET) database. Through descriptive analysis and principal component analysis of the ratings on the importance of abilities (52 ratings), work styles (16 ratings), skills (35 ratings), and knowledge (33 ratings) to succeed in one's occupation and comparing them with previous 21st century competencies frameworks, it was able to identify five (5) competencies that stand out as important for most occupations, namely: (1) problem solving (e.g., complex problem solving), (2) fluid intelligence (e.g., category flexibility), (3) teamwork (e.g., cooperation), (4) achievement and innovation (e.g., persistence), and (5) communication skills (e.g., oral expression). Table 2 presents the specific 21st century skills based on the constructs that correspond to a relatively robust and established research basis within education and psychology.

Table 2: Mapping of Specific 21st Century Skills According to the Three Frameworks and of Competencies in Education and Psychology*

Research-Based Constructs	**P21 Framework Terminology**	**NRC Framework Terminology**	**ATC 21 Framework Terminology**	**ETS/ ONET Framework**
Critical Thinking	Learning and Innovation - Critical Thinking	Cognitive - Critical Thinking	Ways of Thinking - Critical thinking, - Problem solving, decision making	Problem Solving - complex problem solving
Collaboration	Learning & Innovation - Communication & collaboration	Interpersonal - Communication - Social skills - Teamwork	Ways of Working - Communication - Collaboration	Teamwork - cooperation Communication - oral express.
Creativity	Learning and Innovation - Creativity	Cognitive - Non-routine problem solving	Ways of Thinking - Creativity/ innovation	
Motivation	Life and Career Skills - Initiative - Flexibility	Intrapersonal - Self-development - Adaptability	Living in the World - Adaptability, flexibility - Self-direction	Fluid Intelligence - Flexibility
Metacognition	Life and Career Skills - Self-direction - Productivity,	Intrapersonal - Self-management - Self-regulation	Ways of Thinking - Metacognition or learning to learn	Achievement/ Innovation - persistence

* Source: *Lai and Viering, 2012*

In summary, an examination of the list of skills identified by the four frameworks would indicate that the 21st century skills could be categorized broadly into the following:

(1) Problem Solving and Decision-Making Skills - the ability to reason effectively, to use systems thinking, and to evaluate evidence; they also include the skills to solve problems by identifying gaps in knowledge, clarifying various points of view and coming up with better solutions, and to clearly articulate the results of one's inquiry (Binkley, et al., 2010).
(2) Creativity/Innovation - the ability to think creatively, to work creatively with others, and to implement innovations (Partnership for 21st Century Learning, 2015).
(3) Communication Skills - the ability to articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts (Partnership for 21st Century Learning, 2015).
(4) Adaptability/Flexibility – the ability and willingness to cope with uncertain, new, and rapidly-changing conditions (Hilton, in Ruiz-Primo, 2009).
(5) Self-Management and Initiation - the ability to work remotely, to work autonomously, and to be self-motivating and self-monitoring; it includes willingness and ability to acquire new information and skills

(Hilton, in Ruiz-Primo, 2009).

(6) Collaboration/Team Work - the ability to work effectively and respectfully with diverse teams, to exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal and to assume shared responsibility for collaborative work, and to value the individual contributions made by each team member (Partnership for 21st Century Learning, 2015)

Phase II: Item Writing

For this study, only the above six broad categories were included in the development of the 21st century skills scale. Ten items were developed for each of the six categories, for a total of 60 items. In the development of items, it was made sure that items that only represent the behavior, and are relevant, observable, and measurable were included.

Phase III: Content Analysis of Items and Scale

Aside from the criterion-related and construct validity of the scale, its content validity is also important when a new scale is being developed as this will inform about the scale's quality. Citing other researchers' works, Polit and Beck (2006) defined content validity as (1) the degree to which an instrument has an appropriate sample of items for the construct being measured, (2) whether or not the items sampled for inclusion on the tool adequately represent the domain of content addressed by the instrument, and (3) the extent to which an instrument adequately samples the research domain of interest when attempting to measure phenomena. Given these definitions, there is a general agreement in that content validity concerns the degree to which a sample of items, taken together, constitutes an adequate operational definition of a construct.

For this study, Lynn's (1986 as cited by in Polit and Beck, 2006) two types of content validation indexes (CVIs) were computed. The first type involves the content validity of individual items (I- CVI) and the second involves the content validity of the overall scale (S-CVI). Item and scale acceptability indices were pegged at $\geq$ 0.78 for I-CVI and at $\geq$ 0.80 for S-CVI. Eight experts were then asked to pass on the applicability and relevance of the items to the identified factors.

Results indicate that of the 60 items, only two items were deemed not applicable and relevant to their corresponding factor and the whole construct of 21st century skills. On the other hand, the scale content validity indices for the 14 dimensions ranged from 0.85 to 1.00. Table 3 presents the S-CVIs for the six factors and overall.

Table 3: S-CVIs for the Six Factors and Overall

	Factor	S-CVIs
1	**PROBLEM-SOLVING AND DECISION-MAKING SKILLS**	**0.985**
	Judgement and Decision Making	0.97
	Problem-Solving Skills	1.00
2	**CREATIVITY/INNOVATION**	**0.99**
	Creative Thinking	0.98
	Innovation	1.00
3	**COMMUNICATION SKILLS**	**0.93**
	Verbal Skills	0.88
	Writing Skills	0.96
	Listening Skills	0.96
4	**ADAPTABILITY/FLEXIBILITY**	**0.89**
	Ability to adapt to change	0.93
	Flexibility	0.85
5	**SELF-MANAGEMENT AND INITIATION**	**0.94**
	Ability to Manage Goals and Time	0.94
	Self-directed Learning	0.92
	Initiative	0.96
6	***COLLABORATION/TEAMWORK***	**0.96**
	Collaboration	0.93
	Teamwork	1.00
	Overall	**0.95**

The 58 items were then pilot tested to 100 college students and the data gathered were used for item analysis, particularly to determine the internal consistency (i.e., reliability) of the scale.

Phase IV: Item Analysis

To determine the quality of each item in terms of its consistency with the other items in the scale, the Cronbach's Alpha if deleted and item-total correlation values were examined. The Cronbach's alpha if deleted index is used to determine what items to discard (i.e., if the reliability of a factor will improve after removing the item). The following criteria were set for the removal of the items: internal consistency ≤0.70, Cronbach's Alpha≤0.80, and item total correlation ≤ 0.30.

Based on the Cronbach's Alpha and item-total correlation coefficient indices, the following numbers of items were retained for each factor:

	Factor	No. of Items Retained
1	Problem-Solving And Decision-Making Skills	7
2	Creativity/Innovation	8
3	Communication Skills	8
4	Adaptability/Flexibility	9
5	Self-Management and Initiation	10
6	Collaboration/Teamwork	7
	Total	49

The 49-item scale was then administered to 300 students. Data from this were used to establish the reliability and factor structure of the scale.

Phase V: Reliability (Internal Consistency) and Factor Structures (Factor Analysis)

The 49-item scale registered a very high Cronbach Alpha of 0.9392, indicating a very high reliability. On the other hand, in exploring the factor structure of the scale, an Exploratory Factor Analysis was conducted.

A large sample is very important in EFA and that the ideal number is ≥300 subjects. For this study, a total of 300 students participated. As such, Kaiser-Meyer-Olkin (KMO) Test for sampling adequacy was no longer conducted.

To determine the number of factors to be retained, the following were considered: (1) eigenvalue of not less than 1.00 and (2) Cattell's scree plot.

An Exploratory Factor Analysis (EFA) was first conducted with six factors. While the eigenvalues of the six factors were all above 1.00, examination of the factor loadings indicate that most items loaded highly in only five factors. As such, another round of EFA was conducted with five factors. A total of 39 items registered factor loadings of greater than 0.40, accounting for 43.66% variance.

A total of 14 items loaded in Factor 1, with majority (f=8) of the items being creativity and innovation items. The six other items also loaded in others factors, though with less factor loadings (i.e., ≥ 0.30) but in their original factors. These six items were thus assigned in the other factors. As such, only the 8 items were retained in Factor 1, which was renamed as "Creative Thinking".

Ten items loaded in Factor 2, with five items coming from Self-Management/Initiation subscale, three from Teamwork/Collaboration, and one item each from Problem-Solving/Decision-Making Skills, and Communication Skills. This factor can be named as "Student Engagement". Student engagement refers to "meaningful student involvement throughout the learning environment" and "typically includes three dimensions: (1) behavioral engagement, focusing on participation in academic, social, and co-curricular activities, (2) emotional engagement, focusing on the extent and nature of positive and negative reactions to teachers, classmates, academics, and school, and (3) cognitive engagement, focusing on students' level of investment in learning" (Martin and Torres, 2016).

Only five items loaded in Factor 3 and most of these items are Communication Skills items. However, two of these items also loaded in other factors that are related to their original factor. Three more items that also loaded in Factor 3 but with factor loadings of less than 0.40 but higher than 0.25, were included. Factor 3 comprised six items and retained its original name "Communication Skills".

Only six items have factor loadings of greater than 0.40 in Factor 4. This factor may be called Thinking Skills Factor as most of the items pertain to the ability of an individual to solve problems, plan and make decisions, organize information, and create objects. On the other hand, nine items loaded highly in Factor 5. Most of the items came from the Adaptability/Flexibility items. As such, the original name of the factor was retained.

However, a 41-item scale was deemed somewhat long for a 5-factor scale and the number of items per factor was not the same. As such, it was decided to trim down the scale and included only 30 items, comprising 6 items per factor. Table 4 presents the 30 item included in the final form of the scale in their corresponding factor.

Table 4: Factor Assignments of the 30 Items

Factor 1 Creative Thinking	Factor 2 Student Engagement	Factor 3 Communication	Factor 4 Thinking Skills	Factor 5 Adaptability
I think "outside the box".	I set timelines and deadlines when doing an important task.	I express my ideas fluently and with very minimal grammatical errors.	I set aside my biases or personal goals and cooperate with others in order achieve the common good.	I feel at ease with people whom I just met.
I easily think of new solutions to problems when the previous ones did not work out well.	When planning a group project/activity, I listen to and consider other suggestions.	I find it easy to express my thoughts and ideas in writing.	When faced with a dilemma, I first evaluate alternatives before coming up with a viable solution.	I adjust easily when there are changes in plans or schedules.
I enjoy conceptualizing and creating things that are out of the ordinary.	When I have a lot of school work, I tackle tasks in order of importance.	When I submit a written report, I make sure that I edit it very well and it is free of any grammatical error.	When working on something, I look for new approaches to execute the tasks and achieve my objectives.	I do not have difficulty taking on new challenges at short notice.
I make a point to submit course requirements that are innovative and different from my classmates.	I abide by the rules, schedule or work plan set by the group/class in order to meet our goals.	I seldom get major revisions in the written work that I submit.	I quickly shift my priorities in response to the demands of a situation.	I do not easily get discouraged when faced with a difficult problem or situation.
When I see something or observe a process that is not of good quality, I instantly think of ways on how it can be improved.	I strictly stick with my to-do list to be able to meet the demands and requirements of my course.	During conversations, I find it easy to grasp the message being expressed.	When a friend is in need, I take the initiative immediately to help even when others don't.	I find it easy to adapt to a new environment.
In most of my work or tasks, I think of new ways to carry them out.	I enjoy discussing issues and concerns with my peers/classmates and come up with solutions together as a group.	When talking to someone, I maintain an eye contact with him/her.	Whenever something goes wrong, I search for a solution immediately even without being told to do so.	I respond quickly to sudden changes in circumstances.

To determine comparability of the 41-item and the 30-item scales, their item-total correlation and Cronbach Alpha were again computed. Results revealed that the two (2) versions of the scale are comparable based on the item-total correlation (≥0.25) and Cronbach Alpha coefficients (≥0.90) [Table 5]. This indicates that the 30-items scale can be used to measure the 21st century skills.

Table 5: Comparison of the Reliability Coefficients of the Two Versions of the Scale

Version	Reliability Indices	
	Item-Total Correlation	Coefficient Alpha
41-Item	0.259149- 0.604179	0.929912-0.932945
30-Item	0.263452-0.608900	0.903373-0.909123

Conclusion and Recommendations

This study aimed at developing a 21st Century Skills scale that can be used to determine the extent to which college students are able to develop and demonstrate the 21st century skills. Going through the different phases in scale development, the study was able to identify five (5) factors that define 21st century skills, namely: (1) Creative Thinking, (2) Student Engagement, (3) Communication Skills, (4) Thinking Skills, and (5) Adaptability and Flexibility. These factors were also identified in other studies or recognized by educators and institutions as important skills needed to face the challenges in the 21st century and included in the different 21st century skills frameworks. For example, the Partnership for 21st Century Skills Framework (2006) identified learning and thinking skills (i.e., critical and problem solving, communications, creativity and innovation, collaboration, contextual learning, and information and media literacy skills), ICT Literacy (i.e., ability to use technology), and Life Skills (e.g., leadership, adaptability, people skills, and social responsibility) as important 21st century skills. The National Central Regional Educational Laboratory (NCREL) and Meteri Group (2003) cited digital-age literacy, inventive thinking, effective communication, and high productivity. The National Leadership Council for Liberal Education and America's Promise (2007) Essential Learning Outcomes include among other things, intellectual and practical skills such as inquiry and analysis, critical and creative thinking, written and oral communication, quantitative and information literacy, and teamwork and problem solving.

The final form of the 21st Century Skills scale has shown good psychometric properties as shown by its reliability and factor structure. As such, it can already be used to explore students' development and demonstration of the 21st century skills.

Just like in any other scale development project, continuous validation studies of the 21st Century Skills Scale should be conducted. First, a confirmatory factor analysis should be done to examine whether the 5-factor structure of the scale is stable. Second, more validity studies should be conducted, such as construct validity (i.e., by correlating it with another similar test), convergent and divergent validity (i.e., by correlating it with other constructs related to 21st century skills), and known-group validity (i.e., by comparing results between and among students based on some criteria). Lastly, the norms of the scale should be established to be able to use the scale in determining individual students' level of development and practice of each skill.

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Personal Financial Management of Tertiary Students in Mindanao, Philippines

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ABSTRACT

Managing personal finances is one of the most basic competencies required by each individual. Personal financial management is the person's efficient and effective management of money. Nonetheless, it is observed that many college students are not adequately prepared to handle their own finances. In fact, it is also a course often underemphasized in today's curriculum especially in the Philippine setting. This paper, therefore, examined the personal financial management of nine hundred forty six (946) randomly sampled tertiary students among eight (8) higher education institutions in Mindanao, Philippines. Data was obtained using five adapted Likert scale questionnaires supplemented by interviews. Means and correlations were computed for analysis. The findings showed that financial education opportunities and financial disposition indicators were moderate, while, financial behavior constructs were high. Further, financial education opportunities have significant relation with some financial disposition and financial behavior dimensions. However, financial education opportunities were observed to be informal and deficient in depth and structure necessary to develop a sound financial disposition and behavior. The study hopes to offer institutions valuable information to facilitate personal financial management programs in the academe.

Keywords

Personal Financial Management, Financial Education Opportunities, Financial Disposition, Financial Behavior

Introduction

Personal financial management is a daunting and continuous task that can cause even the most economically savvy individual to become confused or short-sighted. Personal financial management refers to an individual‟s efficient and effective management of money; it utilizes financial economic concepts in the management of one‟s financial resources and daily use of money (Referra and Kolech, 2015). Managing personal finances is one of the most basic competencies required by all members of modern society and it is something that everyone has to deal on (Marsh, 2006). Day-to-day consumer choices ultimately affect a person's financial security and standard of living. It is also reported that many young adults lack the basic knowledge and skills needed to make important personal financial decisions, in fact, individuals were not taught proper money management when young. (Munohsamy, 2015; Henry,Weber &Yarbrough, 2001; Chen & Volpe, 1998; National Institute for Consumer Education, 1994and Danes & Hira, 1987 in Gutter 2009). Many young adults begin their careers without having been solely responsible for their own personal finances (Gutter, Copur and Garrison, 2016) and regardless of how knowledge is operationalized, studies indicated that college students do not possess a high degree of personal financial knowledge (Avard et al., 2005; Chen and Volpe, 1998; Jones, 2005; Markovich and DeVaney, 1997; Warwick and Mansfield, 2000 as cited byRobb, 2011). Also, the University of Nebraska – Lincoln (2012) reported that many students are not adequately prepared to handle their own finances, usually, college is their first money management experience. As academic institutions require that graduates achieve a certain level of professional expertise before they are sent out to businesses and to workplaces (Moskow, 2009), it is imperative that these college students need greater knowledge about their personal finances and the economy, which requires a greater range of „real life‟ skills such as balancing a check book, budgeting, reducing debt, saving, having good credit, paying interest, investing, and purchasing a car or a home; financial education opportunity is also a necessity as the marketplace becomes increasingly complex (Jorgensen, 2007).

However, schools do not require young adults to be prepared to manage their personal finances (Moskow, 2009); personal financial management is a topic often underemphasized in today's curriculum (Marsh, 2006); it is a subject that is not taught in many schools, as a result, people often tend to learn about personal finance through trial and error (Lachance and Choquette –Bernier in Jorgensen et al, 2014).In the Philippines, lack of financial literacy is also one of the major causes why Filipinos struggle with money. Villafuerte (2015) recalled that as a student, schools only emphasized the importance of saving, thrift values and how money is the root of all evil. He further claimed these are not enough exposures on personal financial management. Other financial habits such as, expense tracking, wise spending and the concept of budget planning, should be taught to children early as possible; steps should be taken in planning, organizing and managing personal finances (Munohsamy, 2015).

Given this, colleges and universities have a tremendous responsibility and opportunity to influence the economic lives and future of students. That is why over the last several years attention has been placed on financial behaviors of young adults that begin their careers without having been solely responsible for their own personal finances (Gutter, Copur and Garrison, 2016). This study therefore, determined the personal financial management of tertiary students among eight (8) higher education institutions in Mindanao, Philippines. Specifically, this considered the extent of their financial education opportunities, their financial disposition and their financial behavior.

Statement of the Problem

This study determined the extent of personal financial management of nine hundred forty six (946) randomly sampled tertiary students among eight (8) higher education institutions in Mindanao, Philippines. This study, specifically, looked into their financial education opportunities, financial disposition and financial behavior.

Framework

*Personal financial managemen*t is an individual‟s efficient and effective management of money; it utilizes financial economic concepts in the management of one‟s financial resources and daily use of money (Referra and Kolech, 2015). It is noted to be vital in making money work for individuals as it involves budgeting savings, investing debt management and other aspects related to personal money, whereby, individuals can achieve personal goals (Bimal Bhatt in Munohsamy, 2015). Personal financial management is a component of the broader spectrum of financial management, where, as defined is as the proper handling of financial situation to achieve financial independence; reducing debts, poverty and improving standard of living, increasing savings and hopefully investments. This study utilized the variables in Gutter‟s (2009) study on the financial management practices of college students in theUnited States. His study focused on the rigors of financial education policies on financial knowledge, disposition and behavior. The study of Gutter (2009) prompted the researchers to look into personal financial management of college students in the Philippines in the context of financial education opportunities, financial disposition and behavior.

Financial education opportunities (Gutter, 2009) refer to the tertiary extent where students learned personal financial management from parents, from formal education and from the community. In Jorgensen (2007), the National Endowment for Financial Education (2002), Pauleyand Varcoe et al. (2001)and Moschis (1985), explored that if students need “real life” skills to better survive in the economy today the question could be, “where do they learn these financial skills?” The researches of Allen and Kinchen (2009), Cude (2006) and Lyons (2003) in Gutter (2009) revealed that around 68% of respondents stated that they have acquired financial management information or skills from parents and around 87% of college students rely on their parents as revealed by the Capital One Financial Corporation survey of 2003. Further, studies of college-aged young adults‟ financial socialization have consistently shown influence from parents and friends about financial issues (Lyons, 2003; Palmer et al., 2001; Pinto et al., 2005 in Gutter 2009). Meanwhile, a smaller percentage have acquired financial assistance from friends, significant others, teachers, church and from one‟s self. However, several studies have shown that many young people still have low levels of personal financial literacy and can benefit from financial literacy training. These studies provide support for the inclusion of financial literacy programs into the school curriculum (Consumer and Financial Literacy Taskforce, 2004; Financial Services Authority, 2006a and Financial Services Authority, 2006b; Russell, Brooks, & Nair, 2006 in Pham, Yap and Dowling, 2012).

Financial Disposition refers to how the students used their money. It is measured in three aspects: Materialism (Richins, 2004), Compulsive Buying (Faber and O‟Guinn, 1992) and Future Orientation (Strathman and Joireman, 2005). Materialism refers to the importance a consumer attaches to acquiring and consuming materials goods which assume a central place in a person‟s life and are believed to provide the significant basis of satisfaction and dissatisfaction; it reflects the importance a person places on possession and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness.” (Belk; Richins and Dawsons as cited by Cinches and Russell, 2014). It can be a feeling of success, centrality and happiness (Richins, 2004). Meanwhile, compulsive buying behavior started to receive increasing attention in the late 1980s. Researches exerted to describe and identify this phenomenon (Ergin, 2010; Faber and O‟Guinn, 1988).It refers to a response to an uncontrollable desire to obtain, use or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual and/or others (Faber and O‟Guinn, 1992). A simpler description of it is expressed by d‟Astous in Ergin (2010) as a generalized craving to engage in the act of buying; an enduring behavior that focuses on the process of buying not the purchase itself and the individuals who are extremely high on this factor may be called compulsive buyers. (Solomon in Nor Idayu Bt Mohd Shafii, 2008; Ergin, 2010). Compulsive buyers tend to buy excessive number of objects they do not need and they sometimes cannot afford (Hoyer and MacInnis, 2001 in Nor Idayu Bt Mohd Shafii, 2008). Moreover, Pham, Yap, Dowling (2012) expressed that highly materialistic individuals were prone to compulsive buying if they engaged in poor financial management practices. On the other hand, highly materialistic individuals with good financial management practices were less likely to report compulsive buying problems. Simply, results showed that financial management practices were a protective buffer to the impact of materialism on compulsive buying. Further, it was found that a lack of financial management practices increased behaviors that led to debt, such as paying for items with insufficient funds (Hayhoe, et al in Pham, Yap, Dowling, 2012). Financial management practices are recommended by financial counselors as a way of putting a halt to excessive spending, and it is likely that compulsive buyers are not aware of or do not engage in these practices. Financial education and counseling directed at improving financial management practices might also have a considerable impact on preventing compulsive buying (Pam, Yap and Dowling, 2012). Specifically, the teaching of basic personal financial management practices such as cash and credit management, budgeting, and savings could perhaps form practical units in curricula and might assist in the prevention of compulsive buying.

On the other hand, future orientation is a measure on the consideration and individual put on potential future outcomes of their current behavior (Gutter, 2009). Future orientation is the degree to which collectivity encourages and rewards future-oriented behaviors such as planning and delaying gratification (Grove, n.d).On the other hand, Consideration of Future Consequences (CFC) or Future Orientation refers to “the extent to which people consider the potential distant outcomes of their current behaviors and the extent to which they are influenced by these potential outcomes" (Strathman, et al. 1994). Therefore, individuals low in CFC pay greater attention to the immediate consequences of their behaviors than to the delayed consequences of their behaviors. Individuals high in CFC, in contrast, pay greater attention to the delayed outcomes of their behaviors (Gale, 2008). Presumably resisting temptations in a given context requires the ability to transcend that context, which is something future-oriented people seem more capable of doing than present-oriented people (Strathman and Joireman, 2005). Further, Joireman, et al (2010) cited that high levels of CFC are also positively correlated with personality traits related to self- control including conscientiousness and delay of gratification (Strathman et al., 1994) and negatively correlated with impulsivity (Joireman et al., 2010). Since financial variables and future time perspective predict compulsive buying, one means of reducing compulsive buying behaviour would be to increase college students‟ ability to make informed judgments and effective decisions regarding the current and future use of financial resources (Brougham et al, 2011).

Gutter (2009) writes that there is little known effectiveness of financial education to financial disposition, rather, cited Norum (2008) and Borden, Lee Serrido and Collins (2008) emphasizing that financial or consumer education programs could provide beneficial information to students by covering appropriate financial disposition topics that seemingly increase students„ responsible attitudes toward credit and decreased avoidant attitudes towards credit.

Moreover, *financial behaviour* according to Jorgensen (2007) refers to how an individual make financial decisions. Several researches, Gutter and Copur (2011), Gutter, Copur and Garrison (2010), Gutter (2009) and Hogarth, Beverly, Hilgart (2002), have utilized savings and budgeting as dimensions for financial behavior. In terms of budgeting, studies of O‟Niell (2002) as reviewed by Hogarth, Beverly, Hilgart (2002) indicated that financial educators usually recommend for individuals to make written budgets and to compare actual versus projected expenditures; also to save regularly. Nonetheless, evidences showed by the same citations that people often use informal mental budgeting and that a small percentage save. On the other hand, Parotta and Johnson (1998) as cited by Pham, Yap and Dowling (2012) discovered that people are more likely to engage in sound financial management practices if they have a positive outlook towards saving money.

Several studies in Gutter (2009) highlighted the relationship of financial education opportunities and financial behavior. Those who were taught about personal finances at a younger age tend to do better financially than those who were not (Lyons, 2003, 2004; Varcoe, Peterson, Garrett, Martin, Rene, & Costello, 2001). Danes, Huddleston-Casas, and Boyce (1999) found that mandated personal finance education has a positive effect on students‟ financial behaviors; there exists self- reported rates of saving and accumulated wealth over time. Although on the other hand, it is emphasized by Friedline and West (2015) that financial education opportunities maybe insufficient for promoting healthy financial behavior. Sherraden (2013) in Friedline and West (2015) elaborated that millennials‟ financial behavior is not purely based on knowledge; they need to have real life situations or means that will facilitate the exercise of healthy financial behavior.

Given the above discussions, it is logical to look into tertiary students‟ financial education opportunities, financial disposition and financial behavior. In response, an appropriate intervention programs must be studied and developed to improve the personal financial management of the students based on the student's current level of financial education opportunities, financial disposition and financial behavior.

Methodology

This study surveyed nine hundred forty six (946) randomly chosen third and fourth-year college students in eight (8) universities and colleges in Cagayan de Oro, Oroquieta and Ozamis Cities in Region 10 Mindanao, Philippines. Descriptive survey method was utilized in this paper. Specifically, it adapted five survey instruments to measure the indicators. Financial education opportunities items were developed from Gutter (2009); Materialism from Richins‟ (2004) material value scale; compulsive buying scale of Faber and O‟Guinn (1989) ; future orientation was quantified using the consideration of future consequences scale both from the 14-item questionnaire by Joireman, et al (2012) and the 5-point likert scale of Strathman, et al (1994). Financial Behavior was measured using the college students‟ financial literacy survey of Jorgensen (2007). The questionnaire has a Cronbach‟s Alpha of 0.70 which is generally acceptable (George and Mallery, 2010 in Cinches et al, 2017). The quantitative results were augmented by interviews (n=51). The interviews were conducted in three different schools, each representing the cities mentioned above. Means and Correlations were computed in this study.

Results

The paper attempted to look into the level of financial education opportunities, financial disposition and financial behavior of tertiary students. Table 2 shows the result of the level financial education opportunities, financial disposition and financial behavior.

Table 2. Means and Standard Deviation

Variables	Mean	SD	Description
1. Financial Education Opportunities 1.1 family (mean =4.23) 1.2 formal education (mean=3.86) 1.3 community (mean=2.14)	3.41	0.71	Moderate
2.Financial Disposition			
2.1 Materialism	3.00	0.39	Moderate
2.2 Compulsive Behavior	-3.68	1.91	Compulsive Buyer
2.3 Future Orientation	2.87	0.60	Neutral
3. Financial Behavior			
3.1 Savings	3.59	0.61	High
3.2 Budgeting	3.68	0.41	High

Legend: Score Range Interpretation

Range	Material Value Scale	Consideration of Future Consequences	Financial behavior
4.50-5.00	very high	extremely future	very high
3.50-4.49	high	future oriented	high
2.50-3.49	moderate	neutral	moderate
1.50-2.19	low	immediate oriented	low
1.00-1.49	very low	extremely immediate	very low

Materialism culled out from Richins‟ 5 point scale MVS from Richins (2004), Consideration of future consequences from 14-item cfc questionnaire of Joireman et al (2012) and 5-point scale of Strathman et al (1994); financial behavior from Jorgensen (2007)

Legend: compulsive Buying Scale Scores

Scores	Description
higher negative score than -1.34	compulsive
-1.34	neutral
Lower negative score than -1.34	Non-

The CBS (Faber & O Guinn, 1992) consists of 7 statements. One statement was rated 1 (Strongly Agree) to 5 (Strongly Disagree) and the other six statements were rated 1 (Very Often) to 5 (Never). This scoring equation is used: Scoring equation = -9.69 + (Q1 x .33) + (Q2a x .34)+ (Q2b x .50) + (Q2c x .47) + (Q2d x .33) + (Q2e x .38) + (Q2f x .31). If the overall score is a higher negative score than -1.34 (for example, -2.04), the students would be classified as a compulsive buyer (note: Some words in the items were modified to suit to the Philippine language and culture)

Since in Southern Philippines there is no-known approved and structured programs on personal financial management, financial education opportunities were assessed in the context on whether students had financial exposure from parents, school and community. From the table, students‟ overall assessment of their financial education opportunities is moderate (mean=3.41), specifically, financial opportunities from parents and formal education as high with means 4.23 and 3.86 respectively. Meanwhile, exposure form the community is low (mean=2.14). The interviews disclosed that although majority of interviewees have discussed financial matters with their parents, these are mainly on savings, budgeting and spending wisely. A few also remarked that they either have not or did not converse these topics in the family. Further, some revealed that their first money management exercise was when their parents had given them responsibility on managing their own allowances when they entered college. This situation was especially triggered to those who have left home for schooling elsewhere. Students further expressed that their knowledge and exposure on personal financial management is really limited and that they would like to expand and deepen it through school activities or programs. The findings of Marsh (2006) showed that personal financial management is a topic often underemphasized in today's curriculum; it is a subject that is not taught in many schools, as a result, often people tend to learn about personal finance through trial and error (Lachance and Choquette; Bernier in Jorgensen, 2009; Cude et al, 2006 in Gutter, 2009). This validates the findings of Allen and Kinchen (2009), Cude (2006) and Lyons (2003) in Gutter (2009) that parents were the common means of acquiring financial management skills and that topics normally focused on the importance of saving and thrift values (Villafuerte, 2015). This can also be substantiated by the University of Nebraska-Lincoln (2012) research findings that for many young people, college is their first money management involvement. Given this limited experience and exposure, often they are not adequately prepared to handle their own finances when they leave school. (Gutter, Copur and Garrison, 2016; Rob, 2011).

Financial Disposition refers to how students use their money. It is measured using the dimensions such as: materialism, compulsive buying behavior and future orientation. The results indicate that students‟ materialism is to a moderate extent. The item "*I'd be happier if I could afford to buy more things*" was rated as high, while, the following items as moderate "*I like a lot of luxury in life*"; "b*uying gives me a lot of pleasure and it bothers me that I can't quite afford all the things I like*"; "*I admire people who own expensive home, cars and clothes*"; "*I like to own things to impress people*" and "*my life would be better if I owned certain things I don't have*". There were only two items rated low and these are "*I don't place much emphasis on the amount of material objects people own as a sign of success*" and "*I try to keep my life simple, as far as possession concerned*". Somehow the results reflect that college students place moderate importance in acquiring and consuming material goods which that become central to their "feeling of success and happiness" (Belk, 1985 in Cinches and Russell, 2014 and Richins, 2004).

Tertiary students were found to be compulsive buyers with an overall score of -3.68. Looking at mean of each item revealed that "*bought things even though I couldn't afford them*"; *"bought myself something in order to make myself better*"; and "*felt others would be horrified if they know of my spending habits*" have average scores on the upper limit, which also, are the same items that have greater weight when the scores were converted. Compulsive buyers tend to buy excessive number of objects they do not need and they sometimes cannot afford (Hoyer and MacInnis, 2001 in Nor Idayu Bt Mohd Shafii, 2008). The students claimed to have high financial exposure from parents in the context of savings and budgeting but survey results also support that they are moderately materialistic and are compulsive buyers. Pham, Yap and

Dowling (2012) found out that materialistic individuals and are prone to be compulsive buyers if they have poor financial management background. Personal financial management becomes a protective buffer to the impact of materialism to compulsive buying. In fact, lack of financial management practices can led to behaviors such as debt.

Future orientation is the extent to which people consider the potential distant outcomes of their current behaviors and the extent to which they are influenced by these potential outcomes" (Strathman et al. 1994); it is also a concept wherein planning and delaying gratification are potentially rewarded (Grove, n.d). Described further, people with low consideration of future consequences put more weight on immediate consequences of their behavior and those with high consideration of future consequences place importance delayed outcomes of their behaviors. The tertiary students‟ *future orientation* is neutral (other versions use uncertain) with a mean of 2.87, with all items assessed as neutral, meaning, neither future- oriented nor immediate-oriented. Since Gale (2008) and Joireman et al (2010) associated high and low consideration of future consequences scores as indicative of high or low self-control and consciousness to delay gratification, then it is assumed that among those surveyed in this research, there is no clear understanding of the short or long effects of their behavior. Since financial variables and future time perspective predict compulsive buying, one means of reducing compulsive buying would be to increase college students‟ ability to make informed judgments and effective decisions regarding the current and future use of financial resources (Brougham et al, 2011).

Financial behaviour is measured in terms of students‟ outlook with regard to savings and budgeting. The tertiary students‟ viewpoint of savings and budgeting is high with means 3.73 and 3.59 respectively. it is noted that students assessed the item "*putting away money for each month for savings or investment is important*" high and "*it does not matter how much one saves as long as they do save*" as low. Further, in terms of budgeting, students remarked very high on item *" saving money regularly is important*"; and high on "*I budget my money very well*"; "*I am satisfied with how I spend my money*"; "*it is important to spend less than one's income*"; "*it is important to track of where money is spent*" and "*I use my money very carefully".* Although it was revealed that there is moderate to high financial exposures from parents, nonetheless, these were described and observed to be limited, informal and deficient in depth and structure necessary to develop a sound financial disposition and behaviour. The colleges and universities, therefore, have this responsibility and opportunity to influence the economic lives and future of their students especially that there is really void in the academe in this aspect.

Table 3, on the other hand, reflects the correlation between financial education opportunities and financial disposition, knowledge and behavior.

Financial education opportunities have significant relationship with the variables compulsive buying behavior and future orientation. However, it has a negative correlation with financial behavior on savings. It is reported by Friedline and West that (2015) that financial education opportunities maybe insufficient for promoting healthy financial behavior. Sherraden (2013) in Friedline and West (2015) elaborated that millennials‟ financial behavior is not purely based on knowledge; they need to have real life means to facilitate the exercise of healthy financial behavior.

Table 3. Relationship of Tertiary Student‟s Financial Education Opportunities to Financial Disposition and Financial Behavior

	Financial Education Opportunities	
	p –value	r
Financial Disposition – Materialism	0.347	0.031
Financial Disposition – Compulsive Behavior*	0.000	0.207
Financial Disposition – Future Orientation*	0.000	0.115

Financial Behavior – Savings*	0.001	-0.109
Financial Behavior – Budgeting	0.052	0.063

*correlation significant at 0.05 level (2-talied)

Implications maybe drawn from this study: Personal financial management is a course underemphasized in the academe (Marsh 2006); if discussed, it is often in informal manner and that usually focus on savings and budgeting; students claimed that their personal financial management exposure from family, friends and community were moderate but further expressed the lack of a more structured program relating to personal financial management. Furthermore, their financial disposition in terms of future orientation, materialism and compulsive buying behaviour ranges from neutral, moderate to high in respectively. However, they have gauged themselves highly on financial behaviors such as savings and budgeting. Since the university or college years are an important developmental period, in which many changes are experienced in academic, social, personal, and occupational areas (Newman & Newman, 2017; Baglama & Uzunboylu, 2017), the higher educational institutions have tremendous responsibility and opportunity to influence current and future disposition and behavioural changes. As possible agents of individual development and change, schools are highly encouraged to look into areas or avenues where it can incorporate personal financial management and seriously consider educational efforts vis-a-vis desired impact on the individual.

Conclusions and Recommendations

Personal financial management is vital to every individual as part of successful living. It enables to improve standard of living and considerably reduces financial stress. It empowers individuals to make better informed financial decisions (Munohsamy, 2015) that hopefully lead to improved life. Ironically, it is also a subject often undervalued and is informally approached. With all the changes in the Phlippines educational system, it is but timely that schools revisit or review their current offerings and programs to considerably include sessions or discussions on incorporating personal financial management in different avenues in the institution. As higher educational institutions form a big role in the development of young adults, it is essential to continuously reinvent itself, thereby, expediting personal financial educational opportunities that hopefully will positively impact financial disposition and behavior.

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The Level of Financial Literacy of Oas Public Secondary School Teachers

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ABSTRACT

People face challenges on financial decisions whether about savings, insurance or any kind of investment projects. Financial instruments have become increasingly complex and individuals are confronted with new and evermore sophisticated financial products. Access to credit/loans is easier than ever before and opportunities to borrow are copious. However, there is evidence that many individuals, among them are teachers, who are not well-equipped with knowledge in making sound financial decisions. The purpose of this study was to determine the level of financial literacy of nine (9) public secondary school teachers in Oas, Albay, Philippines. There were 151 respondents involved in this study. A survey was conducted using questionnaire developed by the researchers based on the variables proposed by Van Rooij, Lusardi, and Alessie (2011) and the OECD (2015). The questionnaire consists of items, which determine respondents" level of financial literacy in terms of financial knowledge, financial attitude, and financial behaviour. Data analysis was performed with the aid of Microsoft Excel program. Analysis was done using frequency counts, percentages, and standard deviation. The data generated were presented in tables with their corresponding descriptions. To analyze the relationship between the demographic profile and financial literacy the *Phi Coefficient* and *Percentage Difference* were used. The findings revealed that the overall level of financial literacy of Oas public secondary school teachers, especially on financial knowledge was low, on financial attitude was low, but on financial behaviour was high. Further, men had higher financial literacy than women. Married individuals have slightly higher level of financial literacy than single ones. Furthermore, there was a weak positive relationship between educational level and level of financial literacy. This study recommends to higher education institutions, to include basic financial literacy courses or series of financial literacy trainings for higher education students taking up teacher education program in order to produce teachers, ready to live the teaching profession as financially literate citizens in the society.

Keywords

Financial literacy, Financial knowledge, Financial attitude, Financial behaviour, Public secondary school teachers

Introduction

The need for financial literacy continues to be relevant in the 21st century. The continuous change in economic and social environment influences people"s financial decisions. Financial structure has been more complex (Greenspan, 2002), sophisticated and growing rapidly (Lusardi & Mitchell, 2011). The roles of the government and employers to help the people in managing investments have been decreased significantly due to recent economic turmoil across the world. Instead, the individuals are now entering into the financial venture where they are at their liberty to manage their own investments. In such an environment where the range and the complexity of financial products continue to increase, it is imperative that individuals develop nuanced understanding of the world of finance to be able to make choices that are most appropriate to their financial goals and needs (Lusardi & Mitchell, 2011).

Putting Financial Literacy in Context

There are varied perceptions and opinions regarding the definition of financial literacy (Fernandes, Lynch Jr., & Netemeyer, 2014; Remund, 2010); however, such definitions are still subject to discussions and debates (Hung, Parker, & Yoong, 2009). The President"s Advisory Council on Financial Literacy (PACFL) (2008) defines financial literacy as the knowledge of basic economic and financial concepts, as well as the ability to use that knowledge to manage financial resources effectively (Atkinson & Messy, 2012; Garman & Gappinger, 2008). Financial literacy is also described as an understanding of basic financial management, such as, budgeting, saving, investing and insuring (Worthington, 2006). It includes an understanding of the adverse consequences of inflation, time value of money, investment, risk diversification, and interest rates (Lusardi, Mitchell, & Curto, 2010). Additionally, organisation for Economic Co-Operation and Development (OECD) (2015) briefly defines financial literacy as a combination of financial knowledge, attitude, and behaviour, necessary for an individual to make sound financial decisions and eventually achieve financial well-being.

Financial Illiteracy as a Global Concern

Despite its importance, Standard & Poor Rating Services Global Financial Literacy (S&P Global FinLit) Survey revealed that many of the world"s population suffer from financial illiteracy hence there is an urgent need to address such a concern (Lusardi & Mitchell, 2011; Atkinson & Messy, 2012; Brown & Graf, 2013; Thaler, 2013; World Bank, 2014). Individual"s financial literacy level needs to be determined and effective financial literacy strategies focused on priorities are to be conceptualized. Citing S&P Global FinLit Survey, Klapper, Lusardi, and Oudheusden (2014) further elaborate that financial literacy ranges from 13 to 71 percent among countries, with Norway, Sweden, and Denmark sharing the top spots and Yemen at the bottom. Only one out of three adults or 31 percent showed an understanding of basic financial concepts such as numeracy, risk diversification, inflation, and compound interest (saving and debt).

In the Philippine context, Klapper, Lusardi, and Oudheusden (2014) revealed that only 25 percent of Filipino adults are financially literate, highlighting the need to boost awareness and access to financial services. The Philippine government recognizes the need for financial education and training, however, none in the curriculum for teacher education program has this been included. Per Republic Act No. 10922, the 2nd week of November every year is declared as Economic and Financial Literacy Week. The main goal of this law is to develop national awareness on economic and financial literacy. The potential growth and development of the nation could be realized through the people who are able to make sound financial decisions and share their expertise in improving and managing financial policies and programs.

Several international studies consistently indicated that women have lower financial literacy levels than men (Lusardi & Mitchell, 2011; Atkinson & Messy, 2012; Brown & Graf, 2013). Further, higher educational attainment is highly correlated with financial literacy (Thaler, 2013; Klapper, Lusardi, & Oudheusden, 2014). Financial literacy tends to be higher among adults, ages 30-40 years old, and lower among young and elderly individuals (Atkinson & Messy, 2012). And singles are more likely to have lower financial literacy than married individuals (ANZ Banking Group, 2008). The studies of Atkinson and Messy (2012) and Monticone (2010) established the correlation between low financial literacy and low- income levels.

The Importance of Financial Literacy for All

Financial literacy helps people manage their financial affairs and improve their standard of living. But it also makes an important contribution to the soundness and efficiency of the financial system and to the performance of the economy of the country. Financial literacy helps individual in enhancing the nature of money related administrations and add to financial development and advancement of a nation. Significantly, financial literacy matters on the awareness level, concrete know how on available financial products, and knowledge on monetary decision making. Thus, there is an association between low level of financial literacy and the adverse financial problems. According to Sporakowski (1979), financial problems have a clear negative consequence on employees" health and job performance. Financially troubled employees do bring their financial related issues to their work, thus affecting their productivity, organization"s overall profit figure, and even in the long run it affects the organization"s work culture. Furthermore, Brown and Graf (2013) found that many employees were suffering from stress due to financial problems such as over indebtedness, unwise use of credit, bad spending decisions, poor money management, and inadequate resources to make ends meet. Recently, public school teachers in the Philippines have been in the spotlight due to over indebtedness. According to DepEd Secretary Leonor Briones (2017), „financial literacy is crucial for teachers especially that teachers" debt has accumulated to Php 170 billion from legitimate institutions". And the financial literacy of professional teachers in the Philippines is very low (Montalbo, Pogoy, Villarante, & Pepito, 2017).

Having presented the aforementioned dynamics in financial literacy, this study is deemed timely and relevant. The findings of this study can serve as bases for recommendation for addressing the need for financial management trainings and can help stakeholders to devise appropriate strategies in order to improve the financial well-being of the teachers in the country. In addition, most studies on financial literacy have been conducted in developed nations like US, Australia, and UK, to cite a few, whose target populations are mostly students in the tertiary level of education. Very few studies have been carried out in developing countries like the Philippines. To fill this gap, this study sought to find out the level of financial literacy of public secondary school teachers in Oas, Albay Philippines. Specifically, it aimed to answer the following: 1) What is the demographic profile of Oas public secondary school teachers in terms of gender, age, marital status, educational level, occupational status, aggregated family income, and trainings on financial literacy? 2) What are the common sources of financial information/advice acquired by Oas public secondary school teachers in financial decision making? 3. What is the level of financial literacy of Oas public secondary school teachers in the context of three financial constructs: financial knowledge, financial attitude and financial behaviour? And 4) What relationship exists between the selected demographic profile and level of financial literacy of Oas public secondary school teachers?

Conceptual Framework

The following conceptual framework graphically shows the relationship between the dependent and independent variables. Having varied elements of the demographic profile, individually the teachers have various and certain means of acquiring financial information, needed to determine their financial literacy levels in terms of financial knowledge, financial attitude, and financial behavior.

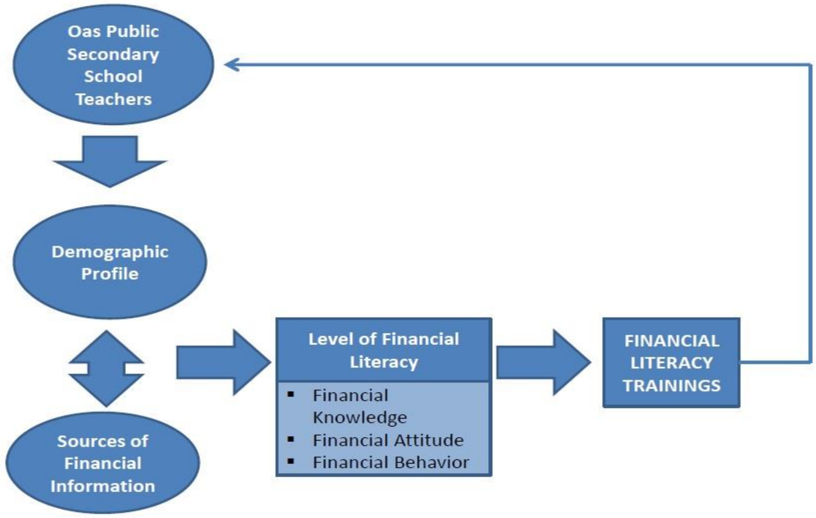

Figure 1: The Financial Literacy of Oas Public Secondary School Teachers

Research Hypotheses

Based on the conceptual framework and relationship found in review of related literature, the following null hypotheses were formulated:

H0: Men and women have the same level of financial literacy. H0: Level of financial literacy does not vary according to age.
H0: Financial Literacy is independent of educational level of individuals.

Method

Research Design

This study used the descriptive research design with survey questionnaire as the main data gathering tool. It is a concrete and comprehensive outline, which includes the place of the study, the timeframe of the data collection, and the actual data collection and analysis (Saunders, Lewis, & Thornhill, 2009). Comparison among the variables and their relationships (Aggarwal, 2008) were parts of the data analysis.

Population and Sampling

The research was conducted in Oas, Albay, covering all faculty members of the nine (9) public secondary schools of the town, namely: Sabino Rebagay Memorial High School, Oas Polytechnic High School, Saban National High School, Manuel Andaya Bustamante High School, San Juan High School, Tobog National High School, Maramba National High School, San Miguel High School and Balogo High School. However, out of 209 total target respondents, only 151 respondents returned their completely answered questionnaire yielding a retrieval rate of 72.25%.

Instrumentation

The survey questionnaire was developed in line with variables identified in the framework or model advanced by Van Rooij, Lusardi, and Alessie (2011) and the OECD (2015). This framework was considered relevant and most appropriate to answer the immediate call to investigate the level of financial literacy of the respondents in the educational field. To adjust to the local context, revisions were made before it was pretested to ten teachers in Oas South Elementary School in Oas, Albay. The questionnaire has three parts: The first part contains the demographic profile of the respondents. The second part contains questions pertaining to the respondents‟ common sources of financial information. And the last part of the questionnaire pertains to the financial literacy level of the respondents in the context of three financial constructs, namely: financial knowledge, financial attitude, and financial behaviour.

Content Validity

For content validation, the survey was piloted in Oas South Elementary School involving ten (10) teachers. The final draft of survey questionnaire after the pilot testing was further evaluated and validated by two graduate school professors who are knowledgeable in personal finance.

Data Gathering Procedure

To carry out the data collection, the researchers administered the instrument on January 15 to 26, 2018. After securing the approval from the principals or school heads to conduct the study, the questionnaire was administered to the respondents. Majority of the teachers agreed to participate in the study.

In order to gauge the respondents‟ financial knowledge, a set of adapted multiple choice questionnaire was distributed. The questions were designed to assess the respondents‟ awareness, understanding, and knowledge on basic financial concepts such as interest, time value of money, investment, risk diversification and inflation. For each question, a value equals to 1 was assigned for the correct answer, and a value equals to 0 for the incorrect answer. The respondents‟ average score across all questions were computed and further converted into percentage score.

Further, a 5-Point Likert scale on set of statements to determine the financial attitude of the respondents was used. It aims to capture their inner emotional contrivance that may hinder or support their behaviours towards financial well-being. The tool consists of statements regarding confidence, motivation, and attitude on financial management, such as, setting financial goals, saving money and budgeting. Agree or strongly agree to the statements suggests a favourable financial attitude. A value of 1 was assigned to every 4 (agree) or 5 (strongly agree) response, and a value of 0 was assigned to every 1 (strongly disagree), 2 (disagree), or 3 (undecided) response (Lusardi & Mitchell, 2015).

Additionally, a 5-Point Likert scale on set of statements to determine respondents‟ financial behaviours (OECD, 2015) was used. The statements that pertain to financial goals, living within the means, tracking family expense and saving means favourable behaviour in managing finances. A value of 1 was assigned to every 4 (agree) or 5 (strongly agree) response, and a value of 0 was assigned to every 1 (strongly disagree), 2 (disagree) or 3 (undecided) response (Lusardi & Mitchell, 2015). Also, a set of questionnaires regarding budgeting, savings, and having emergency funds was used, answerable with a “YES” or “NO”. A value of 1 was assigned to every “YES” response, and a value of 0 to every “NO” response.

Finally, the respondents‟ average score across all three financial constructs were computed and converted into percentage scores. The resulting percentage scores were interpreted as a representation of the respondents‟ financial literacy level. Specific to this study, the resulting percentage scores were arbitrarily grouped into two categories: 75% and above (high level of financial literacy) and below 75% (low level of financial literacy) (DepEd‟s definition of satisfactory mastery performance level (MPL)).

Statistical Treatment

Data analysis was performed with the aid of Microsoft Excel program. This program is most practical to the researchers, besides, it can provide the sufficient computed data needed by the researchers in the data analysis. Analysis was done using frequency counts, percentages, means, rank, standard deviation; and the information generated was presented in the form of tables. To analyse the relationship between demographic profile and financial literacy, *Phi Coefficient* was used. The Phi Coefficient is a statistical tool used to measure the strength of association between two nominal variables, and it takes values from 0 to 1. Values close to 0 indicate a weak association and values close to 1 indicate a strong association between the variables.

Aware of the limitation of this statistical tool, the researchers have to reduce all data into dichotomous data since the raw data were not measured uniformly. Some data were intervally scaled, and other data were nominally scaled. The researchers have to reduce or transform the intervally scaled data and the nominally scaled data to perform statistical analysis. Further, the *p* value cannot be generated using Microsoft Excel program thus the *Phi Coefficient (ø)* was used. It is a symmetric measure, in the sense that it does not matter what variable is placed in the rows and what variable is placed in the columns. In this study, demographic profile in terms of age, marital status, educational level, occupational status, and aggregated family income were transformed to dichotomous category (Mitchell, 2007).

The following demographic profile was transformed into the said dichotomous category. The „age‟ is transformed into *"Millennials"* for respondents age 41 years old and below; and *"Baby busters"* for age above 41 years old. The „marital status‟ was transformed into „*Never married'* for respondents who are single and single with dependent status; and "*Ever married'* for respondents who are married or legally separated. The „educational level" was transformed into "*With baccalaureate degree"* for bachelor's degree holder; and "*With post baccalaureate units/degree"* for respondents with masters and/or doctorate units, Masters and Doctorate degree holders. The "occupational status" was transformed into "*Level 1"* for Teacher I position; and "*Level 2"* for "Teacher II, Teacher III, Master Teacher (MT), or Head Teacher" (HT). Lastly, the "aggregated family income" was transformed into "*Low level income"* for respondents who earn below Php30,000; and "*High level income"* for respondents who earn above Php30,000.

To test the hypothesis of the study, *The Percentage Difference* was used. This method measures the relationships between two variables arranged in a 2 x 2 contingency table. The degree of association is measured by the amount of difference between percentages in different columns of the same row, or in different rows of the same column, depending on which variable is called dependent or independent. Its value goes from 0 percent when there is no association, to 100 percent, when there is complete association (Mitchell, 2007).

Results and Discussion

Demographic Profile of the Respondents

As seen in Tablel 1, majority of the respondents are female (120 or 79.47%), and this indicates that the teaching profession in the Philippines is normally predominantly a female occupational field. The respondents‟ ages were categorized into the „Millennials‟ (99 or 65.56%), in agreement with the statement that the Philippines has the most young workforce in the world (Rada, 2016). The millenials are those who were born in 1982-1990. Most of the respondents were „Ever married‟ (99 or 65.56%) with an „aggregated family income‟ below Php30,000 (104 or 66.87%). Majority of the repondents belongs to Teacher I at Level 1‟ position with a salary of Php20,179 (DepEd). In terms of trainings, 115 or 76.16% of them have "NO" trainings on financial literacy.

Table 1: Demographic profile of the respondents (N = 151)

Profile		f	%
Gender	Male	31	20.53
	Female	120	79.47
Age	"Millennials" (1982 - 1990)	99	65.56
	"Baby busters" (1943 - 1981)	52	34.44
Marital status	Never married (single and single with	52	34.44
	dependents) Ever married (married and legally	99	65.56
Educational level	With baccalaureate degree	77	50.99
	With post baccalaureate units or degree	74	49.01
Occupational status	Level 1 (Teacher I)	114	75.50
	Level 2 (Teachers II, III, MT or HT)	37	24.50
Aggregated family income	Low level income (below Php30,000) High	104	66.87
	level income (Php30,000 or higher)	47	33.13
Trainings on financial	With training (YES) Without training (NO)	36	23.84
		115	76.16

Common Sources of Financial Information

As reflected in Table 2, in the effort to acquire the financial literacy, majority of respondents (46 or 30%) relied on „information from sales staff of the financial institutions", which eventually prompted them to avail loans from various lending institutions. Only 24 or 16% of the respondents relied on „digital social media" as their sources of financial information. Unavailability of newspaper in their respective schools made it harder for the respondents (8 or 5%) to rely on this source of financial information. Lastly, „mobile banking message" has not been effectively used as a source of financial information for this group of respondents.

Table 2: Sources of financial information (N = 151)

Sources of financial information	f	%
Sales staff of the financial institutions	46	30
Friends/relatives (who work in the financial services industry)	27	18
Social media (Facebook, YouTube, Twitter etc.)	24	16
Friends/relatives (not working in the financial services	20	13
Television or radio programmes	16	11
Internet	8	5
Newspaper articles	8	5
Mobile banking message	0	0

Levels of Financial Literacy of the Respondents

As reflected in Table 3, the greatest percentage (72.79%) of the respondents‟ financial knowledge is on inflation. Similarly, 66.44% of the respondents have financial knowledge on risk diversification. Another key finding worthy of attention is that 53.06% of the respondents lack knowledge on investment. The result is consistent with the findings of the study of Bhushan (2014) that being financially literate enables the individual to employ proper instrument to evaluate the risk and returns associated with his/her investment. Lastly, 49.66% of the respondents have financial knowledge on interest. Overall, the average score of the respondents on questions regarding financial knowledge is 57.4%. These results simply indicate the respondents‟ inadequate financial knowledge.

Table 3: Percentage scores of respondents‟ financial knowledge (N = 151)

Key questions	Correct responses (%)	Incorrect responses (%)
Interest	49.66	50.34
Time value of money	51.17	48.33
Investment	46.94	53.06
Risk diversification	66.44	33.56
Inflation	72.79	27.21
Average	57.40	42.60

Meanwhile Table 4 reveals the respondents‟ financial attitude. Majority of them (96.03%) see the importance of setting goals for the future. And only 22.52% of the respondents sees the importance to build a family spending plan. Overall, the average percentage score of respondents for financial attitude is 56.29% with a standard deviation of 0.238.

Table 4*: Percentage scores on respondents‟ financial attitude (N = 151)*

Financial attitude	%	S.D.
It is important to set goals for the future	96.03	0.016
I worry about the future; I do not live only in the	70.20	0.037
I dislike buying things because it makes me feel good	34.00	0.039
It is important to build a family spending plan.	22.52	0.034
I prefer to save money for the future than to spend it.	65.56	0.039
Average	56.29	0.238

In terms of financial behaviour, Table 5 reveals significant data; where 122 or 80.79% of the respondents have a household budget. It is consistent with the study of Nyamute and Maina (2010) that individuals who successfully execute their household budget are individuals who are financially literate. Through the household budget the teachers list and prioritize how to address their daily needs. Further, that 61.93 percent of the teachers have no emergency fund. This result is similar to the research of Collins and Gjertson (2013), which found that individuals who fail to put up emergency funds are financially illiterate. Emergency fund is an integral part of having a sound financial well-being. It acts as a form of insurance against unexpected, irregular and unpredictable expenses. It also enables teachers to prohibit themselves from availing loans from financial institution should the need for immediate finance arises. Overall, the average score of respondents for questions regarding financial behaviour is 67.99 percent.

Table 5: Percentage scores on respondents‟ financial behaviour (N = 151)

	Responses	
	Yes	No
With a household budget	122 (80.79%)	29 (19.21%)
With savings and investment account	127 (84.11%)	24 (15.89%)
With emergency fund	59 (39.07%)	92 (61.93%)
Average	67.99	32.34

In terms of statements regarding the financial behaviour, 70.86% of the respondents agreed with the statement „I save a part of my income every month‟. In addition, 76.82% of the respondents agreed with the statement „I am tracking my personal and family expenses‟. Lastly, 86.75% of the respondents agreed with the statement, „I set financial goals and try to achieve them‟. Overall, the average score of the respondents for statements regarding financial behaviour is 82.78%.

Table 6: Percentage score of the statements regarding respondents‟ financial behavior (N = 151)

Statements	%	S.D.
Before I buy something I carefully consider whether I can	96.69	0.015
I set financial goals and try to achieve them	86.75	0.028
I am tracking my personal and family expenses	76.82	0.034
I save a part of my income every month	70.86	0.037
Average	82.78	0.114

Overall Financial Literacy Levels

There are 17 items that comprise the overall scores to assess the level of financial literacy of the respondents; these are dichotomously divided into two categories of the respondents, namely: respondents who got 75 percent score or higher, and respondents who got below 75 percent. For the respondents who got 75 percent or higher are considered to possess a high level of financial literacy. As reflected in Table 7 below, 66 or 44% of the respondents possess a high level of financial literacy while majority, 85 or 56% of the respondents possess a low level of financial literacy.

Table 7: Overall level of respondents‟ financial literacy

Level of financial literacy	f	%
High level of financial literacy (75% and above)	66	44.00
Low level of financial literacy (below 75%)	85	56.00
Total	151	100

The financial literacy level among selected public school teacher in Oas, Albay is relatively low with 56 percent of the teachers acquiring below 75% average score. The results are similar to the study of Montalbo, *et al*. (2017) which revealed that the level of financial literacy of professional and pre-service teacher in the Philippines is low. Consequently, having low teachers‟ financial literacy could lose their sense of authority to portray the importance of savings and investments to their students.

Relationship Between Demographic Profile with Level of Financial Literacy

Table 8 shows that there is a statistically moderate positive relationship between gender and financial literacy level with a ø value of .356. Males were indeed more financially literate than their female counterparts. These findings are parallel with the previous study where males generally have higher level of financial literacy than their female counterparts (Danes & Hira, 1987); and being the head of the family, males have the upper hand in terms of managing finances. Men have a high sense of confidence and prove themselves superior in terms of financial knowledge and interpretation. Consequently, there seems to be low enthusiasm levels among the females on financial matters (Chen & Volpe, 2002). Furthermore, there is no statistical relationship among age, marital status, aggregated family income, educational level, occupational status taken separately with financial literacy level. Lastly, there is a statistically weak positive relationship between financial literacy trainings and financial literacy level with a ø value of .212.

Table 8: Socio-economic and demographic variable with financial literacy

Profile	Dichotomous Category	Financial Literacy		Chi Sq
		High (f)	Low (f)	(ø value)
Gender	Male	21	10	4.38*
	Female	56	64	[0.356]
Age	"Millennials" (1982-1990)	31	66	0.154
	"Baby busters" (1946-1976)	15	37	[0.012]
Marital Status	Never married (Single, Single with dependents)	33	64	1.29
	Ever married (Married, Legally Separated)	13	39	[0.106]
Educational Level	With baccalaureate degree	21	56	0.968
	With post baccalaureate units or degree	25	47	[0.079][
Occupational Status	Level 1 (Teacher I)	34	80	0.827
	Level 2 (Teacher II, III, MT & HT)	14	23	[0.068]
Aggregated Family Income	Low level (below Php30,000)	33	71	0.506
	High level (above Php30,000)	15	32	[0.041]
Fin Lit Trainings	With training (Yes)	15	21	2.59*
	Without training (No)	31	82	[0.212]

(ø values range from 0 (no relationship) to ± 1.0 (perfect relationship)

Verification of Hypotheses

The first hypothesis focused on the relationship between gender and financial literacy level. The null and alternative hypotheses are: *H0:* Men and Women have the same level of financial literacy. *H2:* Men have higher level of financial literacy than women. As shown in Table 9, the percentage of male respondents who possess a high level of financial literacy is 67.74 percent and female respondents is 46.67 percent; registering a 21.07 percent point difference between gender and level of financial literacy. To conclude, there is a slight difference (21.07%) in the level of financial literacy between male and female with the male exhibiting a slightly higher level of financial literacy than their female counterpart. Therefore, data in this study showed that men have slightly higher level of financial literacy then women.

Table 9: Gender relationship to level of financial literacy

Level of financial literacy	Se		[% diff]
	Female	Male	
High level of financial literacy (75% and above 75%)	46.67%	67.74%	[-21.07%]
Low level of financial literacy (below 75%)	53.33%	32.26%	[21.07%]
Total	100%	100%	

Percent point difference values range from 0 (no difference) to ± 1.0 (100% difference)

The second hypothesis focused on relationship between age and the level of financial literacy. The null and alternative hypotheses are: *H0:* Level of financial literacy does not vary according to age. *H2:* “Millennials” have higher level of financial literacy than “Baby busters”. Shown in Table 10, the percentage of “Millennials” with high level of financial literacy is 31.96% and „Baby busters‟ on the other hand is 28.85%, displaying a 3.11% percent point difference between age and level of financial literacy. This study therefore revealed that both the “Millennials” and “Baby busters” have the same level of financial literacy. This result is contrary to the findings of several studies (Chen & Volpe, 1998; Lusardi & Mitchell, 2011; Brown & Graf, 2013) that as individuals grow older, they achieve higher level of financial literacy than young ones. To conclude, there is negligible or practically no difference in the level of financial literacy between “Millennials” and “Baby busters”. Therefore, in this study “Millennials” and “Baby busters” have the same level of financial literacy.

Table 10: Level of financial literacy to age

Level of financial literacy	Age		[% diff]
	Millenials	Baby	
High level of financial literacy (75% above 75%)	31.96%	28.85%	[3.11%]
Low level of financial literacy (below 75%)	68.04%	71.15%	[-3.11%]
Total	100%	100%	

Percent point difference values range from 0 (no difference) to ± 1.0 (100% difference)

The third hypothesis focused on relationship between educational level and level of financial literacy. The null and alternative hypotheses are: *H0:* Financial Literacy is independent of educational level of individuals. *H2:* Individuals with higher educational level have higher level of financial literacy. The result shows that there was a slight positive relationship between educational attainment and level of financial literacy. In particular, those teachers who have post baccalaureate units or degree exhibit a high level of financial literacy compared to those who have baccalaureate degree only. This is consistent with earlier researches (Dvorak & Hanley, 2010; Chen & Volpe, 2002) that individuals who took postgraduate studies are more likely to be financially knowledgeable than those who did not. As reflected in Table 11, 34.72 percent of respondents with post baccalaureate degree/units have high level of financial literacy and 27.27 percent among respondents with baccalaureate degree, registering a 7.45 percent point difference between educational level and level of financial literacy. Therefore, the data show that there is a weak positive relationship between educational level and level of financial literacy.

Table 11. Educational level relationship to financial literacy

Financial literacy	Educational level		[% diff]
	Post baccalaureate units or degree	Baccalaureate	
High level of financial literacy	34.72%	27.27%	[7.45%]
Low level of financial literacy (below 75%)	64.38%	72.73 %	[-7.45%]
Total	100%	100%	

Percent point difference values range from 0 (no difference) to ± 1.0 (100% difference)

Conclusion

It is important to stress that financial literacy program is not designed to make people as financial experts, rather, the aim is to empower individuals with sufficient skills and knowledge to form positive financial decisions and to allow them to be more in control of their financial management. Financial literacy can help individuals understand and assess his/her current financial standing, financial obligations, and his/her financial goals and take advantage of the many financial opportunities that can enhance his/her skills and ability to better manage his/her own finances.

Financial literacy is about motivating and educating individuals so that they can be knowledgeable about finance in a way that is relevant to their lives and that would enable them to use this knowledge to evaluate financial products or instruments and make informed decisions. As a consequence of the changing structure of an economy, financial literacy has become an integral tool to have a sustained financial well-being. A lack of financial knowledge can contribute to the making of poor financial choices that can be harmful to both individuals and communities (Kefela, 2011). “What is good for individual households is often good for the economy as a whole” (Hall, 2008). Encouraging teachers to save is not just good for themselves; it has an effect on the national interest in the long term. The potential growth of the economy relies on the successful channelling of domestic savings into productive investment opportunities. Banks in the developing countries like the Philippines must promote financial literacy to their customers because of the positive direct impact this can have such as an access to investment and savings, which in turn support economic growth, sound financial systems, and poverty reduction. Lastly, an efficient economy will effectively function if the population are financially literate and has the ability to maximize risk – rewards so that resources are utilized efficiently leading to higher and longer term growth.

In response to this reality, it is highly recommended that courses on financial literacy should be part of the curriculum as core subjects for students taking up teacher education program in the tertiary level. Basic personal financial principles in budgeting, saving, credit management and investment portfolio management, which include bookkeeping and other basic accounting courses are necessary. This study certainly serves as an eye-opener for higher education institutions offering teacher education program to prepare better future teachers, equipped with financial knowledge and skills.

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Re-profiling a university graduate's generic skill set of workforce of the future

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Abstract

A university identity is reflected through its graduate profile, and this is reflected in the university's vision and mission that are translated into its operational goals and achievable objectives. In the ever changing market environment, students' employability skill sets and technology capabilities meeting market need and external changes in the era of IoT (Internet of Things) must be reflected in the profiling of the university graduate outcomes. These inevitably will affect the student learning outcomes for the future workforce. To ensure that the university is incorporating the external changes and requirements with that of the university strategic directions and its envisioned graduate profile, this paper is aimed at identifying an integrated set of generic skill sets that reflects and meets the future workforce's employability and desirable employees' attributes. This would call for a re-profiling of the university graduate that meets the external regulatory requirements and market needs and the internal strategic direction of the university. It is not meant as a hodgepodge of skill sets or learning outcomes but as a consolidated and integrated skill sets and learning outcomes that position the university graduate's employability with attributes desired of the market. This would mean that the HEI's student effectiveness is no longer internalized but developed and embedded throughout the 4 or 5 years program of studies that incorporates the internal and external market and changing requirements and specifications. This paper aims to propose a future workforce consolidated skill sets of learning outcomes that do not cater to all disciplines but at least meet the minimum balanced internal & external requirements of a generic university graduate that can later be adapted to more specific collegial or programmatic requirements.

Keywords

Qualification framework, Graduate profile, Student learning outcomes

Introduction

In the OBE (Outcome based Education), learning outcomes are mandated as SLOs (Student learning outcomes) measures of a university, college or program graduate's effectiveness. These SLOs were basically based on or evolved from the Bloom Typology. In the rapid changes of the global & technological and social & economic environments, a key question is what and how has the university incorporated these new requirements in determining student effectiveness. Three of the more immediate and basic requirements are that of the student employability, ethics and technological capacities & capabilities in the new era of IOT (Internet of Things).

To make educational accomplishment and achievements measurements more pragmatic in determining students' effectiveness, OBE (Outcome Based Education) with a central focus on student accomplishment has become the norms of quality assurance and accreditation requirements. Over the past decades, the OBE has primarily used the basic object oriented Bloom Taxonomy of Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation, (Bloom et.al, 1956). This was supposedly improved on by using the revised two- dimensional framework of knowledge (that has the added dimension of procedural & metacognitive knowledge in addition to the basic factual & conceptual knowledge) and cognition which are more verb action oriented (Anderson et.al., 2001; Krathwohl, 2002). The metacognitive knowledge are: (1) strategic knowledge for learning, thinking and problem solving, (2) knowledge about cognitive tasks that underscore different tasks requiring different cognitive strategies, and (3) self-knowledge of one's strengths and weaknesses (Pintrich, 2012; Flavell, 1979; Schneider and Pressley, 1997). The intersection of the (a) four knowledge dimensions of Factual, Conceptual, Procedural and Metacognitive and (b) six cognitive process dimensions of Remember, Understand, Apply, Analyze, Evaluate and Create led to Heer's revised Taxonomy Model (2012) with 20 key actions verbs of:

i. *Remember & Knowledge* – Listing factual, Recognizing conceptual, Recalling procedural, Identifying metacognitive;
ii. *Understand & Knowledge* – Summarize factual, Classify conceptual, Clarify procedural, Predicting metacognitive;
iii. *Apply & Knowledge* – Responding factual, Providing conceptual, Carrying out procedural, Using metacognitive;
iv. *Analyze & Knowledge* – Select factual, Differentiate conceptual, Integrate procedural, Deconstruct metacognitive;
v. *Evaluate & Knowledge* – Check factual, Determine conceptual, Judge procedural, reflect metacognitive;
vi. *Create & Knowledge* – Generate factual, Assemble conceptual, Design procedural, Create metacognitive.

The revised Taxonomy and proposed model has fundamentally changed learning outcomes accomplishment assessment and measurement of the higher level of metacognitive knowledge that can affect teaching strategies as related to transfer of learning, ability to use knowledge or facilitate or constrain teaching, learning and assessment (Pintrich, 2012). It can bring about meaningful learning based on its cognitive process (Mayer, 2002) as propagated in constructivist learning (Mayer, 1999; Bransford et.al., 1999; Lambert and McCombs, 1998). It can also bring about improving instruction through re-examination of curriculum alignment (Anderson, 2002) of planning objectives, instructional activities, deliver integrated thematic learning units (Ferguson, 2002) and roles and means formative and summative assessments (Raths, 2002; Airasian and Miranda, 2002).

In 2018, Saudi Arabia introduced the SAQF (Saudi Arabian Qualification Framework) that defines 3 main descriptors of Knowledge, Skills and Competence (that covers autonomy & responsibility and behavioral & social dimensions of learning work attitudes and ethical considerations) for Level 1 to10, of which L5 to L10 applies to the Higher Education. This new development must incorporate the existing NQF (National Qualification Framework) that all HEIs had been accustomed to over the last decade. The NQF has 5 main domains of learning identified as Knowledge, Cognitive Skills, Interpersonal Skills and Responsibility, Communication, Information Technology and Numerical Skills and Psychomotor Skills.

Given these two sets of SAQF & NQF requirements and new and additional skill sets requirements meeting market needs' and students' employability in the era of rapid changes, HEIs are challenged to meet these changes and ensure desired students' employability and new skill sets are developed to position the graduates better to meet these needs. These changes have given rise to the issue of the incorporation of employability and new skill sets development to meet the workforce of the future in the era of IoT. As such, this paper aims to re-walk and potentially re-position the SLOs of the students' employability and additional or new skill sets of the workforce of the future.

Workplace and Workforce of future: Changes

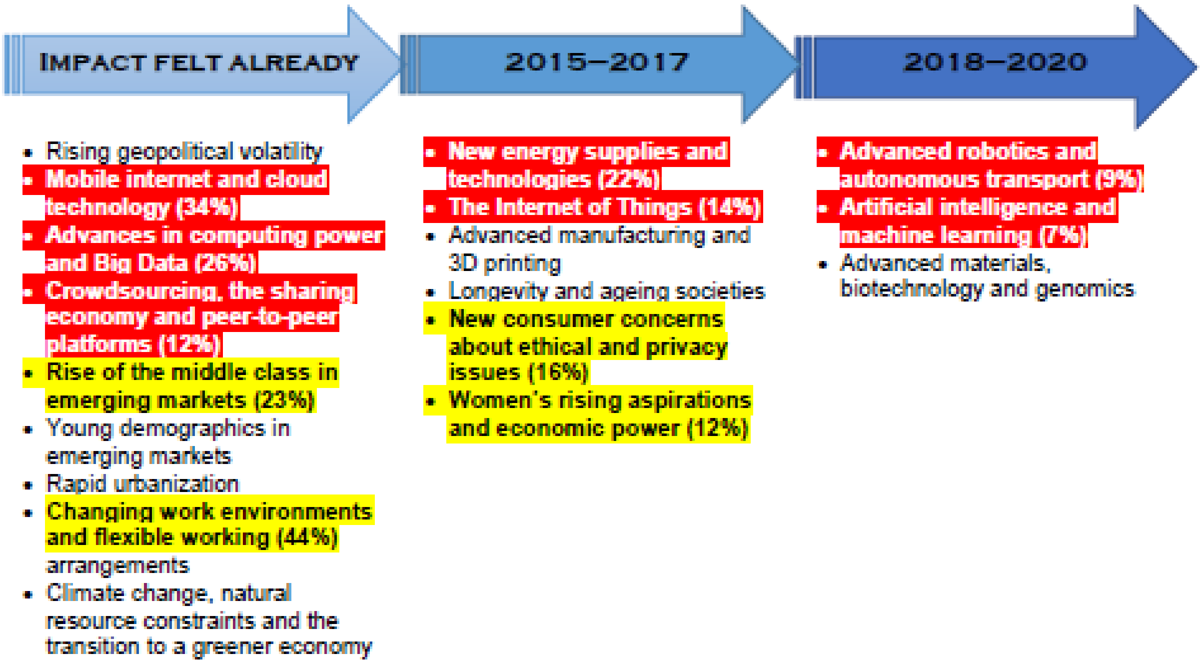

Figure 1: Drivers of Change (Demographic, Socio-Economic & Technological) & Timeframe to Impact Source: Adapted from "Future of Jobs Survey, World Economic Forum, (2016)"

A leading report by the World Economic Forum, (WEF, 2016) of 350 executives across 9 industries in 15 of the world's biggest economies to generate The Future of Jobs provided some insight into the demographic, socio-economic and technological drivers sets (Figure 1) that can potentially bring about changes in the future workplace scenario with a timeline of happenings. The key demographic/socio-economic drives and impacts highlighted (in yellow) are: (1) Changing work environments & flexible working (44%); (2) Rise of Middle Class in emerging markets (23%); (3) Ethical and Privacy issues, and (4) Women's aspirations & economic power, that could potentially affect the workplace and work environment. For the technical drivers and impacts (in red), they are (1) Mobile internet & cloud technology (34%); (2) Advances in computing power & big data (26%); (3) New energy supplies & technologies (22%); (4)The Internet of Things (14%); (5) Crowdsourcing, sharing economy & peer-to-peer platforms (12%); (6) Advanced robotics & autonomous transport (9%) and (7) AI & machine learning (7%). These translate into key drivers of changes as (a) Changing work environments and flexible working arrangements (44%); (b) Mobile internet and cloud technology (34%); (c) advances in computing power and big data (26%), and (d) rise of the middle class in emerging markets (23%). All these technology drivers potentially changes the ways we work, we share, we communicate, we learn and we live. These culminate into a more rapid fast paced multi-tasking use of big data analysis and decision making and communication means and efforts that are morphing pervasively into our work and social networked life. These are also supported by the research of Davies et.al (2011) entitled "Future Work Skills" which identified 6 drivers of changes as: (1) *longevity:* increasing global lifespans that change the nature of careers and learning: (2) *rise of smart machines and systems:* workplace automation that nudges human workers out of rote repetitive tasks: (3) *computational world:* massive increases in sensors and processing power making the world a programmable system: (4) *new media ecology:* new communication tools requiring new media literacies beyond text: (5) *superstructure organizations*: social technologies driving new forms of production and value creation, and (6) *globally connected world:* increased global interconnectivity putting diversity and adaptability at the center of organizational operations.

Abilities	Basic Skills	Cross Functional Skills	
Cognitive Abilities (15%) Cognitive Flexibility Creativity Logical Reasoning Problem Sensitivity Mathematical Reasoning Visualization	**Content Skills (10%)** Active Learning Oral Expression Reading Comprehension Written Expression ICT Literacy	**Social Skills (19%)** Coordinating with Others Emotional Intelligence Negotiation Persuasion Service Orientation Training and Teaching Others	**Resource Management Skills (13%)** Management of Financial Resources Management of Material Resources People Management Time Management
Physical Abilities (4%) Physical Strength Manual Dexterity and Precision	**Process Skills (11%)** Active Listening Critical Thinking Monitoring Self and Others	**Systems Skills (17%)** Judgement and Decision-making Systems Analysis **Complex Problem Solving Skills (36%)** Complex Problem Solving	**Technical Skills (12%)** Equipment Maintenance and Repair Equipment Operation and Control Programming Quality Control Technology and User Experience Design Troubleshooting

Figure 2: Change in demand of Core Work related skills 2015 – 2020, all industries
Source: World Economic Forum (WEF, 2016), based on O*NET Content Model

Based on these drivers and their impacts, there are changes in the skills demand (Figure 2) to meet the new work place requirements in 2020. As perceived in the WEF (2016) study, they are ranked as: (1) Complex Problem Solving Skills (36%); (2) Social Skills (19%); (3) Systems Skills (17%); (4) Cognitive Abilities (15%); (5) Resource Management Skills (13%); (6) Technical Skills (12%); (7) Process Skills (11%); (8) Content Skills (10%); and (9) Physical Abilities (4%). It is noted that the more advanced skills of complex problem solving, social skills and systems skill are normally not catered to nor addressed more in-depth in the institutional or programmatic skills development, which is more clearly addressed from the ranked order of (4) to (9) in the normal revised Bloom Taxonomy. This potentially mean that these more inherent and important skills needs consideration and incorporation in the programmatic learning objectives and outcomes of the new workplace skills demands and environment.

With the research of the 6 drivers, Davies et.al (2011) also identified 10 key skills for the 2020 environment as:

1. *sense making* - ability to determine the deeper meaning or significance of what is being expressed;
2. *social intelligence* - ability to connect to others in a deep and direct way, to sense and stimulate reactions and desired interactions,
3. *novel & adaptive thinking* - proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule-based;
4. *cross-cultural competency* - ability to operate in different cultural settings;
5. *computational thinking* - ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning;
6. *new media literacy* - ability to critically assess and develop content that uses new media forms, and to leverage these media for persuasive communication;
7. *transdiciplinarity* - literacy in and ability to understand concepts across multiple disciplines;
8. *design mindset* - ability to represent and develop tasks and work processes for desired outcomes;
9. *cognitive load management* - ability to discriminate and filter information for importance, and to understand how to maximize cognitive functioning using a variety of tools and techniques, and
10. *virtual collaboration* - ability to work productively, drive engagement, and demonstrate presence as a member of a virtual team.

Another key study by McKinsey (MCI, 2017) as to workforce and automation, it was found that of the key time spent in any occupation, the constitution is (1) manage 7%,(2) expertise 14%, (3) interface 16%, (4) unpredictable physical 12%, (5) collect data 17%, (6) process data 16% and (7) predictable physical 18%. Based on the current technology automation, there is a 81%, 69% and 64% change for predictable physical, process data and collect data respectively. They also identified key skills that are needed for 2020s that are more demanding of the social-emotional, creative and logical reasoning abilities with more advanced capabilities in recognizing known patterns/categories, sensory perception, logical reasoning / problem solving, retrieving information, articulating / display outputs, social and emotional sensing, fine motor skills / dexterity and gross motor skills. (Figure 3).

Skill by activity hours: automated (% total activity hours automated) and added (% total activity hours added)			
Sensory perception	**Cognitive Capabilities**	**Social & Emotional Capabilities**	**Physical Capabilities**
Sensory perception (-65%/68%)	Retrieving Information (-93%/94%)	Social and emotional sensing (-5%/38%)	Fine motor skills / dexterity (-25%/32%)
	Recognizing known patterns/ categories (-90%/96%)	Social and emotional reasoning (-5%/35%)	Gross Motor skills (-29%/34%)
	Generating novel patterns/ categories (-5%/16%)	Emotional & Social Output (-6%/34%)	Navigation (-8%/17%)
	Logical reasoning/ problem solving (-20%/ 45%)		Mobility (-14%/27%)
	Optimizing and planning (-24%/39%)		
	Creativity (-3%/13%)		
	Articulating / display output (-71%/69%)		
	Coordination multiple agents (-31%/45%)		

Figure 3: Work activities automation hours added of different skills need 2016-2030
Source: MGI (2017), *Jobs lost, Jobs gained: Workforce transitions in a time of automation*

Skills	**United States, all sectors**		**Western Europe, all sectors**	
	Hours worked in 2016	**% change in hours worked by 2030**	**Hours worked in 2016**	**% change in hours worked by 2030**
Physical & manual	90	-11	113	-16
Basic cognitive	53	-14	62	-17
Higher cognitive	62	9	78	7
Social & emotional	52	26	67	22
Technological	31	60	42	52
Total	**287**		**363**	

Figure 4: % change in hours worked in 2030 as compared to 2016 of 5 major categories of skills
Source: McKinsey Global Institute (May 2018) workforce skills model; McKinsey Global Institute analysis

Bughin et.al. (2018) conducted a MGI study of 3,031 corporate level executive respondents in Canada, the United States, and five European countries of France, Germany, Italy, Spain, and the United Kingdom of 25 sets of core workplace skills. These 25 core workplace skills were categorized into 5 groups (Figure 4) that showed growth in averaged % hours worked changes in 2030 of social and emotional skills (24%) along with technological (56%) and advanced cognitive skills (7%). Of the five sub-sets of technological skills, basic digital skills (67%) and advanced IT skills and programming calls for the greatest change. Of the six higher cognitive skills, creativity (35%) and complex information processing & interpretation (18%) ranked top. For the social and emotional skills, 5 of the 6 sub-set of skills showed leadership & managing others (30%) and entrepreneurship & initiative taking (31%) were placed more important than advanced communication & negotiation skills (27%), interpersonal skills & empathy (25%), and adaptability and continuous learning (24%).

Jacob Morgan (2014) in an authoritative work “The Future of Work”, identified five trends that will shape the future or work. These trends are (1) New behavior that are shaped by special media and the Web; (2) Technologies shift to cloud, collaborative technologies, big data and Internet of Things (3) Millennial workforce with new attitudes, expectations & ways of working, (3) Mobility where people work anytime, anywhere & on any devices, and (5) Globalization with no boundaries. These trends will bring about new principles of the future employees as flexible work, customized work, sharing information, becoming a leader, leveraging new ways of communicating and collaboration, learning versus knowing and learning and teaching at will which calls for new or upgrading existing skills.

Basically the employee of the future will evolve to (1) work anytime as against working from 9 – 5; (2) work anywhere as against in an office; (3) use any devices as against company equipment; (4) focused on outputs as against inputs; (5) creating own ladder as against climbing corporate ladders; (6) customized work as against predefined work; (7) shareing information as against hoarding information; (8) can become a leader as against no voice; (9) relies on collaboration technologies as against e-mails; (10) focused on adaptive learning as against knowledge, and (11) democratized learning & teaching as against corporate teaching & learning. By mid-century, the millennial will make up half of the workforce where 38% are actively looking for a different role, 43% are open to offers, 41% prefer to communicate electronically than face-to-face or telephone, 18% will stay with current employees for long term, 28% said work/life balance worse than they had expected and 52% says rapid promotion is the main attraction in an employer that comes ahead of salaries (Bresman, 2015).

Another perspective of future skills from van Hooijdonk, and Hewlett (2016), are (1) Learning skills that includes critical and creative thinking and collaborating and communicating; (2) Literacy skills of information, media and technology literacy and (3) Life skills of flexibility, initiative, social skills and discipline and leading without authority. This leading without authority calls for a vast array of social skills like (1) planning, organizing & setting objectives, (2) taking initiative & responding flexibly to changing situations,(3) accepting responsibilities, (4) persevering when things do not work out, (5) taking a positive attitude to & learning from failure, (6) presenting a positive personal image & being assertive, (7) delegating tasks to people with right skill set, (8) listening, supporting & giving constructive criticisms, (9) clarifying problems and making logical decisions and ultimately (10) persuading & motivating that include creating enthusiasm to make things happen.

Future Employability and Expected Skills Sets

In the more recent educational trends, graduate employability has taken central focus of the mismatch of skills in existing educational practices and outcomes as compared to what real life job environments requires. Due to the changes from "professional networking" to a "connected community" (Dey & Cruzvergara, 2014), employability, a key expectant of a graduate is becoming a core issue in the education agenda with greater attention being paid "to the role of higher education in developing employability" (Huang, Turner & Chen, 2014, p .177; HEF CE, 2011; QAA 2014a, 2014b). Employability is not employment but encompasses the set of skills, knowledge, understanding, and personal attributes that make a graduate secure, retain, progresses and adapt to changes in a job, (EACEA, 2015; Harvey, 2003; Mason, Williams & Cranmer, 2009; Yorke, 2006). Graduate employability are critical skills and attributes that stimulate adaptability within real life situational needs in the current job markets (Coetzee, 2012). In 2016, Blackmore et.al conducted a comprehensive literature review of the worldwide practices, ecosystems and strategies used to improve students and graduates' employability levels and ensure that their skills and knowledge are fit for-purpose for the graduate labor market upon leaving Higher Education (HE). One of the key recommendation was program offers "should progress beyond citing generic knowledge, skills and attributes in program specifications and consider methods to assess the level of which these learning outcomes have been acquired to the same degree that discipline specific learning outcomes are assessed".

Through a focus group of 225 stakeholders groups, the Tennessee Department of Education identified two critical skills of Application of Academic & Technical Knowledge and Skills, Personal, and Social Skills in addition to those deemed important as Career Knowledge and Navigation Skills and 21st Century Learning and Innovation Skills. In a survey of 233 UK firms, regardless of company size, Archer & Davison, (2008. p.7) identified the top 10 skills ranked in order of importance as communication skills (86%); team working skills (85%); integrity (83%); intellectual ability (81%); confidence (80%); character / personality (75%); planning & organizational skills (74%); literacy (71%); numeracy (68%) and analysis & decision-making skills (67%). The UKCES employability model highlighted key employability skills as self- management, thinking and solving problem, working together and communicating and understanding business driven by using numbers, IT and language effectively (UKCES, 2009). Coetzee et.al (2012) came up with three attitudinal domains with eight core skills of graduate employability as: (1) scholarship – covering problem solving and decision making skills, analytical thinking skills and enterprising skills; (2) global and moral citizenship – covering ethical and responsible behavior, presenting and applying information skills and interactive skills; and (3) lifelong learning – covering goal directed behavior and continuous learning.

Based on a number of surveys on the skills required by graduates undertaken by Microsoft, Target Jobs, the BBC, Prospects, NACE and AGR and other organizations, Woodcock (2016) provided a summary of the 10 key skills that are most often deemed important. They rank as verbal communication, teamwork, commercial awareness, analyzing & investigating, initiative / self-motivation, drive, written communication, planning & organizing, flexibility and time management.

The Flux Report (2014) explored the nature and impact of flux on organizations over time in a survey of 100 HR leaders and 250 line managers in UK and Irish organizations with 500+ employees. The survey identified the most important skills to develop in employees to drive company growth over the next five years as: Leadership skills 62%; Management skills 62%; Interpersonal skills 53%; Innovation and creativity 45%; Resilience 43%; Technical/specialist skills 40%; IT skills 40%; Sales/marketing skills 32%; and Client management skills 24%.

Methodology

To achieve the aim of identifying a generic employability and technology capabilities skill sets of the future workforce, this paper employs a two stepped secondary research as follows:

Step 1 – Literature Review: A selective literature review was conducted of the existing skill sets of SLOs and changes of the IoT era and potential future workforce skill sets was reviewed.
Step 2 – Deductive Synthesis: Based of the reviewed and identified skill sets, deductive reasoning based on similarity of skill sets terminology and its occurrence, these generic and consolidated skill sets of the future workforce are deduced and identified as a potential skill sets of the future workforce. Based on this set, the HEIs should review their existing SLOs and adapt and apply to of the future workforce skill sets representative of their university's or program's identity and uniqueness.

Discussion and Implications

In the OBE practices, most HEIs have faithfully followed either the original 1956 Bloom Taxonomy or the revised two dimensional Bloom Taxonomy (Anderson et.al., 2001; Krathwohl, 2002). However, due to the changes in the work environment brought about by the rapid change and rise in technology, artificial intelligence, robotics, internet of things, or socio-economic changes like work-life balances, shorter work hours, quality of work and life expectations, there is a need to review the existing set of skills sets that a HEI graduate is equipped with. A typical HEI might need to study these changes carefully and incorporate any required changes of the skill sets expected of the workforces of the future.

This secondary research identified the major changes and potentially enhanced or new skill sets that is needed of the workforce of the 2020 to 2030. Based on the studies by key consultancy agencies or leading research, this paper came up with 4 main sets of skill sets that are termed as the very minimal but critical set to the situational set as follows:

Minimal Skill set – This skill sets conforms generically to the existing revised Bloom typology that most HEIs are using. However, this paper uses the revised two- dimensional cognitive abilities and that of the knowledge domains of Heer's revised Taxonomy Model (2012) with 20 key actions verbs that is the base reference with that of other studies. Albeit being stated differently in the use of terminologies, 9 of the 11 studies reiterated the "Cognitive Abilities" as the minimal requirement that all HEIs should equip their graduates with this skill set of the future workforces.

Highly Needed Skill set – The future workforce is more complicated in terms of the work and social environment brought about by more available and accessible information and datasets from diverse arrays of disruptive technologies. In such a dynamic disruptive technology era, a highly needed more enhanced set of social, emotional and communication skills in dealing with diverse human abilities in the new disruptive technological era is an imperative. In addition, technical (technological) skills in the use and applications of technology to work-life balances with more complex reasoning skills, computational thinking skills are needed due to the great volume of data analytics that need skillful and creative rational management and interpretation. The new work environment needs better resource management skills due to the more advanced and wider array of resources in a future technologically oriented work recourse.

Table 1: Synthesis of expected skills set of the workforce of the future

	Key Studies / Skills Sets	Bloom revised Taxonomy (2016)	World economic Forum (2016)	Davis et.al. (2011)	McKinsey Global Institute (skill by activity hours) (2017)	Bughin et.al (2018) MGI workforce skills model	Hooijdonk and Hewlett (2016)	Tennessee Department of Education	Archer & Davison, (2008)	UCKES Employability Model (2019)	Coetzee et.al (2012)	Woodcock Graduates Skills (2016)	Flux Report (2014)
Minimal	Cognitive Abilities (Remember; Understand; Apply; Analyze; Evaluate; Create)	√√√	√√		√√√	√√√	√√	√√	√√√	√√	√√	√√	
Highly Needed	Social Skills (intelligence)		√√	√	√√	√√	√	√√		√√	√		
	Technical (Technological) Skills		√			√√√	√	√√	√√	√√	√		√
	Complex reasoning Skills		√√√				√		√√	√√	√		
	Emotional Skills				√√	√√	√	√√		√√			
	Communication Skills								√√√	√√		√	√√
	Computational Thinking			√			√			√√	√		
	Resource Management Skills		√				√			√√		√	
Expected	Team working Skills								√√√	√√		√	
	Integrity / Confidence / Personality / Ethical / Responsibility / Resilience								√√√		√		√
Desired	Physical Abilities		√		√	√							
	Systems Skills		√√				√						
	Content Skills		√				√						
	Process Skills		√										
	Sense Making			√				√					
	Learning Skills							√			√		
	Innovation Skills							√					√
	Novel & Adaptive Thinking			√			√						
	Design Mindset			√							√		
Situational	Cross-Cultural competency			√									
	New Media Literacy			√									
	Transdiciplinarity			√									
	Cognitive Load Management			√									
	Virtual Collaboration			√									
	Initiative / self-motivation											√	
	Flexibility & Time management											√	
	Commercial awareness											√	
	Client Management												√

Expected Skill set – As the social and work norms changes, team working and a person with a higher level of integrity, confidence, able to take initiative, have good personality, ethical, responsibility and resilience is an expected norm of the new workforce skills set.

Desired Skill set – Since these studies have different perspective of the future workforce with different focus in different industries, some of these desired skills might not be potentially be needed in any specific educational program. These selective desired skill sets range from basic physical (or motor skills), systems skills, content skills, and process skills that focus more on the operation holistic value addition as a system. Others like sense making, learning skills, innovation, novel & adaptive thinking and design mindset are desirable but not necessary to have at the operational workforce but will be more needed of those in managerial positions.

Situational Skill set – These are rather overly specific skill sets that have been identified as potentially important skill sets by certain researchers but that could excluded by most programs as being too much to incorporate into the desired SLOs of a program.

While this paper tries to identify a generic set of skill sets needed of the future workforce, it cannot be inclusive of incorporating all the vast literature on future skills set of different industries. But it is deemed safe to say that the three main sets of (1) Minimal skill set; (2) Highly needed skill set, and (3) Expected skill sets meets more convergence than divergence in their being cited across the main literatures.

This would mean that for a HEI to meet the future market needs better, they can re-consider the above skill sets as the start of a review and potential revision of the skills sets of the future workforces. This means that each program depending on its mission and nature of its discipline, needs to select what is more appropriate to be adapted within the context of its program.

Conclusion

In conclusion, while HEIs or programs still adapt or adopt the existing development of its SLOs based on the Bloom Typology or its revision, the HEIs and programs are well advised to review their students' effectiveness objectives and learning outcomes to make their students more employable and that can meet future workplace and market needed skill sets.

While the HEIs or programs can claim that their basic mission are fulfilled through the existing use of the Bloom Typology and its measurement of its student effectiveness through these SLOs, a HEI or a program can make its program more effective and competitive by looking at and incorporating beyond these minimal skills sets. Since these studies including this paper have extensively researched into the future workforces expected or desired skills sets, it recommends that HEIs or programs to review their existing positions on these skills sets in order to improve on meeting the future workforce skills sets to maintain and sustain its relevance to the market needs.

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Development of a Visual, Auditory and Kinesthetic (VAK) Model-Based Classroom Management Toolkit for Pre-Service Teachers

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ABSTRACT

Classroom management is essential in students' learning. This embedded mixed study intended to develop a classroom management toolkit for pre-service teachers based from Fleming's (2001) visual, auditory and kinesthetic (VAK) model. The activities were designed to pre-service teachers teaching Preschool to Grade 3 classes. In developing the toolkit, Analysis, Design, Development, Implementation and Evaluation or ADDIE model was used. The evaluation of implementers and experts was done through the use of the researcher-modified VREP by Simon and White (2011). Descriptive statistics was used to treat the data gathered. The general findings showed that the toolkit "exceeds the expectations" of the implementers and majority of the implementers found the toolkit "effective", "useful" and "helpful." From the findings of the study, it is, thus, recommended that higher educational institutions that train pre- service teachers may utilize the developed VAK model based-classroom management toolkit. Moreover, teachers in early childhood may use the toolkit. Future studies may be planned out for the improvement in terms of more classroom management strategies in the VAK model-based classroom management toolkit for pre-service teachers.

Keywords:

Classroom Management, Visual, Auditory and Kinesthetic (VAK) Model, Toolkit

Rationale

Through several interviews and observations, both early childhood education pre-service teachers and seasoned early childhood educators have attested and manifested struggles in classroom management. Past researches on classroom management revealed that it has consistently ranked on top as one of the most difficult problems experienced by neophyte teachers and this includes pre-service teachers (Clunies-Ross, Little & Kienhuis, 2008; Borden, 2013). Pre-service teachers experience difficulties in applying what they have believed to be effective from their theoretical learning to what they are experiencing in reality which includes classroom management (Akiyama, 2009).

One of the main factors contributing to the challenge of employing classroom management among early childhood education pre-service teachers is the diversity of young learners. The challenge experienced by early childhood education pre-service teachers double-up with the responsibility of dealing with young learners' differences and at the same time, providing classroom experiences that will be developmentally appropriate to the young learners.

Young learners, unique as they are, differ in many aspects in their way of learning. It is claimed that a significant factor leading to these young learners' academic success and manifestation of lesser challenging behaviors is classroom management (Rosas & West, 2008; Conner, 2015). Two of the main ideas about an individual's learning preference state that these preferences influence a learner's behaviour towards learning and taking these preferences strategically in teaching, could positively gear towards better learning (Fleming & Baume, 2006). An understanding of employing proper classroom management techniques leads to the success and effectiveness of the teacher's instruction and would also prevent misbehaviors in class (Alexander, 2014). This study takes these points with the intent of developing a classroom management toolkit based on the learners' learning styles.

On the learners' learning styles, this study focused on the learners' preferred learning styles according to Neil Fleming's (2001) Visual, Auditory and Kinesthetic modal preferences for learning or the VAK Model. Visual, auditory and kinesthetic learning preferences have been recognized as "three of the most popular learning preferences" (Gilakjani, 2012). Though it has been lately recognized as Visual, Auditory, Read/Write and Kinesthetic (VARK) model, the researcher finds the read/write preference as part of the visual preference; hence, the use of VAK model as the anchor of the study has been decided.

This study aimed to provide a guide for early childhood education pre-service teachers through appropriate classroom management techniques harmonious to that of their learners' preference through the development of a relevant toolkit. The development of a VAK model- based classroom management toolkit for early childhood education pre-service teachers will be the end product of this study.

Objectives of the Study

This study proposed to develop a Visual, Auditory and Kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers.
Specifically, this study aimed to attain the following;

1. formulate toolkit;
2. evaluate toolkit; and
3. revise toolkit.

Theoretical and Conceptual Framework

This study assumes that classroom management toolkit anchored on the visual, auditory and kinesthetic (VAK) modalities of learning of Neil Fleming (2001) would be an essential guide for early childhood education pre-service teachers in employing effective classroom management strategies.

This study aimed to develop a classroom management toolkit mainly anchored on Neil Fleming's VAK Model (2001). VAK is an acronym that consists of three (3) preferred modes of learning which are visual, auditory and kinesthetic. VAK is one of the most well-known learning styles (Saga, Qamar & Trali, 2015). Fleming (2001) emphasized that the importance of knowing one's modal preference is its significance to better learning. It is believed that these learning preferences can serve as basis for strategies in both teaching and learning (Baume & Fleming, 2006). Learners when taught with their learning styles, visual, auditory and kinaesthetic preferences, will learn more effectively (Laptad, 2008). He (2009) further advanced the need of teacher's knowledge of the learning styles to be applied in the teaching practice. The teaching-learning process entails important responsibilities from the teacher including well-planned classroom management strategies (Faryadi, 2012). Classroom management aims to lead the learners toward better learning opportunities with minimized presence of misbehaviors (Sieberer-Nagler, 2016). Several studies claimed that there is a positive relationship on the success or failure of the teaching-learning process with the classroom management provided by the teacher (Moore, 2008; Sowell, 2013) and appropriate classroom management techniques ensure the success of the learning process (Gujjar & Naoreen, 2009). Teachers believe that it is the most significant quality that they must possess (Bozkuş & Taştan, 2016).

For the pre-service teachers, classroom management is set on top of their "professional development needs" as neophytes in teaching (Ritz et. al, 2014). According to Emmer & Stough (2001) as cited by Simonsen et. al. (2008), classroom management is an essential part of pre- service teachers' training. However, classroom management among pre-service teachers may not come easy in beginning teaching. Pre-service teachers tend to become frustrated when dealing with difficult management situations in class (Pellegrino, 2010). Therefore, there is a need to find ways to provide support to pre-service teachers in using effective classroom management techniques (Darney, 2013).

One of the most important roles of the teacher is to appropriately employ classroom management techniques through the awareness of the learners' learning styles. Though this cannot guarantee greater learner achievement, aligning these learning styles with the teacher's classroom management strategies claims to be very beneficial towards having a better teaching- learning experience (Gilakjani, 2012). The researcher used the aforementioned studies as basis for the conceptualization of the study. Thus, the researcher uphold the need to support pre- service teachers in providing appropriate classroom management strategies with the components of VAK Model and embedding each part; visual, auditory and kinesthetic, in the development of a toolkit for classroom management.

The process flow of this study adhered to the Analysis, Design, Development, Implement and Evaluate, (ADDIE) model of the Instructional Systems Design. Moreover, the ADDIE model has been known to be an effective approach in developing various instructional products (Aldoobie, 2015) and a well-known framework for research and development (Mayfield, 2011).

In this study, the analysis stage was the beginning of the formulation of the toolkit. During this stage, interviews, observations and researches together with the personal experiences of the researcher about problems of pre-service teachers in classroom management took place. The analysis stage led to the creating of plan specifying the goals in accordance with the recognized classroom management problems met by early childhood education pre-service teachers.

The design stage of the ADDIE model was the crafting of the visual, auditory and kinesthetic or VAK model-based classroom management toolkit. The identified, analyzed and evaluated classroom management problems of early childhood education pre-service teachers served as basis in designing the toolkit. Each part of the toolkit contained several strategies intended for the classroom management of young learners. The desired toolkit encompassed varied techniques in each area of learning. The contents on the visual preference category were the proposed printed symbolic images for classroom management. In the auditory preference category, the toolkit contained audio compilation, oral statements and objects that produce a sound which can be utilized in managing the class. The last part of the toolkit was the kinesthetic preference. This preference contained simulating activities to manage the class.

The development stage on ADDIE model was the validation of experts of the designed toolkit. This part of the process was essential in order to achieve the desired toolkit. Two experts on the field of research and early childhood education validated and evaluated the classroom management toolkit through answering the researcher-modified Survey/Interview Validation Rubric for Expert Panel (VREP) by Simon and White (2011). Based on the results of the evaluation, the classroom management toolkit was subjected to necessary revisions.

The implementation stage of the ADDIE model followed through after the experts' validation. The implementation stage began with orientation, preparation and organization of the implementers involved namely: the Kindergarten to Grade 3 pre-service teachers. The researcher oriented the implementers of the toolkit with thorough explanation on each part of the toolkit. The implementers were given the necessary materials needed to achieve the activities on each of the visual, auditory and kinesthetic category. The implementation process lasted until the on- campus training of the pre-service teachers.

The final process in ADDIE model was the evaluation stage which was essential in all aspects of developing the toolkit. The analysis, design, development and implementation stages of the ADDIE model were done with the integration of evaluation. However, the major evaluation happened after the utilization of the toolkit by the implementers. After the utilization of the implementers of the VAK model-based classroom management toolkit, the researcher- modified Survey/Interview Validation Rubric for Expert Panel (VREP) was used to evaluate the use of the toolkit. The implementers also had statements and suggestions based on their use of the toolkit. The pupils of the implementers, the Kindergarten to Grade 3 pupils had also evaluated the use of the pre-service teachers of the VAK model-based classroom management toolkit with the use of a pictorial Likert scale.

Participants of the Study

The toolkit was implemented by the two-hundred thirty four (234) Bachelor of Early Childhood Education and Bachelor of Elementary Education pre-service teachers of the College of Education in the elementary laboratory school of a state university in the province of Bukidnon. These pre-service teachers taught Kindergarten to Grade 3 classes during the Second Semester of School Year 2017-2018. Among these 234 pre-service teachers, one hundred (100) of them were purposively chosen to validate the VAK model-based classroom management toolkit for pre-service teachers.

Research Design

This study utilized the embedded mixed method research design. This method involved the collection and analysis of both quantitative and qualitative data which are essential in constructing the overall design (Creswell, 2014). The quantitative data were gathered through the use of the researcher-modified Survey/Interview Validation Rubric for Expert Panel (VREP) and pictorial Likert scale. The qualitative data were gathered through the written comments of the experts and implementers. The development of a Visual, Auditory and Kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers was constructed through the presented process flow of the study and the aforementioned design.

Research Instrument

The process of developing the Visual, Auditory and Kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers had undergone the validity testing of experts in the field of education as well as the members of the panel. The experts and implementers of the study assessed through the researcher-modified Survey/Interview Validation Rubric for Expert Panel (VREP) of Simon and White (2011). The pupils of the implementers rated the toolkit through a pictorial Likert scale of Dickensen, Johnson, and Reynolds-Keefer (2009).

Sampling Procedure

The participants of the study were chosen through purposive sampling. The researcher included all the pre-service teachers who were assigned in the Kindergarten to Grade 3 classes. One hundred (100) out of the 234 implementers were identified to evaluate the toolkit using the researcher-modified Validation Rubric for Expert Panel with the criteria,that the implementers had utilized the toolkit many times and that majority of the activities in the toolkit during the process of implementation was utilized. A focused group of twenty-two 22 implementers, who utilized the toolkit in Kindergarten and Grade 3, was formed to distinguish the utilization of the toolkit in the two different levels. Each of the classes from Kindergarten to Grade 3 was well- represented in the conduct of the study.

Scoring Procedure

To interpret the assessment of the pre-service teachers of the activities and strategies presented in the toolkit, the following scoring scale was used; thus:

Range	Interpretation
3.51 – 4.00	Exceeds Expectations
2.51 – 3.50	Meets Expectations
1.51 – 2.50	Below Expectations
1.00 – 1.50	Not Acceptable

To interpret the pupils' assessment of the Visual, Auditory and Kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers, frequency count and percentage was used with the following pictorial Likert scale:

Angry/Very Sad Sad Happy Very Happy

Data Gathering Procedure

The gathering of data of the desired study had undergone the proper protocol. A letter of intent to the experts and implementers who validated the Visual, Auditory and Kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers had been given. The data gathered through the rating of the researcher-modified survey/interview validation rubric for expert panel (VREP) with comments and suggestions of the two (2) experts in the field of research and early childhood education were set as the reference for revisions of the proposed VAK model-based classroom management toolkit for pre-service teachers.

The comments and suggestions of the implementers were also taken into consideration to fulfill the revision for the final toolkit. Parents consent form was given to the pupils of the implementers, who belonged to the Kindergarten to Grade 3 classes. The pupils rated their overall reaction with the utilization of the implementers of the VAK model-based classroom management toolkit with the use of a pictorial Likert scale.

Statistical Treatment

Descriptive statistics from results of researcher-modified survey/interview validation rubric for expert panel (VREP) of the toolkit was done and was used for the organization of the data. The results would correspond to the presented scoring procedure. Frequency count and percentage were used for the analysis of the pictorial Likert scale answered by the pupils.

Findings

The development of the VAK model-based classroom management toolkit for pre-service teachers was guided by the ADDIE model. The analysis done through the observations, experiences and personal ideas of the researcher and compiled researches led to the initial design of the toolkit. The toolkit is divided into three (3) categories namely: visual, auditory and kinesthetic category.

After the researcher analyzed and designed, the formulated toolkit was subjected to evaluation of experts. These were experts in the field of early childhood education and instructional material making. The experts evaluated and validated the content of the toolkit using the researcher-modified Survey/Interview Validation Rubric for Expert Panel (VREP). Thus, written specific comments and suggestions as regard, content of the toolkit were elicited.

Considering the comments and suggestions of the implementers of the toolkit and the process taken by the researcher with the use of ADDIE model, the following were integrated in the final revision of the VAK model-based classroom management toolkit for pre-service teachers. The following summarizes the result of the study:

1. All the contents of the toolkit were rated by the implementers as *exceeds expectations*;

Table 1. Summary Table from the Implementers' Assessment

Toolkit Content	Mean	Interpretation
7 Rules in Class	3.85	Exceeds Expectations
Positive Classroom Reminders	3.82	Exceeds Expectations
"Untouchable" Rewards	3.75	Exceeds Expectations
"A-10-tion" Chants	3.80	Exceeds Expectations
"Manage Time with a Rhyme"	3.78	Exceeds Expectations
"8t's" Time	3.78	Exceeds Expectations
"Calm Me Down to 10"	3.77	Exceeds Expectations
"Less than a-Minute Breakers"	3.82	Exceeds Expectations
Grand Mean	3.80	Exceeds Expectations

2. Majority of the implementers of the toolkit find the toolkit as *effective*, *useful* and *helpful*; and

Table 2. Summary of Themes from the Comments of the Implementers

Toolkit Content	Effective	Themes Useful	Helpful
7 Rules in Class	53	13	17
Positive Classroom Reminders	16	20	20
Untouchable Rewards	52	10	18
A-10-tion Chants	12	8	14
Manage Time with a Rhyme	9	7	6
8t's Time	15	4	6
Calm Me Down to 10	18	11	6
Less than a-Minute Breakers	3	9	7
Total	178	82	94

3. Majority of the pupils of the implementers were *very happy* with their experience with the toolkit.

Table 3. Frequency and Percentage on the Pupils' Assessment of the Visual, Auditory and Kinesthetic (VAK) Model-Based Classroom Management Toolkit for Pre-Service Teachers

Range	Description	Frequency	Percentage
3.51 – 4.00	Very Happy	205	74.00
2.51 – 3.50	Happy	41	15.00
1.51 – 2.50	Sad	26	9.00
1.00 – 1.50	Very Sad/Angry	6	2.00
	Total	277	100.00

The main purpose of the research was to develop a visual, auditory and kinesthetic (VAK) model-based classroom management toolkit for pre-service teachers. Specifically, this study achieved the following objectives: Formulate toolkit; validate toolkit; and finally the revised toolkit.

Conclusion

Although visual, auditory and kinesthetic (VAK) model of Neil Fleming (2001) was known to be just one of the many learning styles, the researcher believes it is the most suitable model to serve as the anchor of this study. Evidently, there is a positive implication of matching these learning styles of the learners and the classroom management of the teachers in the teaching-learning process. The use of analysis, design, development, implementation and evaluation (ADDIE) model was deemed to be the most appropriate for it clearly directed the process of developing the toolkit. With the developed VAK model-based classroom management toolkit for pre-service teachers being assessed, revised and implemented, the results have shown that the objectives of the study are achieved. The VAK model-based classroom management toolkit is effective, useful and helpful for pre-service teachers.

Recommendations

From the major findings and conclusions of the study, the following recommendations are hereby presented:

1. Higher educational institutions that train pre-service teachers may utilize the developed VAK model-based classroom management toolkit for pre-service teachers;
2. Teachers in early childhood levels may also make use of the developed VAK model-based classroom management toolkit; and
3. Future studies may be planned out for the improvement in terms of more classroom management strategies on the VAK model-based classroom management toolkit for pre-service teachers.

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Cognitive and Psychosocial Dispositions: Influence on Self -Perceived Employability Among First Batch of Senior High School Graduates

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ABSTRACT

Philippines saw another massive reform in its educational system when the K-12 Program was signed into law back within 2013. Presuming that cognitive and psychosocial dispositions are central to the Senior High School graduates' decisions after Grade 12, this study verified the graduates' assessments of their academic self-efficacy, self-regulated learning, career decision self-efficacy, and self-perceived employability. More than 1500 completers from three major higher educational institutions of a city in Southern Philippines participated in the study. Using descriptive research design, a modified survey questionnaire that went through rigid construct validity and reliability processes was the main data gathering tool. This was complemented with qualitative information using focus group discussions. The findings revealed that there was a moderate assessment of their self-perceived employability and that self-regulated learning is a strong predictor of self-perceived employability. This research hoped to provide solid information for curriculum enhancement and policy formulation of the Philippine Educational system specifically for the Basic Education.

Keywords

Self-Perceived Employability, Self-Regulated Learning, Career Decision Self-Efficacy, Academic Self Efficacy,

Introduction

The massive Philippine educational reform highlighted by the K to 12 Program saw the first batch of Grade 12 completers in March 2018. The three years addition to the country's Basic Education was not only meant for the Philippine Educational Framework to be at par with global standards; the said framework also aimed to provide sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment, or entrepreneurship (Republic Act No. 10533). After graduation where completers are already at least 18 years old, the K-12 Program was designed to harness them with needed basic competencies for independence and to prepare them for tertiary education and for gainful employment. Whatever choices they may have, this study asserts that these learners would view themselves as productive adolescents capable of engaging in whether they pursue higher education or choose to be employed. It is in this line of thought that this study was conceptualized.

There is a dearth of studies that has been conducted as to the status of the graduates' cognitive and psychosocial dispositions needed to undertake tertiary education or to embark into employment or both. Employers have openly expressed their preference for desirable dispositions and /or pleasant attitudes much more than what is reflected in applicants' resumes. Taylor (2011) in his Harvard Business Review article quoted "we recruit for attitude, train for skills." Employers prioritize job applicants with the right attitude to work rather than the skills listed on their CVs, new research shows (Tyler, 2011).

The industry sector, specifically, the Philippine Chamber of Commerce and Industry (PCCI) are apprehensive of the first batch of K-12 graduates' work capabilities. They further recounted that the minimum requirement of 80 hours or 2 weeks for the students' on-the-job training was not enough to prepare them for skilled jobs (The Filipino Times, 2018). This is an area of research that needs to be expanded or further explored for HEIs to cope effectively with whatever learning difficulties or academic deficits that may confront these new batches of graduates.

Studies reported that learners' cognitive and psychosocial dispositions such as self-regulated learning and academic self-efficacy and career decision self -efficacy, may be linked to their self-perceived employability, a construct needed to have a positive outlook toward work. Some scholars emphasized that academic skills are important to employability. A career model on generic employability suggests that willingness to learn be included within the skills that should be developed among the graduates (Pool & Sewell, 2007; Sewell & Pool, 2010). Further, Yorke and Knight (2006) outlined that employability is influenced by understanding, skills, efficacy beliefs, and metacognition. Taking these employability models together, strategies that guide students in developing a capacity for self-regulation and in learning how to learn to be a lifelong learner are particularly important for the enhancement of graduates' employability (Qenani, MacDougall, & Sexton, 2014). The collective efforts of Lapan (2004) and Bluestein (2006) in Lu (2016) suggested that self- regulated learning empowers students to be successful learners with a highly skilled and occupational competence which might augment volition in working. This, in fact, can serve to enhance students' perceptions of the academic and occupational competencies needed in highly skilled workforce.

This study intended to provide solid information for curriculum enhancement of the involved higher education institutions. The result may also contribute initial trigger data to find relevance in expanding the study to wider population for policy formulation in the Philippine Educational system specifically for the basic education. This research also hoped to contribute to the scant investigations on the Grade 12 graduates' entry to higher education and work choice particularly in the Philippines.

Framework

It is postulated that self-perceived employability is influenced by an individual's academic self-efficacy, self-regulated learning, and career decision self-efficacy. It is further assumed that these are constructs can gauge K-12 completers' capability for college work or for gainful employment or for both. Thus, this concept is anchored on the model of Rothwell, Herbert & Rothwell (2008) on self-perceived employability as discussed by Lu (2016); Zimmerman's (2013) Self-regulated Learning Model; Bandura's Social Cognitive Theory (1997); and Taylor & Betz Career Decision Self Efficacy (Reddan, 2015). The succeeding paragraphs explain the salient concepts used as framework of the study.

Self-Perceived Employability. The concept of self-perceived employability is lifted from the dissertation of Lu (2016) on "Self- regulated learning in college students' work volition: The mediating effects of self- efficacy and self-perceived employability." As cited, employability is defined as the individual's perception of one's possibilities to obtain and maintain employment (Vanhercke & et al., 2014). Specifically, self-perceived employability is the ability to attain sustainable employment appropriate to one's field of study. The model of Rothwell, Herbert & Rothwell (2008) organizes self- perceived employability into four components: self-belief, the state of external labor market, one's alma mater and one's field of study. Self-belief points to the individual's skills and behavior (Rothwell, Jewell, & Hardie, 2009); sense of understanding of one's attributes relating to job knowledge and skills mastery and personal confidence and efficacy (Rothwell et al, 2008). Further, the reputation or the perception of the university's reputation where the student belongs is also a probable asset for the individual. The field of individual study or academic major pertains to the individual academic career. This academic discipline is said to influence individual career identity, employability outcomes and perception of the status and credibility of one's individual field of study. Similarly, the variation of the external labor market affects the individual's employability (Lu, 2016).

In the actual study, statements for self-belief such as, but were not limited to: "*the skills and abilities that I possess are what employers are looking for"; "I am generally confident of success in job interviews and selection events"; and "I feel I could get any job so long as my skills and experience are reasonably relevant."* Likewise, among the statements for state of labor market and one's alma mater were: "*People in the career I am aiming for are in high demand in the external labor market*" and "*Employers target this University to recruit individuals from my academic track."* For the students' academic field of study, an item indicator: *"My chosen strand rank(s) highly in terms of social status"* was part of the data gathered.

Lu (2016) also cited several studies that have reported self-efficacy to be associated with gaining re-employment (Hillage, & Pollard, 1998; McArdle, et.al., 2007; Pinquart, Juang, & Silbereisen, 2003; Regenold, Sherman, & Fenzel, 1999; Vinokur & Schul, 2002). Moreover, Bandura (1997) stated that "individuals who approached the employment problem with confidence in their capability to find a job were able to delve out job opportunities and present themselves sufficiently well to gain job offers." Bandura further hold that self-efficacy can be the confidence that an individual has in his or her ability to carry out a task that is important in "dealing with the social realities of work situations"

Self-Regulated Learning. Self-regulated learning (SRL) is a core conceptual framework to understand the cognitive, motivational, and emotional aspects of learning. Spawned by Zimmerman (2002), self-regulation is the process of transforming one's intelligence into academic skills, guiding it to self. Self-regulatory takes result oriented behavior and ideas that it creates on its own as reference. Self-regulatory is significant because the purpose of education is to enhance lifelong learning skills. After graduating from high school or university, young adults can learn very important abilities through unofficial ways (Zimmerman, 2002). In this study, self-regulatory includes strategic performance adjusting processes and self-monitoring (Zimmerman, 2010). Moreover, self-regulated learning is regarded as an important skill in career development, can serve to enhance students' perceptions of the academic and occupational competencies needed in a highly skilled work force (Lapan, 2004). The structure and function of self-regulatory process consists of performance phase, self-reflection phase and forethought phase (Zimmerman, 2002; Zimmerman & Kitsantas, 2005; Zimmerman & Schunk, 2004; Di Benedetto & Zimmerman, 2013).

Performance phase entails self-control and self-observation phases, and takes the specific method chosen at self-control precaution phase as reference. The self-reflection phase, which forms the structure of self- regulatory process, consists of self-judgment and self-reaction phases. Self-judgment takes the comparison of self-observation performances under certain circumstances and affects the importance of goal achieving and its purpose features (Zimmerman, 2002;1994). If student knows that similar others performed a task, one can reach increased levels of self-efficacy and motivation (Schunk, 1987).

Forethought phase is separated into: self-motivation beliefs and task. It prepares for individuals' learning (Zimmerman, 2002; Zimmerman & Kitsantas, 2005). Task analysis includes goal setting and strategic planning (Zimmerman, 2002; DiBenedetto & Zimmerman, 2013). Self-regulation is situational specific, which means that learners do not engage in self-regulation equally in all domains (Schunk & Zimmerman, 2003). Self-regulatory includes self-monitoring, which involves observing one's own performance and output (Zimmerman & Kitsantas, 2005). Further, Lapan (2004) posited that individuals who are actively in the self-regulatory cycle of forethought, performance-volitional control, and self- reflection phases and then, under more self-determined or self-regulated control, engage in a process of internalizing and integrating uninteresting academic tasks. The author further recounted that such individuals are more likely to accomplish identified and valued academic outcomes and "experience a sense of competence and self-direction in their everyday learning tasks." With the foregoing discussion, self-regulated learning may have a strong bearing on the learners' academic self-efficacy and enhance self-perceived employability.

Career Decision Self-Efficacy. There is an increasing interest in the processes involved in career decisions (Miller in Reddan, 2015). Career decision self-efficacy has been placed into significant research such as those espoused by Taylor and Betz (1983). It is described as a measure of an individual's degree of belief that one can successfully complete tasks necessary in making career decisions (Reddan, 2015). Career Decision Self Efficacy (CDSE) is a salient construct in understanding the career decision-making process (Betz, Hammond & Multon in Jin, Ye & Watkins, 2012). Moreover, it is regarded as a crucial element in an individual's career interests, goals, choices, experiences and performances (Jo & et.al., 2016) implying that this is also making a choice for a profession, education program, job or school (Dogan, 2015). It is the confidence enacted when making effective career decisions and generating positive outcomes in relation to career development roles. These roles include competencies regarding accurate self-evaluation, collecting information about vocations, goal setting, planning and problem-solving (Betz, 2000), which are also basic of academic processes. It is then likely that career decision self-efficacy is significantly associated with self-perceived employability.

Academic Self Efficacy. Literature has established that academic self-efficacy has something to do with an individual's belief (conviction) that they can successfully achieve at designated level on an academic task or attain a specific academic goal (Bandura, 1997; Eccles & Wigfield, 2002; Linenbrink & Pintrich, 2002a; Schunk & Pajares, 2002). Self-efficacy theory suggests that academic self-efficacy may vary in strength as a function of task difficulty—some individuals may believe they are most efficacious on difficult tasks, while others only on easier tasks; self-efficacy is believed to be situational in nature rather than being viewed as a stable trait (Linnenbrink & Pintrich, 2002). As outlined by Bandura (1997), students with high academic self-efficacy regard difficulties as challenges to be mastered instead of threats and set goals to meet the challenges; are committed to the academic goals they set; have a task-diagnostic orientation, which provides useful feedback to improve performance, rather than a self-diagnostic orientation, which reinforces the student's low expectation about what he or she can accomplish; view failures as a result of insufficient effort or knowledge, not as a deficiency of aptitude; and increase their efforts in cases of failure to achieve the goals they have set. This highlights the reciprocal or cyclical relationships among the environment, self, and behaviors posited by Bandura's (1977) social cognitive theory as discussed by Sharma and Nasa (2014).

For the past few years, the discussion of self-efficacy has extended to the impact on employability as well. In some employability research, self-efficacy is regarded as one of its components (Knight & Yorke, 2004; Pool & Sewell, 2007). In other words, self-efficacy is one of the important traits that give access to employability (McArdle & et.al., 2007). As such, employability could be influenced by self-efficacy. The process of aligning career decision making with educational requirements has increasingly become complex with evolution of advanced technology in the world today than before (Onoyase & Onoyase, 2009).

The foregoing conceptual discussions support the arguments that self-perceived employability may have links on students' dispositions and can be explained by self-regulated learning, academic self-efficacy, and career-decision self-efficacy. Evidently, the constructs advanced by Zimmerman (2013) on Self-regulated Learning model; Bandura's Social Cognitive Theory (1977); Taylor and Betz Career Decision Self Efficacy (Reddan, 2015); and Self-Perceived Employability of Rothwell et. al., (2008) firmed up the assumptions advanced in this empirical study.

Statement of the Problem

This study attempted to establish valid and reliable scales that could appropriately measure the academic self-efficacy, self-regulated learning, self-perceived employability and career decision self-efficacy in the local setting and looked into the self-assessments of Grade 12 completers' self-perceived employability, self-regulated learning, academic self-efficacy, and career decision self-efficacy; it likewise determined the influence of self-regulated learning, academic self-efficacy, and career decision self-efficacy dispositions on their self-perceived employability.

Methodology

Using descriptive correlational research design, specifically the causal comparative method, this study was conducted in three higher education institutions in a major city of Southern Philippines with 1,509

Grade 12 completers participating. Recognizing the diversity of the three institutions, the researchers conducted the tests of normality on the data gathered from the scaled instruments. To gather the quantitative data, the Cognitive and Psychosocial Preparedness Survey Questionnaire for Grade 12 Completers was used. This adapted instrument was based from the various researchers espousing the four(4) main constructs of this study. The first part was the fifteen items of General Academic Self-Efficacy Questionnaire based on Bandura's Social Cognitive Theory (Jerusalem & Schwarzer, 1992; Kabara & Turner, 2017); the second part of twenty seven items were indicators of Self-regulated Learning modified from Zimmerman, (2000), Efklides (2011) and Pintrich (2000). The third part consisted of twelve items that indicated Self-Perceived Employability by Rothwell, Herbert, & Rothwell (2008) which was used by Lu (2016); and Career Decision Self-Efficacy with sixteen items derived from Betz &Taylor (2012). Exploratory factor analysis conducted for all the four sets of instruments provided evidence of construct validity after these were modified. Focus group discussions and key informant interviews were conducted to give in depth information of the quantitative data. To organize the data, descriptive statistics and multiple linear regressions were used to further attain the objectives of the study.

Furthermore, evidence of student learning through Grade Point Average was not part of the study because student-completers had different subjects by strands and tracks. The use of students' General Point Average (GPA) that has direct bearing on their learning outcome is a limitation of the study. The student- completers had different strands ranging from Humanities (HUMSS); Accountancy, Business and Management (ABM); and Science, Technology, Engineering and Mathematics (STEM). There were other students who were in another track: Technology and Vocational (TECH VOC). Moreover, the three participating institutions do not have common grading system; hence, GPA could not be part of the study.

Results

The Confidence and Construct Validity and Reliability of the Instruments. To establish the confidence and construct validity of the instruments, the exploratory factor analysis was used for each construct. Table 1 shows the results of the procedure. For want of space, the item means and factor loadings could not be displayed. However, a summary of the results to support the construct validity of the scale is reflected in Table 1.

Table 1. Summary of the Confidence and Construct Validity Results of the Instruments

Scales	Explained Variance	Cronbach's Alpha	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity
Self-Perceived Employability	53.57%	.876	.903	6507.71*
Self-Regulated Learning	53.86%	.935	.954	17453.32*
Academic Self-Efficacy	48.41%	.889	.918	1473.540*
Career Decision Self-Efficacy	61.08%	.940	.967	14397.84*

*p<.05

The confidence calculation of scores obtained from each scale was performed by applying the internal consistency method, and the values of Cronbach´s alpha are presented as follows: .876 for self-perceived employability; .935 for self-regulated learning; .889 for academic self-efficacy and .940 for career decision self-efficacy. These figures denote that the indicators identified are reliable measures of the construct.

To establish construct validity, exploratory factor analysis was also conducted and the Kaiser-Meyer-Olkin measure of sampling adequacy reached the value of .903(self-perceived employability); .954 (self-regulated learning); .918 (career decision self-efficacy). These figures imply that there was adequate sampling. Furthermore, the factor analysis yielded Bartlett´s Test of Sphericity expressed in chi-square significant values that are less than p of .05, establishing that the correlation matrices are not identity matrices. Likewise, the factor weights are explained by the total variances (Ferrando in Alegre, 2014). The above data show that the scales used in this study possessed construct validity.

Normality Measures and Descriptives. Table 2 shows the normality measures, mean of the means for each variable with standard deviations and descriptions of the participants' responses. Skewness and kurtosis values of the constructs are highly acceptable as these are within the accepted □□2 range. Most of the values are less than one and nearing zero, except for career decision self-efficacy which is 1.142. The modified instrument used a 5-point scale with 5 as the highest and 1 as the lowest.

Table 2. Normality Measures, Means, Standard Deviation, and Descriptions

Variables	S*	K**	Mean	SD	Descriptions
Self-Perceived Employability	-.460	.968	*4.10*	.49	Moderately Aware
Self-Regulated Learning	-.294	-.343	*3.97*	.49	Often
Academic Self-Efficacy	-.380	.104	*3.95*	.51	Somewhat true to me
Career Decision Self Efficacy	-.809	1.142	*3.92*	.63	Much Confidence

(n=1,509); *Skewness; **Kurtosis

The table further shows that although *self-perceived employability* (M=4.10, SD =.49) was rated by the Grade 12 completers with the highest mean score, it is described as 'moderately aware' implying that generally the participants had moderate belief of their capability to get through sustainable employment. This study used the Rothwell, Herbert and Rothwell (2008) Self-Perceived Employability Model where there were four components: self-belief, the state of external labor market, one's alma mater and one's field of study. For self-belief, item on *"I am generally confident of success in job interviews and selection events*" scored lowest in the study 3.97, SD=.72. Nevertheless, the item indicator *"the degree I will pursue leads to a specific career that's generally perceived as highly desirable*" had the highest mean score of 4.20, SD =.70, although still described as 'moderately aware." This finding resonated with the participants' disclosures when asked during the focus group discussion that if *there are chances for them to get a job, would they be ready for work?* Out of 64 participants, there were 23 of them who responded that they were not ready for work and 10 of them were uncertain of their responses. More than 50 percent or 34 claimed that they were prepared for work. The result of the focused group discussion evidently supports the moderate belief of the participants of their capability to get sustainable employment. Even if the finding on self-perceived employability is only moderate, there is the possibility of occurrence of the self-belief phenomenon emphasizing person's belief on one's skills and behavior; and sense of understanding of one's attributes relating to job knowledge and skills mastery Rothwell, Jewell, and Hardie (2009); and personal confidence and efficacy as posited by Rothwell et al. (2008). Nevertheless, there is a need to look into the factor which influences self-perceived employability so that appropriate measures to develop self-perceived employability in the lived experience of students in school can be addressed.

Table 3. Zero-Order Correlations of Variables

Variables	1	2	3	4
1. Self-Perceived Employability	1			
2. Self-Regulated Learning	.449**	1		
3. Academic Self-Efficacy	.396**	.834**	1	
4. Career Decision Self Efficacy	.413**	.450**	.412**	1

**. Correlation is significant at the 0.01 level (2-tailed)

The zero-order correlation of variables in Table 3 shows the significant relationship of self-perceived employability to self-regulated learning (r=.449, p=.000); to academic self-efficacy (r=.396, p=000) and to career decision self-efficacy (r=.413, p=.000). The data suggest that self-perceived employability is significantly linked with self-regulated learning, academic self-efficacy, and career decision self-efficacy. In some employability research, self-efficacy is regarded as one of its components (Knight & Yorke, 2004; Pool & Sewell, 2007). Self-efficacy is one of the important traits that give access to employability (McArdle & et. al., 2007). Employability, then, could be influenced by self-efficacy (Zimmerman, 2010). Lu (2016) also cited a number of studies that reported self-efficacy to be associated with gaining re- employment (Hillage, & Pollard, 1998; McArdle & et al., 2007; Pinquart, Juang, & Silbereisen, 2003; Regenold, Sherman, & Fenzel, 1999; Vinokur & Schul, 2002). Moreover, self-regulated learning is regarded as an important skill in career development which can enhance students' perceptions of the academic and occupational competencies needed in a highly skilled work force (Lapan, 2004). It is the confidence enacted when making effective career decisions and generating positive outcomes in relation to career development roles. These roles include competencies regarding accurate self-evaluation, collecting information about vocations, goal setting, planning and problem-solving (Betz, 2000), which are also basic of academic processes. Seeing the critical role of self -regulated learning in career development, the researchers use this premise to assume that self-regulated learning can be associated with self-perceived employability.

To determine the influencing factors of self-perceived employability, Table 4 shows the result of the stepwise regression analysis between the independent variables (self-regulated learning, academic self-efficacy and career decision self-efficacy) and self-perceived employability.

Table 4 Multiple Linear Regression Analysis between the Independent Variables and Self-Perceived Employability (SPE)

Independent Variables	Regression Coefficients	t-value	P-Value
Self-Regulated Learning (SRL)	.329	13.251	.000
Career Decision Self Efficacy (CDSE)	.208	10.647	.000

Dependent variable: Self-perceived employability (SPE)

Constant :	1.983
Adjusted R^2:	0.256
F-Value	261.009
Sig. Level	0.000

The adjusted R^2 value explains the amount of influence of *self-regulated learning* and *career decision efficacy* taken as one, on self-perceived employability. This indicates that 25.6% of the change in *self-perceived employability* could be attributed to the two variables. With f-value of 261.009, the model is highly significant at 0.000. Thus, the two independent variables can explain and or predict the *self-perceived employability*. The final model is represented as:

SPE = 1.983 + 0.329 SRL + 0.108 CDSE

Moreover, the data in the table disclose that for every unit change in the self-regulated learning, there is a corresponding increase of 0.329 or 32.9% in the self-perceived employability. This further means that the higher the self-regulated learning of students, the higher would be their self-perceived employability. This finding is in consonance with the postulation of McArdle & et.al. (2007) espousing that self-efficacy is one of the important traits that give access to employability. The authors likewise advanced that employability is influenced by self-efficacy. Furthermore, self-regulated learning is considered an important skill in career development which can enhance students' perceptions of the academic and occupational competencies needed in a highly skilled work force (Lapan, 2004).

The table further disclosed the coefficient that implies of every unit of increase in the graduate career decision self-efficacy; there is a corresponding increase of 0.208 or 20.8% in the self-perceived employability. This also means that the higher the graduate-respondents' career decision self-efficacy, the higher would be their self-perceived employability. This finding finds support in the supposition of Dogan (2015) which emphasized career decision self-efficacy as making a choice for a profession or a job which can generate positive outcomes in career development roles; hence, it is more likely to happen that learners who have higher self-efficacy will have higher tendency to have strong beliefs of their capacity for gainful employment.

Conclusions and Recommendations

The completer-respondents in this study have attained certain levels of cognitive and psychosocial dispositions that can be characterized of their hesitance to enter the world of work whether on full time or part time basis. Given the backdrop of the K-12 Program, which expects that after completion, these students although may pursue college work can also be capable of gainful employment. The moderate assessment for self-perceived employability leaves a gap for higher education institutions to address so that students while studying, their readiness to be in a gainful employment will also be in place. Thus, it is incumbent for the Basic Education system to strengthen the K-12 Program to enhance the completers'self-regulated learning which is a strong predictor of self-perceived employability.

Consequently, given that scales that have undergone rigid construct validity and reliability measures, the instrument generated in this study, may be considered a contribution to the field of institutional research in education. Nevertheless, since the study is limited only to the cognitive and psychosocial dispositions of the K to 12 completers, an expanded study may be considered to include predictors of evidences of learning outcomes to a much wider population considering geographical scope for wider generalizability.

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Comparative Study on Teaching Profession: East Asia, North America, and North Europe

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ABSTRACT

The purpose of this study is to investigate and compare three regions, East Asia, North Europe, and North America with teachers' professional performance and development via Teaching and Learning International Survey (TALIS) data initiated by OECD mainly focusing on the relationships among school climate, teacher professional development, and teaching quality. We employed structural equation modeling (SEM) to investigate the relationship among these three concepts via 15,230 samples collected from TALIS in 2013. According to the path analysis, in the influence of school climate on professional development needs, it is showed that the result of East Asian region group is positive while that of the North European countries, the United States and Canada are negative. The study also finds the impact of professional development needs on teaching quality is positive in East Asia, but negative in the Nordic region and the United States and Canada.

Keywords

Comparative study, School climate, TALIS, Teacher profession development

Introduction

The rapidly changing environment has transformed school into a multi-functioning role and being a teacher is not an exception, such as teaching in increasingly multicultural classrooms, designing instructional materials for those with special learning needs, using information and communication technologies for teaching more effectively, being more active in involving parents in schools. Since the challenges have confronted with the teaching quality, education systems thus are required to seek a professional development mechanism to prepare teachers with qualified capacities. As such, teacher professional development aims to help teachers acquire and expand the knowledge and skills needed for their instruction. Through the growth of teacher professionalism, both teachers and the schools they serve can translate the experiences research and practices derived from teachers learning into benefits to improve student learning achievement and meet their needs (Darling-Hammond, 1998).

Furthermore, linkage between stakeholders such as school community and external organizations can be shaped as a conducive culture to contribute to school environment and development, as well as be more involved in educational policy (Avalos, 2011). There is existing evidence supporting that professional development for teachers can trigger effects on student learning. Rosenfeld and Rosenfeld (2008) found that using professional development activities as a medium can enhance a teacher's belief in student learning. In Yoon, Duncan, Lee, Scarloss, and Shapley's study (2007), they also found that teachers who continued their professional development for more than 49 hours on average could improve students' learning outcomes by about 21%, which shows that professional development of teachers has a positive effect on student learning.

On the other hand, according to Chen and Ho (2016), the school climate, teacher professional development needs and teaching quality in North America and East Asia, regional differences were identified. Teachers in East Asia demonstrated higher interests and needs in professional development than those in North America; nonetheless, East Asian teachers exhibited lower self-rating scores for their teaching quality. On contrary, despite that North American teachers displayed lower needs for professional development, they reported higher teacher quality instead. It is further stressed that higher demands on teaching observation were implemented by East Asian teachers, who also expressed higher extent of needs and supports for class management and self-development. It was also worth mentioning that teachers in East Asia preferred using standardized tests to assess student learning outcomes and hesitated to provide individual feedbacks for students spontaneously.

In spite that teacher professional development can cause significant and positive effects on student learning, other factors which may influence the outcomes of student learning are likely to be overlooked and only few studies have investigated the potential variables. Chen and Ho (2016) further suggested that the discrepancies with respect to teaching ability and practical management can be ascribed to school climate in East Asian countries due to the highly competition for school admission or "diplomaism". This phenomenon is expected to force school teachers to be more concerned with academic performances of students rather than creativity of those. Lee (2005) provided the empirical support of the view, stating that the school climate in East Asian countries including South Korea and Japan proved to have more significant influence on student learning than in the United States.

Although there is no consistent or unifying definition of school climate, it is widely agreed that it is formed by a group of stakeholders who endeavor to establish the links among parents, community, and school staff to jointly create a network of supporting asset for students through various types of activities (Cohen, McCabe, Michelli, & Pickeral, 2009). School climate functions as a facilitator to reinforce teaching performance and even enrich teachers' motivation. Since "diplomaism" prevails in East Asian countries, students' academic performance is highly valued by society, forming an atmosphere of academic demands in both schools and family, which further leads to different results of student learning (Lee, 2005).

On the other hand, the schools in the United States tend to embrace cooperative learning and be attentive to nurturing students' learning interests (Black & Deci, 2000). These characteristics yield a distinct school climate differentiating from those in East Asian countries. Based on these observations, it can be expected that regional cultural differences will lead to a different degree of relationship and influence among school climate, teacher professional development, and teaching quality. Besides, the attitude of teachers in various states and their needs for professional development will vary accordingly. Considering the inconsistency existing in different nations, this gap requires us to investigate this issue and disentangle the knot behind it. Therefore, the primary aim of this study is to draw a comparison among North America, Northern Europe, and East Asia to analyze the relationship among school climate, teacher professional development, professional development barriers, and teaching quality.

Literature Review

School Climate

There is widespread agreement that a positive school climate can contribute to cooperative learning, group harmony, respect and common belief. It not only leads teachers to enhance better teaching performance (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004), but also has a strong influence on the motivation of learning among students. Cohen et al. (2009) define school climate as the quality and characteristics of school life, which consist of stakeholders' experiences regarding participating in campus life where norms, goals, interpersonal relationships, teaching practices, and organizational structure are formed and shaped. That is, the combination of internal and external factors has shaped the collective experiences of individuals and schools. School climate also promotes or complicates the meaning of student learning and has a strong influence on learning motivation (Pallas, 1998).

Although Cohen et al. (2009) divided the school climate into four aspects, including security, teaching, relationships, and environmental structure, the impact of school climate on teaching is highlighted in this study. They noted that teaching comprises of learning, professional development and leadership that teaches quality, social emotions, and aesthetics, and further suggested that factors ranging from systematical design of teacher professional development program, instructional strategies with support of evidence-based approach, and teachers' investment in professional development are crucial to the extent of teaching quality. Abdal-Haqq (1996) pointed out that the growth of teachers' professionalism has been limited owing to the time in school being fragmented because of managing the class. Nevertheless, teachers are obliged to access education information from all sources to translate into gains such as new concepts, skills, and/or research method, and these acquisitions should be applied to classroom teaching (Corcoran, 1995; Troen & Boles, 1994). However, a range of factors mentioned above such as workshop arrangement, school support and workplace learning may play a role in teachers' professional learning.

Teacher Professional Development

The most direct purpose of teacher professional development is to help teachers acquire and expand the knowledge and skills needed for their teaching (Blandford, 2001). The traditional approach to teacher professional development is based on the participation of teachers in on-campus training and off-campus professional courses. The new trends of professional development of teachers should be continuous, systematic, cooperative, constructive, diverse, research-based, and student learning orientation. Either traditional or trendy approach, the focal point of this concept is to update teachers advancing in pedagogy by which they can gain teaching knowledge and skills recently developed and transform them into classroom practice for the benefit of students' growth. Teacher professional learning is a complex process, which requires teachers' cognitive and emotional involvement individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change.

It has been found that professional development initiatives have shifted from the traditional training mode to the professional learning that focuses on the long-term and the interactive discussion with peers. In addition to collaborative activities between teachers and schools such as classroom observation or teaching community, professional development approaches also involve coaching and/or mentoring and sharing of teaching practices. Thus, bilateral interaction between teachers or schools gain importance in the delivery of professional development initiatives, and when they are intensively practiced among schools, teacher learning can bring significant and lasting positive changes to schools and students (Lieberman, 1995).

Teaching Quality

Teachers' stable and continuous professional development can improve their teaching quality, and further influence students' learning (Bandura, 1997). Smith, Desimone, and Ueno (2005) noted that the professional development of teachers is an effective means to improve teaching quality, which further affects student learning outcomes. Lumpe, Czerniak, Haney, and Beltyukova (2012) also found out that the elementary teachers who have long been actively involved in the scientific professional development have significantly improved their self-efficacy in science education. In other words, enhancing the effectiveness of professional development through teacher learning networks or communities could be a key factor for improving teaching practices and student achievement.

Researchers claimed that positive teacher professional development could affect student achievement through three stages (Yoon et al., 2007). To begin with, professional development improves teacher's knowledge and skills, and then the teaching methods in the classroom could be positively evolved by these enhanced acquirements. Finally, revised or innovative teaching strategies lead to boosting student learning and achievement. There is also worth noting that lacking either one of these three stages will not contribute to the improvement of student learning; that is, if teachers themselves cannot develop and practice new ideas attained from professional development, and apply them tocurriculum design, effective instruction and multiple assessment techniques, the reciprocal benefits between students and teachers are not able to be reached.

However, we address the issue of teacher professional development by adding school climate and teaching quality to form the rationale of this study. In addition, it is supposed that different regions might have different findings because of diverse systems, mechanisms and cultures, so regional comparison (East Asia, North America, and North Europe) is also conducted to investigate the relationship among three concepts discussed above by employing structural equation modeling (SEM).

Methodology

Research Framework

This study builds up the research structure based on previous section discussing the associations among school climate, teacher professional development and teaching quality. It is examined whether school climate is helpful to motivate teachers' professional development and improve their teaching quality via this route. We also try to find out the barriers encountered by teachers during their professional development and testify whether school climate can eliminate these barriers, as well as whether obstacles have negative impacts on teaching quality.

This study uses the data from 2013 Teaching and Learning International Survey (TALIS) collected by OECD's integrated database, and the items we selected as the measurement ones are with consistent definition of the variables in TALIS. Since some of them are in different dimensions in TALIS such as school climate and teaching quality, this study conducts exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to verify the reliability and validity of these variables. Based on the results of factor analysis, we constructed our research framework as shown in Figure 1.

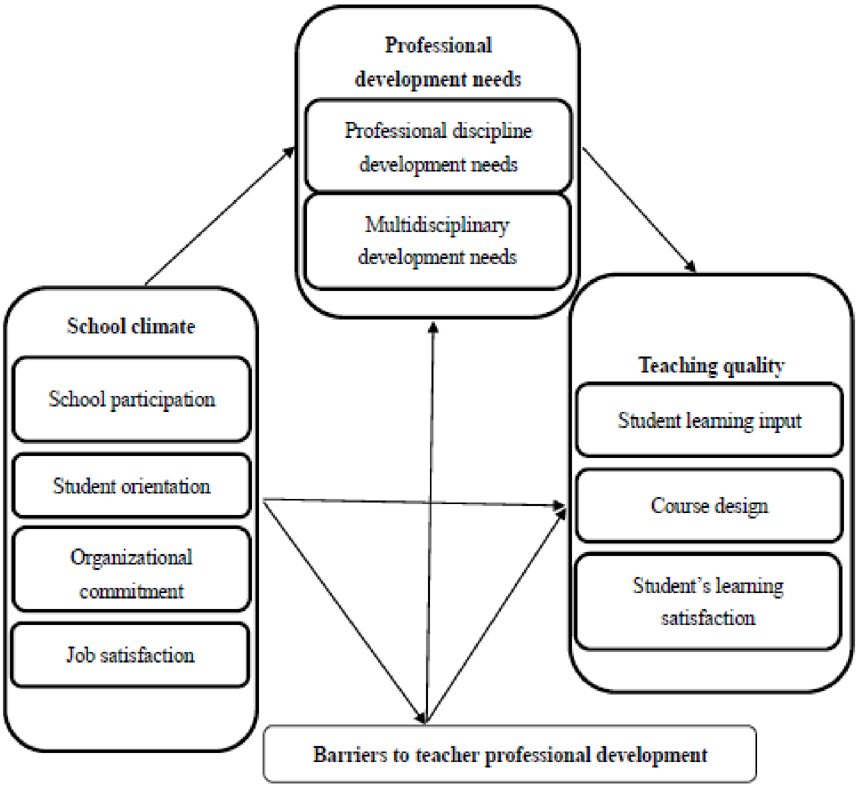

Figure 1：Research framework and Measuring variables

Samples and Reliability and Validity Analysis

In this study, 15,230 samples were collected by TALIS and SEM was adopted to analyze the data. Before validating the relationship among the variables, we firstly examined the reliability and validity of the models and variables by analyzing a total of 15,230 samples from the United States, Canada, Northern Europe and East Asia to confirm the interpretability. Confirmatory factor analysis (CFA) was selected to measure the component reliability, convergent validity and discriminant validity (Anderson & Gerbing, 1988). As shown in Table 1, the AVE of each construct of the survey is between .42 and .62. Despite that the partial variability AVE value is relatively low, they all reach 0.4 or above, which is still considered as ideal range (Slater, Olson, & Hult, 2006). The CR value is between .74 and .93, indicating that the variables in this model display good convergence validity.

With respect to discriminant validity, Capron (1999) argued that it is considered valid when square root of AVE is greater than the absolute value of other coefficients of the facet correlation coefficient. As displayed in Table 1, the results showed that each construct has a positive correlation and the coefficients do not exceed 0.8; thus, the collinearity problem is not significant (Maruyama, 1998). Furthermore, the value of AVE is higher than the squared correlation for adequate discriminant validity. Following the recommendation of Hair, Black, Babin, Anderson, & Tatham (2010), all above the criteria are properly met.

Table 1: Analysis on reliability and validity

	1	2	3	4	5	6	7	8	9	10
1. School participation	*.684*									
2. Student orientation	.431**	*.713*								
3. Organizational commitment	.286**	.323**	*.738*							
4. Job satisfaction	.477**	.491**	.554**	*.713*						
5. Discipline development Needs	-.050**	-.147**	-.150**	-.268**	*.798*					
6. Multidisciplinary development deeds	-.022**	-.141**	-.107**	-.246**	.739**	*.680*				
7. Barriers to teacher professional development	-.213**	-.220**	-.298**	-.327**	.308**	.307**	*.530*			
8. Student learning input	.079**	.143**	.194**	.186**	-.014	.007	-.073**	*.786*		
9. Course design	.182**	.221**	.134**	.244**	-.211**	-.134**	-.144**	.057**	*.470*	
10. Student's learning satisfaction	.156**	.213**	.140**	.208**	-.257**	-.167**	-.150**	.008	.554**	*.563*
Average	2.78	3.26	2.96	3.03	2.52	2.44	2.26	2.89	2.43	2.52
Standard deviation	.50	.43	.53	.57	.79	.68	.54	.65	.46	.56
Cronbach's *α*	.836	.789	.793	.854	.901	.889	.743	.671	.789	.649
CR	.813	.802	.856	.800	.897	.884	.717	.862	.659	.649
AVE	.468	.508	.545	.509	.636	.463	.281	.617	.220	.317

Main Effect Analysis and Structural Model

Multi-group SEM was used to estimate the path relationships between the various facets to verify the comparison of East Asia, Northern Europe and the United States and Canada in the study model. The standardized path coefficients of the samples in these three regions are shown in Figure 2, Figure 3, and

Figure 4. Among them, East Asian samples were positively significant in all path relationships in this research framework; there is only one path in the Nordic region that is not positively significant (schoolclimate→ multidisciplinary development needs); in the samples of the United States and Canada, there are two paths that are not significant (school climate → multidisciplinary development needs, multidisciplinary development needs → teaching quality). Considering that this study put the emphasis on the performance of each path relationships in the research framework across regions, the difference in coefficient values is the focus of this study.

In the influence of school climate on professional discipline development needs, the path showed that the result of East Asian region group is positive while that of the Nordics, the United States and Canada are negative. It means that the culture and ideas in the schools in East Asian countries expect the teachers to provide professional subject knowledge so that students can focus on the improvement of professional knowledge. Another reason is that the permission for East Asian students to attend universities and colleges is still dependent on examinations.

The three major regions in the school climate have a significant negative impact on professional development barriers, indicating that in any given region of this study, schools are willing to express support for teachers and promised teachers to develop professionalism, and help reduce the difficulties and obstacles that teachers may experience when engaging in professional development. However, it is worth mentioning that the school climate in East Asia negatively affected the quality of teachers' teaching. This may be due to the prevalence of private tutoring in East Asia, making it difficult for teachers to exert their teaching influence. Even if schools support teachers with the provisions of psychological and material support, it is difficult for teachers to improve the condition where the students pay little attention to classroom learning, leading to perception of low teaching quality among teachers. Another possible reason is that the school climate must be transformed through certain factors to enhance the quality of teaching. For example, from path by which the development of professional disciplines can positively affect the quality of teaching, there is a mediator to connect the dots so that the effect can be exerted on the school climate.

In addition, the results of the study showed that in these three regions, professional development barriers have a positive impact on the development needs of professional disciplines, the development needs of multidisciplinary disciplines, and the quality of teaching. It means that when the barriers to professional development of teachers are higher, it will be possible to enhance the professional and multidisciplinary development needs and teaching quality. At last, the impact of professional discipline development needs on teaching quality is positive in East Asia, but negative in the Nordic region and the United States as well as Canada. It can be deduced that in East Asian regions, teachers are highly perceptive of the importance of professional discipline development. In contrast, in terms of the demand for multidisciplinary development, the results of the path relationships in each region are contrary to the development needs of professional disciplines.

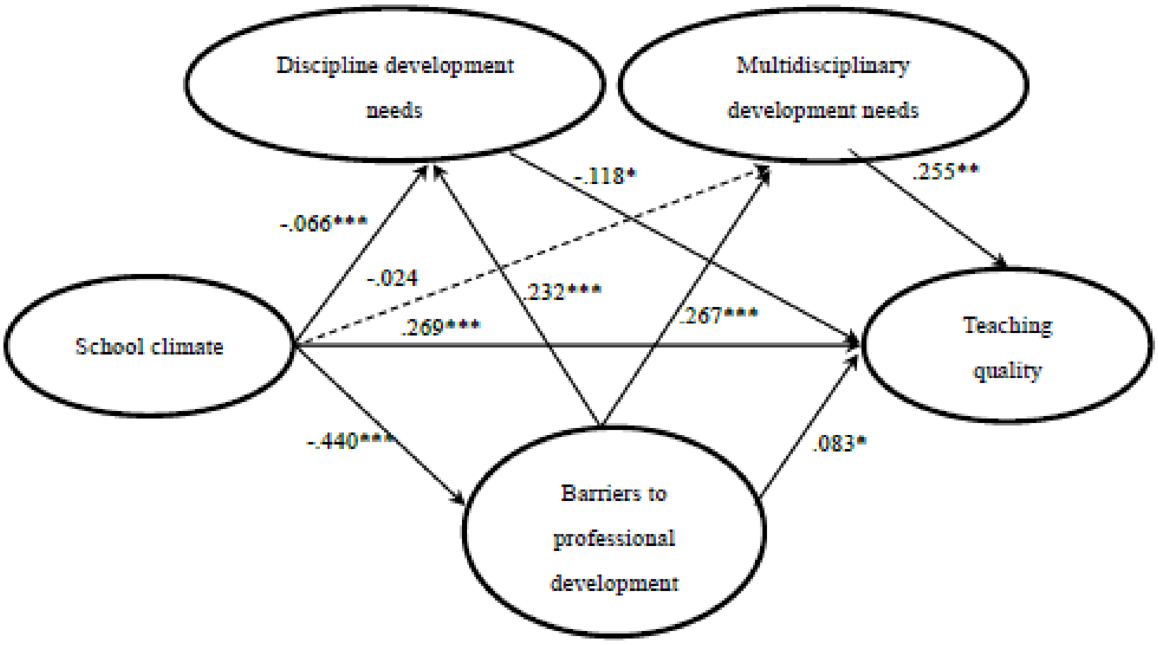

Figure 2: Verification of the research structure in the Nordic samples

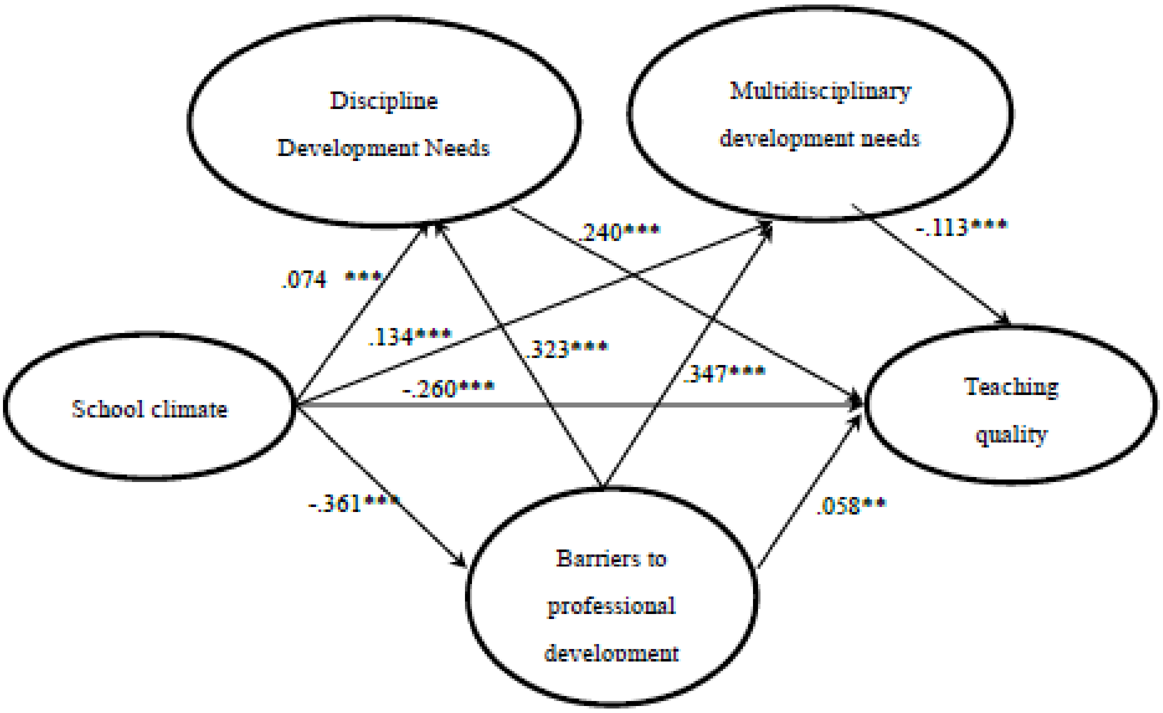

Figure 3: Validation of research framework in the East Asian samples

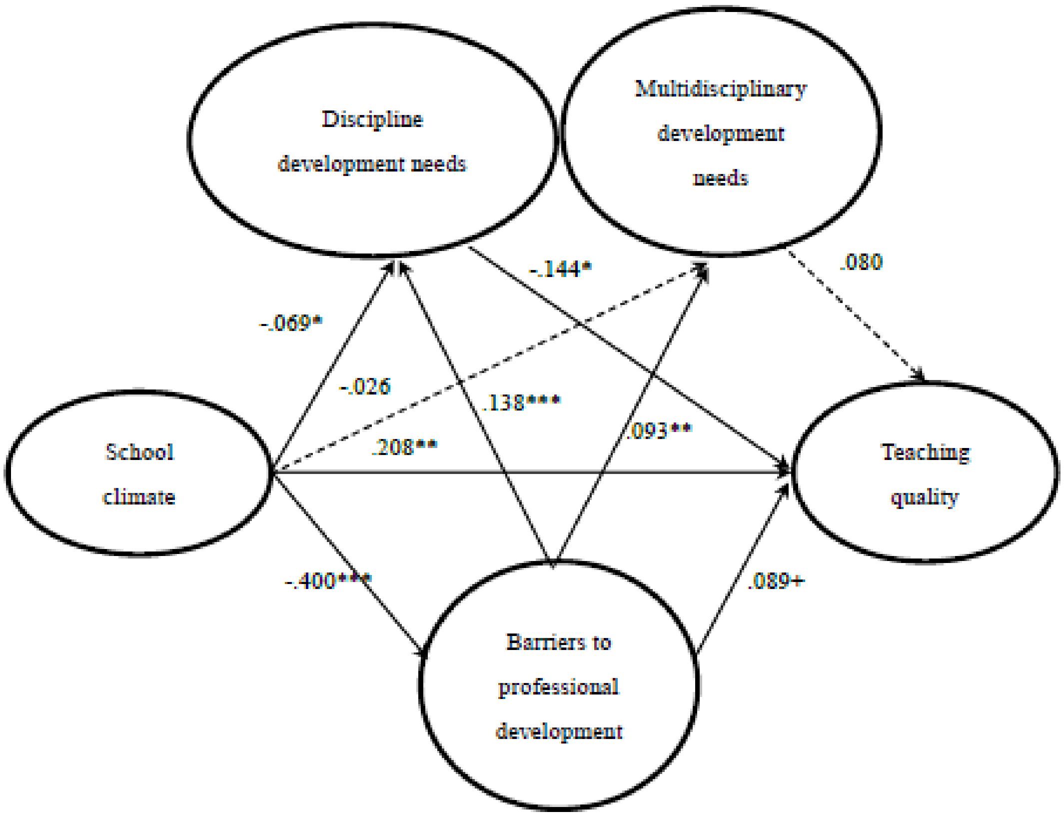

Figure 4: Validation of research framework in the United States and Canada samples

Discussion

From the above findings, it is found that the culture and concept of schools in East Asian countries lie in that the schools expect teachers to facilitate the students to improve their academic performance in order that students can acquire the admission to excellent universities. Those countries are actively using the Programme for International Student Assessment (PISA) to examine student performance as an important indicator of the success of national education policies, or reflection of education reform. In East Asian countries, the scores of PISA have become another battlefield for comparison of academic achievement. As a result, parents in South Korean still have strong perception that sending children to private tutoring schools will bring about solid advantages to compete domestically and internationally (Kim, Lavonen, & Ogawa, 2009).value children's learning performance and believe that sending children to tutor classes will help improve their academic achievement.

It is quite lucid that academic achievement and test scores are indispensable in the educational culture among East Asian countries, making the school climate appear tense and competitive. This form of climate has forced teachers to adopt the teaching methods that tend to enhance students' scores as the priority instead of adapting their interests to appropriate teaching. Furthermore, the results of the study indicated that there are significant differences in the impact of school climate on teachers' professional development among East Asia, Northern Europe, the United States, and Canada. In our samples of between Western and East countries, the role of teachers from the perspective of two different representatives shows intelligible cultural differences. In Eastern countries, the relationship between teachers and students, and the respect students show toward teachers are far significant than those of the West (Shim, 2008). Therefore, the influence of teachers on students is expected to be more pronounced in Eastern countries than in Western.

Another difference exists in the degree of independency. In East Asia, the responsibility regarding the performance of students is more dependent on school education, while in North America and Northern Europe, family education plays the central role. Therefore, when schools in East Asia are given a high extent of social expectation, schools bear the anticipation that school itself and teachers can develop diverse professional capabilities and can more fully meet the needs of social expectation. With this function, the academic success lies in schools and teachers' responsibilities. On the other hand, from the perspective of North America and Northern Europe, the process of teacher development and teaching practice are given autonomy. Teachers can decide which method and content of teaching to select with full support according to their own professional abilities and their interests.

Shin, Lee, and Kim (2009) also indicated that there is an existing difference between the relationship of teacher and student learning outcomes. They believed that learning motivation will influence student learning outcomes, especially the relationship between teachers and students and school climate. Both are important socio-psychological variables which may function as a factor to either increase or decrease students' learning outcomes (Kim, Namgung, & Kang, 2004). For students, they will work harder and learn independently on the subjects they feel interested in, and the academic scores will in turn show positive results. However, in East Asian countries such as Japan and South Korea, under a strong competitive culture, it is difficult to see the causal relationship between interest and performance, which, on the other hand, is evident in the United States.

Implication

This study uses the data collected from the OECD database to examine the influence of professional development of school teachers on the improvement of teaching quality from the perspective of school climate and support. The results from our analysis provide numerous valuable practical implications. Firstly, the emergence of teacher professional development is to help teachers acquire and expand the knowledge and skills needed for their teaching. Through the growth of teachers' professionalism, teachers and their schools can develop their tailored teaching practices, and by means of reflections on teaching experiences, research and practices, students' and overall needs are able to be met so that teachers' teaching quality is able to be improved.

Besides, the study found that diverse professional development needs have significant impact on teachers' perception of teaching quality in Northern Europe, the United States and Canada. The results presented in PISA scores also demonstrated the fact that students in Europe and the United States performed better than those in East Asia, which can be contributed to the schools and teachers' devotion to professional development in daily life, such as the interaction with the school community and external organizations to keep abreast of current educational trends to maintain and develop proper practices in teaching. Past studies had shown that a stronger school climate can enhance teacher professional development; however, those results were not consistent with our findings in the Nordic region, the United States and Canada. Therefore, it is suggested that there should not be too much formal support and regulation on professional development of teachers in schools, which may increase teachers' pressure and burden outside of teaching practice, leading to unwilling to advance their professional growth.

Research testified that teacher professional development has a positive effect on student learning (Bandura, 1997; Rosenfeld & Rosenfeld, 2008), but our findings showed that professional development has caused failures in different conditions in East Asia, North America, and Northern Europe. In spite that teachers in North America and Northern Europe have lower requirements for the teachers to practice professional development driven by their school climate, they showed higher self-rating scores for teaching quality.

Yet, although teachers in East Asia are in line with the direction of teacher professional development supported by their school climate, their teaching quality is relatively low. Therefore, the study suggests that schools in East Asia need to emphasize the strengthening of multidisciplinary teaching in addition to supporting the development of professional subjects for teachers. That is, schools should strengthen the motivation for interaction and mutual learning among teachers of different disciplines, so that teachers can revise their teaching practice from different disciplines. Moreover, to improve the overall student learning outcomes, teachers also have to promote higher self-efficacy in their own teaching quality.

In the past, professional development for teachers should be able to catalyze the professional growth among teachers. However, in this study, the link between teachers' professional development needs and their teaching quality are less supported. Given the regional differences, the study suggests that schools in East Asian countries should support teachers with multi-disciplinary practice to improve their teaching quality. In addition, different regions and countries should adjust the direction and practice of teacher professional development according to their needs and culture.

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Training Pedagogical Lecturer Under the Competency Framework for Career Activities

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INTRODUCTION

Pedagogies lecturers with the professional teaching characteristics are often considered as "Masters of Masters". They instruct students how to teach and study, provide inspirations as well as teaching and practicing at the same time. Therefore, they are the "role models" for their students and future generations. In the context of the fundamental and comprehensive reforms in education towards the capacity development, fostering pedagogies lecturers the competency framework for career activities, is an indispensable, objective and urgent requirement.

Developing the competency framework for career activities for pedagogical lecturers by job positions, job titles and the specificity of pedagogical universities or universities with pedagogical programs is considered as one of the most important stages which helps to implement the planning, recruitment, utilization, training, fostering and treatment policies for pedagogical lecturers.

This paper proposes some solutions for the training of pedagogical lecturer the competency framework for career activities which is built upon certain pedagogical characteristics along with the school's mission, standards and criteria at certain levels in accordance with the job titles of teacher pedagogical lecturers.

THE COMPETENCY FRAMEWORK FOR CAREER ACTIVITIES

DEFINITIONS OF COMPETENCY

There are many definitions of *competency* and this term has drawn attention from many researchers, particularly in the context that Vietnam education is gradually shifting from knowledge-based education to competency-based education. In broad terms, competency can be defined as an ability, aptitude, capability, proficiency, efficiency, effectiveness or a skill. Thanks to the diversity in the way of understanding, along the history, there has been many different definitions about Competency.

The concept 'competency' is generally understood as "the ability to apply knowledge, experience, skill, attitude and motivation in order to act appropriately and effectively in the richness of life." (Québec-Ministere de l'Education, 2004), Tran Khanh Duc - Trinh Van Minh (2013). In addition, the author group of Do Huong Tra claim that competency is the ability to mobilize all knowledge, skills and individual psychological attributes such as motive, belief, will, etc. in order to fulfill a particular type of work within certain specific contexts, Do Huong Tra (2015).

Therefore, in this paper, the term 'competency' is used to refer to the capability to receive and manipulate effectively all human potentials (i.e., knowledge, skill, behavior, physical strength, belief, etc.) in order to perform a job efficiently and effectively or cope with any circumstances, real life situations, and individual career relevant to specific standards.

While a variety of classifications of competencies have been suggested, competencies are generally divided into two main categories: General Competencies, Special Competencies. Otherwise, competencies are classified in terms of social competency, individual competency, methodical competency and professional competency. A competency is developed on the basis of different dimensions. According to Glenn and Blahna (2005), a competency encompasses three fundamental elements: knowledge, skills and traits.

THE COMPETENCY FOR CAREER ACTIVITIES

According to Tippelt (2003) the competency framework for career activities is determined by four components such as individual competency, social competency, methodological competency and professional competency.

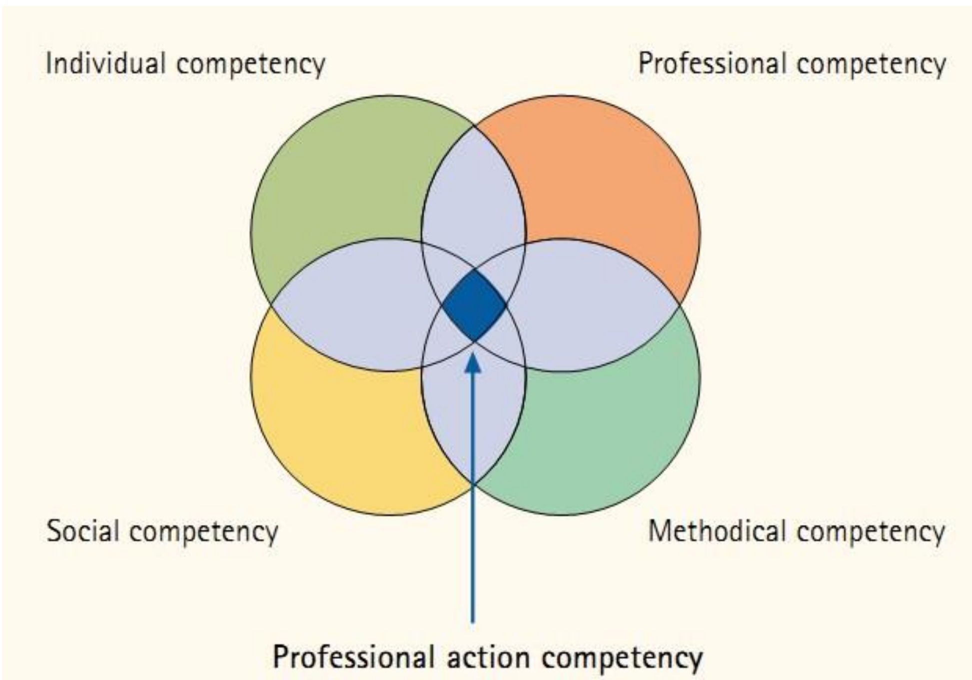

Figure 1*: Proffesional Action Competency Model*
Soure: Rudalf Tippelt (2003), Competency-based training, Inwent, p.11

Thus, professional competency refers to the ability to successfully pursue the professional activities of one's own choosing based on the effective synthesis of different competencies of a particular individual.. Therefore, life-long learning and diligence is the best way to develop personal growth.

According to the theory of job positions (Job System), university lecturers belong to the vocational training group. Hence, each job position that a lecturer holds, requires a combination of specific competencies depending on the job title and job ranking of the lecturer.

THE COMPETENCY FRAMEWORK FOR CAREER ACTIVITIES

Each job position has its own competency framework. "The competency framework is built upon the need of a job performance, which is reflected through corresponding descriptions of work, that is, required competencies and skills to achieve job objectives." (Ministry of Home Affairs, n.d.). This can be underlined by a set of the basic competencies, which is seen as indispensable prerequisites of requirement of a job position.

Competency framework for career activities is a descriptive instrument in determining the requirements of knowledge, abilities, attitudes, behaviors, and other personal attributes in order to accomplish occupational activities for a particular position, a job or a career. Indeed, the competency framework is a collection of competencies and defines the ability to perform a position or a job.

In pedagogical universities/educational institutions, every job position has its own competency framework. The competency framework is developed on the basis of performance requirements, reflected in the corresponding job description, including the capacities required to accomplish the tasks assigned. As a result, it can be seen that the competency framework for job positions is a set of core competencies, specific role competencies, and technical competencies which plays a very important role and meets the demands of every job position and lecturer at pedagogical universities or institutions.

With reference to the definition of competency, the competencies for career activities as well as the professional competency framework, every lecturer has a corresponding framework, where the essential knowledge, skills, behaviors and traits to complete required tasks of the teaching career are prescribed. In this framework, general competencies and special competencies should also be included. Hence, every lecturer always follows general competencies for teachers and specialized competencies for each working position and job title described in detail.

PEDAGOGICAL LECTURERS AND SPECIAL CHARACTERISTICS OF PROFESSIONAL COMPETENCIES

Just like lecturers of other disciplines, a pedagogical lecturer is foremost a lecturer who helps develop student teachers or future teachers to have an informed professional identity and broad range of experience upon which to build a teaching career. Three key roles of a lecturer are identified; they are a lecturer, a teacher researcher, and a service provider. Accordingly, they undertake three important missions, that is teaching, researching and serving the community.

As for pedagogical lecturers, their roles and responsibilities also consist of the three mentioned tasks. More importantly, a pedagogical lecturer needs to have appropriate expertise. They are not only a good example but also provide "role model" for their teacher practitioners. Whereas students from other disciplines may practice through laboratory experiments or real life situations outside the classroom, future teachers practice in the classroom through their educators' ethical practice, teaching philosophy, related values and principles.

The national conference on "Enhancing professional competences for university lecturers" organized at the University of Education of Da Nang in 2015 together with 170 reports and presentations from educators and researchers of seven key universities in Vietnam all confirmed that lecturers at pedagogical universities should be experts on education.

One of the special characteristics of pedagogical lecturer's institutions in comparison with other universities is the final product of the training process, the future teacher. Their subjects and educational programs are designed for their future teachers who will teach learners at different levels. Therefore, it is equally important to equip both teachers at secondary schools and high schools as well as teacher's education essential competencies. Moreover, they should reflect on self-performance, self-knowledge and responsibilities, plus development of personal improvement through their colleagues or on their own. As such, research skills have become critical to lecturers at the tertiary level. Owing to their studies, they have explored and discovered new knowledge, innovative teaching methods; thus, they have transferred their gained experiences and stories to their future generations.

With regard to pedagogical lecturers, it is necessary to take into account pedagogical competencies. According to Pham Minh Hac, "Pedagogical competencies are a group of individual psychological attributes and integrity acquired to satisfy the need of educational activities and success decisions." Pedagogical lecturers perform dual activities: teaching and educating; hence, pedagogical competencies include both teaching competencies and educational competencies.

Nguyen Duc Vu believes that pedagogical lecturers should achieve the required professional competencies. These competencies cover five criteria: 1. The ability to understand the subject and educational environment; 2. The ability to teach; 3. The ability to educate; 4. The ability to relate in teaching and educational processes; 5. The ability to improve professional knowledge/ skills. In other words, professional competencies can be understood as the capacities to perform teaching and training activities to obtain the required objectives. Professional competencies are special attributes of pedagogical lecturers (Rudalf Tippelt, 2003).

In the context of the fundamental and comprehensive reforms of education, tertiary education in general and pedagogical lecturers in particular should have high professional expertise. For example, they should pioneer in the innovative activities, bring into play our beautiful traditions, be active and creative, learn and adapt the cream of world education flexibly, and contribute to the development and innovation of our home education.

STRUCTURE OF THE COMPETENCY FRAMEWORK FOR CAREER ACTIVITIES OF PEDAGOGICAL LECTURERS

The competency framework for career activities is an integrated approach to support the planning, recruiting, using, training, fostering, assessing, creating development environment and treatment policies for individuals under certain occupations. Simultaneously, the framework helps individuals manage their own work and plan for their own career development.

The Developing Higher Education under Career Applying Oriented Project (POHE) in Vietnam (Nguyen Kim Dung et al., 2012) proposes the standardized competency of pedagogical lecturers under application oriented including 10 criteria, 49 standards. Each working position has a equivalent competency framework, occupaional title and ranking occupaional title. Therefore, the competency framework for career activities must be appropriate for each occupational title and occupational title categories.

The factors that constitute the framework include the knowledge, skills and ethics of teachers. The suitable level of the components depends on each occupational title and the professional title categogy.

Having the same purpose with POHE, Bui Minh Hien and Nguyen Van Luong have set the lecturer competency framework in the context of education reform and international integration including 7 criteria with 46 specific standards, such as: 1) political qualifications, 2) professional ethics, lifestyle; 3) Knowledge, professional competence; 4) pedagogical competency; 5) scientific research; 6) Practical activities, socio-political activities; 7) career development, personal development (Bui Minh Hien, Nguyen Van Luong, 2015). This is an important foundation to manage university lecturers in the current period.

According to Pham Xuan Hung, the educational management lecturers consists of the four following competency groups: 1) Professional competency: majored competency, complementary competency, information updating competency; 2) Teaching competency: the ability of using teaching methods, the ability of interacting with learners, the ability of sharing information with colleagues; 3) scientific and technological research competentcy: Number of research and documents published and announced, participation in research conducting and conference reporting; 4) Consulting competency, implementation of educational management activities (Pham Xuan Hung, 2015).

According to Pham Hong Quang, the four core abilities of pedagogical lecturers to meet innovated requirements are: 1) Ability of develop training curriculumn which is considered as basic ability of pedagogical lecturers. 2 / Ability of teaching and assessing. 3 / Ability of self-improvement in higher education. 4 / Ability of cooperation in teaching and research. This is an essential requirement in the integrated era (Pham Hong Quang, 2015),

In one discussion on the competency of pedagogical lecturers, Nguyen Duc Vu said that, in the innovation period, pedagogical lecturers need to obtain the three following abilities: 1 / Ability of scientific research. 2 / Ability of using English, foreign languages and international integration. 3 / Ability of using informatic technology (Rudalf Tippelt, 2003).

Nguyen Danh Nam maintained that pedagogical lecturers need to be trained to achieve five following core abilities: 1) Ability of education; 2 / Ability of developing training curriculumn; 3 / Ability of consulting students; 4 / Ability of scientific research and 5 / Ability of building relationship with the professional network (Nguyen Danh Nam, 2015).

Each scientist, researcher, and teacher will have different perspectives and different views on the importance of the pedagogical lecturers' professional competency, especially in fundamental and complete educational innovational period. However, they share some common views like: Because of the professional peculiarities, pedagogical lecturers must first have the qualities and competency of a teacher with outstanding standards of dedicating to the profession, passionating to explore new knowledge, new knowledge and and constantly improving professsional abilities, having certain pedagogical skills and strongl influence on learners.

Therefore, pedagogical lecturers need to obtain competency of teaching scientific research and community service. In each of these competencies, there is common ones and personal ones. Derived from the above professional peculiarities, the pedagogical lecturers also have their own unique characteristics, specific features that govern each criterion in each competency. The competency framework for career activities of pedagogical lecturers below suggests some of the specific abilities that pedagogical lecturers need to obtain in the innovated and integrated era:

Table 1. Competency framework for career activities of pedagogical lecturers

Order	**Competency criteria**
I	Gerneral requirements
1.1	*Understanding*
1	Having deep understanding and experience in applying the guidelines and policies of the Social Party and the State and sector regulations in education and training.
2	Deeply understanding (both theoretical and practical) assigned module and having basic knowledge of the relevant modules in the discipline of training.
3	Identifying the objectives, plans and programs of the modules in training discipline; the reality and trends of training and majored scientific research domestically and internationally.

4	Organizing or co-ordinating with students and colleagues to carry out scientific research, especially, the science of education, experimentation, application of scientific and technical advances to education and training, and practical production and life.
Order	**Competency criteria**
5	Obeying laws and regulations of the education and training sector and of the tertiary education institution.
1.2	*Professional knowledge*
1	Achieving the training standards of pedagogical lectueres in accordance with the Law on Higher Education
2	Having college and university education certificates
3	Having professional knowledge in depth, precision and science; regularly updating professional knowledge and information and technology to improve the quality of teaching and scientific research
4	Having interdisciplinary knowledge, practical knowledge and ability to link and apply appropriately to teaching and scientific research
5	Having projects or creative work which is granted by a faculties or universities and applied well in professional activities.
1.3	*Foreign language competency*
1	Achieving foreign language proficiency (mainly in English): level B1 in the European Reference Framework or equivalent (second foreign language for foreign language teachers).
2	Mastering foreign languages for professional development activities: comprehending foreign documents; directly professional interacting and working with foreign experts / scholars in the majored fields.
1.4	*IT competency*
1	Acknowledging informatic technology and mass-media in professional activities
2	Being able to use internet, computers and specialized devices for professional activities.
1.5	*Experience*
	Having appropriate seniority for the professional titles of pedagogical lecturers
1.6	*Ethical*
1	Dedicating to careers, respecting discipline, being responsible for work, preserving the characteristics, honor and prestige of teachers
2	Satisfying and adhering to professional ethical standards in the teaching fields
3	Understanding the communication and behavioral requirements in the teaching fields and applying to the relevant context
4	Understanding and respecting gender differences; having suitable communication skills for genders
5	Understanding and respecting international culture; having appropriate behavior in relation with foreign partners

Order	Competency criteria
2	Specific requirements
2.1	*Professional pedagogical competency*
a	*Competency of curriculumn and document developing*
1	Ability of developing and conducting training program
2	Ability of building teaching objectives and plans
3	Ability of building cousebooks, citations, self-study guidelines for students
4	Ability of assuring module program
b	*Competency of teaching methods*
1	Ability of approaching learners and teaching environment
2	Ability of integrated teaching
3	Ability of implementing teaching methods actively and appropriately for the majors and learners
4	Ability of applying informatic technology in teaching (softwares, teaching aids, etc.)
5	Ability of teaching majoring modules in foreign languages (mainly in English)
c	*Competency of testing and assessment*
1	Ability of testing and assessing professional activities
2	Ability of testing and assessing students' outcomes
3	Ability of learning and applying science of testing and assessing
d	*Competency of pedagogical operating*
1	Ability of planning educational activities
2	Ability of teaching through modules and educational activities
3	Ability of detecting and solving problems arising in practical education.
e	*Competency of guiding pedagogical observation and practice for pedagogical students*
1	Ability of cooperating with high schools and educational institutions
2	Ability of building pedagogical observation and practice plans
3	Ability of organizing pedagogical observation and practice
4	Ability of testing, assessing and summarizing experience in pedagogical observation and practice
f	*Other competency*
1	Ability of creating learning environment.
2	Ability of communicating and conducting work punctually and effectively
2.2	*Competency of conducting research on foundamental science and educational science*
a	*Competency of researching scientific projects*

1	Ability of detecting research problems from practical issues
2	Ability of researching through conducting programs, projects, research topics, especially educational science and pedagogical science.
Order	Competency criteria
3	Ability of conducting scientific research to building training curriculumn and improving teaching quality.
b	*Competency of writing, publishing and deploying scientific research products*
1	Ability of researching through the journal publication in domestic and foreign scientific journals; lectures, scientific reports, presentations at scientific conferences and workshops.
2	Ability of scientific researching through the number of citations of scientific research published in reputable domestically and international journals
3	Ability of presiding or coordinating at seminars and workshop in the professional fields
4	Ability of participating in national and international cooperation in scientific research and teacher training
c	*Competency of guiding and assesssing scientific research results*
1	Ability of guiding students to conduct scientific research
2	Ability of assessing students' scientific research results
3	Ability of detecting and solving problems related to scientific research
1.3	*Competency of professional development and community service*
a	*Competency of professional development*
1	Ability of self-assessing and planning professional development, training and improving professional qualifications
2	Ability of self-studying, self-updating new knowledge in the majored field to improve the quality of teaching and scientific research.
3	Ability of learning, sharing, cooperating with colleagues and educational experts
4	Ability of using foreign language proficiently for career development
5	Ability of using informatice technology for career development
6	Ability of consulting, helping, supporting colleagues in career development
7	Ability of seeking opportunities for cooperation; maintaining relationships and communication with the professional network
8	Ability of adapting to internal and external environmental changes.
b	*Competency of community development*
1	Ability of undertaking the positions of the universities
2	Ability of consulting for the leaders on the school year plans and tasks
3	Ability of consulting for colleagues in professional works
4	Ability of consulting and job guiding for pedagogical students

5	Ability of contributing to organizations, individuals and communities on issues related to their professional activities.

To concretize the competency framework for career activities of teacher educator, universities/pedagogical faculties should base on the schools' missions to issueregulations on responsibilities and duties of lecturers with suitable criteria for occupational titles and positions of pedagogical lecturers.

SOME SOLUTIONS TO FOSTER PEDAGOGICAL LECTURERS' ABILITY BASED ON COMPETENCY FRAMEWORK FOR CAREER ACTIVITIES

Competency framework for career activities is an important basement to train and foster lecturers, as well as identify the demand and content of training and fostering teacher educator curriculumn.

When building Competency framework for career activities, the universities must identify competency categories and level needed for current and potential position, and conduct competency assessment for pedagogical lecturers simultaneously. Those two types of data will help to identify the specific competency categories and level for each lecturer easily. Thank to competency framework, the universiy can focus on skills, knowledge and features influencing on effectiveness as well as measure the time and fee for fostering lecturers (Pham Van Thuan, 2016).

DEVELOPING PEDAGOGICAL METHODOLOGY OF PEDAGOGICAL LECTURERS.

- *Creating environment for lecturers to self-study and develop their own competence*

Providing conditions, encouraging and later, requiring lecturers to upgrade their professional knowledge. Also, they should base on proportion of masters, doctors, associate professors and professors over the number of students to make training plan and specific target proportion of higher rank lecturers.

Buiding associations, clubs by cooperating and connecting with major pedagogical universities, so that lecturers have chances to interact, learn and share experience to develop the pedagogical career.

- *Creating conditions for lecturers to study and upgrade their competence*

Creating positive conditions for young lecturers and unqualified lecturers to study and upgrade the competence domestically and internationally.

Planing to train professional and foreign language competence for those lecturers to study abroad in many ways, including by national budget like project 911, project 165, etc. and some other scholarships.

- *Training and fostering lecturer competence by internal force*

Exploiting the university internal strengths (especially research oriented universities) with top major professors to train lecturers. For example, each young lecturer should be guided by experienced one like professor, associate professor, scientific doctor, ect. in doing research or teaching activities.

Requiring young lecturers have specific plan and target for their own field and have specific result like published journals, scientific research, informatic and foreign language certificate, course book, electronic lessons, etc.

- *Exploiting international linking training curriculumn*

Encouraging young and qualified lecturers to build training curriculumn and teach some parts of linking training curriculumn, join scientific exchange network to uprgrade their competence based on international quality, update knowledge and experience to improve teaching and doing scientific research quality of lecturing staff.

- *Opening short-term courses about teaching methods, testing and assessment*

Frequently open short-term courses about undergraduate teaching methods and how to apply modern technology to teaching for lecturing staff.
Training lecturing staff to build the training curriculumns, syllabuses, lesson plans, teaching methods, testing and assessment which develop learners' motivation and are suitable for credit based education.

- *Widen and well-operate high qualified bachelor and talented scientific bachelor classes* in some fields is one of positive training methods to create qualified human resources for pedagogical universities.

DEVELOPING RESEARCH CAPACITY OF PEDAGOGICAL LECTURERS

- Establishing research environment and culture in the universities

The universities should establish research environment and culture for each lecturer to maximize their research capacity through different activities such as: 1) cooperating with the others inside or outside the country to do research and find financial aid for such researches; 2) cooperating with students and post-graduate learners in conducting undergraduate thesises, post-graduate thesises and scientific research; 3) cooperating with entreprises in research conduction and scientific and technological transmition. In such cooerations, the universities' roles of establishing, maintaining and developing these researches by celebrating seminars, workshops, scientific and technological projects domestically and internationally and financial supporting these activities are inevitable.

Besides, the unversities should have the policies for long-term off with payment for lecturers joining academic exchange, scientific research and fact-finding trips for building different academic phylosophy in the universities.

- Organizing seminars and scientific workshops

Host-celebrating majored seminars and workshop so that lecturing staff have chances to compete with the ones from others domestical and international unviversities. Simultaneously sending representatives to attending domestical and international scientific workshops

- Estabishing research phylosophies about pedagogical science and fundamental science

Building a group of qualified scientific researchers with different research phylosophies called research groups (SWG), especially, building interdisciplinary research groups to maximize linking strengths of the universities.

- + Establishing criteria and structures of research groups

Firstly, each research need to have leader and members. The leader must be top majored scientific researcher, be enthusiastic in doing research and have ability to guide the members. The members might include qualified lecturers, young lecturers and post- graduate learners which are guided to conducting master thesises or doctorate thesises by group's members.

Secondly, the group must have high-tech devices and experts to make the best use of these device to serve for conducting research.

Thirdly, the group must obtain big project, have internal and external cooperated spirit and combine teaching, researching and service.

Among the criteria, leading the most important; then the next is active enthusiastic young post-graduate learners.

- + Fostering pedagogical lecturers to be top majored scientific researchers of research groups

Firstly, establishing criteria for resourced teacher educator.

Secondly, identifying quatity, major and quality for the resource and recruiting to preserve the resource if needed.

Thirdly, building and operating training and fostering plan and periodly assessing resourced lecturers.

Finally, applying different training and fostering plan, special treatment for top majored researchers (prior prefering for full-time domestical and international training and assigning training and researching tasks)

Using research results to assess pedagogical lecturers' competence

In addition to establishing criteria for scientific research activities of lecturers, the universities should build assessing lecturers' competence measure through the number of research results such as: the number of patents, inventions, scientific awards; the quantity and quality of domestic and international journals; research results of scientific projects, the numbers of refernces, etc. to be specific norms to assess lecturers' research competence.

CREATING THE ENVIRONMENT AND CONDITIONS FOR LECTURERS TO DEVELOP THEIR COMPETENCY

Opening short-term courses on politics, informatic technological skills and foreign languages for lecturers

Regularly opening training courses on politics, foreign languages, informatics and training courses on the application of informatic technology, mass-media, modern devices and technical equipments in teaching and researching.

- Establishing teaching and scientific research clubs

Setting up teaching and scientific research clubs and regularly organizing activities to help young lecturers or under-qualified ones have chances to participate in teaching and researching activities with experienced ones.

- Promulgating policies for lecturers trained and fostered

Reducing the labor norms, assigning scientific projects, allocating funds, etc. Combining creating conditions of the universities with the efforts of individuals, in which, individual effort is especially important.

Conclusion

Establishing competency framework for career activities for pedagogical lecturers based on occupational position and titles is suitable for the objectives and training quality of the universities in the renovation context. This framework is the basement for pedagogical universities to make their training and fostering plans and manage the quality of academic staff.

The framework also provides clear descriptions of duties and expected results in order for pedagogical lecturers to identify exactly what to achieve to develop their career.

Deploying competency framework for career activities for pedagogical lecturers is essential in order to shaping the research style in teaching and carrying out step by step the compulsory review of teaching, researching and community serving. These will help lecturers improve their self-study capacity and create different academic phylosophies in pedagogical universities.

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Lived Experiences in Research Competence among Graduate Students

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ABSTRACT

Higher education institution (HEI) has become increasingly competence-based, as a result of the rapid evolution influenced by the social constructivism theory, and in an attempt to provide a better answer to the demands of the labour market. Knowledge and innovative competence are becoming increasingly important in society. This is consequently changing the demands that are imposed on professionals. Routine skills are becoming less important, while non-routine skills and cross-disciplinary competencies are playing an important role. Analytical, investigative and reflective competencies may serve as examples of this. For researchers, such competencies are also important for optimal performance to improve responsiveness, innovation, and productivity in research. Utilizing a qualitative research design, this study used the phenomenological approach to explore the lived experiences in research competence among graduate students. The data were collected from the two groups of participants using the focus group discussion (FGD). These two groups include the master's level with eight participants and another eight participants from the doctorate level with the total of 16 participants all in all. The iterative process was observed during the FGD until the researcher reached the saturation point, that is, no new insights can be developed from the participants. From the narratives of the participants, the following themes were culled out: the importance of the past, the influence of teachers, and the reflection of oneself. It was also revealed in the narratives of the participants that the development of research competence is a collaboration among one's experiences, continuous practice, and self-concept. The findings provided the baseline data for designing a research enhancement program for graduate students for the development of their research competencies as their contribution in the research culture advancement of their respective workplaces. This research enhancement program will be based on their insights of their lived experiences as research students.

Keywords

Developing research competence, Research enhancement program, Research competencies, Graduate students

Introduction

Knowledge and innovative competence are becoming increasingly important in society (OECD, 2002; Onderwijsraad, 2011; Rijksoverheid, 2015). This is consequently changing the demands that are imposed on professionals. Routine skills, which are considered specific and well-defined skills, are becoming less important, while non-routine skills, like creative problem solving and decision making, and cross-disciplinary competencies are playing an important role (OECD, 2013). Analytical, investigative and reflective competencies may serve as examples of these non-routine skills. In addition, competencies as critical thinking, self-management and communication skills are generally considered non-routine skills (Herman et al., 2016). For researchers, such competencies are also important for optimal performance to improve responsiveness, innovation, and productivity in research (Volberda, et al., 2011; Onderwijsraad, 2011).

Furthermore, research plays a significant role in our daily life. All inventions in medicine and technology have been possible with the help of research (Gross, 2001). Research aims for better knowledge that can improve the quality of life (Hinkka, H., et al., 2002) and contribute towards the understanding of the phenomenon and communicate that understanding to others (Fishbein & Ajzen, 1975, cited in Wilson, 2008).

Research is a core business of universities globally, and is crucial in the scientific process as a precursor for knowledge uptake and use (Obuku et al., 2017). Relatedly, research is also considered the essence of graduate education (Rogers et al., 2010). Graduate education, as the apex of the educational system, is also one of the most effective means of developing capacities related to doing research that will improve educational theory and practice in the many different aspects of the educational process. Moreover, the Commission on Higher Education (CHED) mandates to inspire and enable Philippine Higher Education Institutions (HEIs) in becoming platforms for research and development, innovation and extension in pursuit of inclusive social and economic development (Philippine Republic Act No. 7722).

In this context, HEIs play a crucial role in the development of the right knowledge, skills, and attitude in research among graduate students. In fact, research is the LIFEBLOOD of Higher Education (CHED Chairman Dr. Angel Alcala). In addition, it is also a research advocacy in higher education through the Philippine Association of Graduate Education (PAGE) as stated in the National Higher Education Research Agenda (NHERA) to develop a responsive culture and environment for research in Philippine Higher Education (CMO 21, series of 1999) to develop research capacity and to enhance research productivity and quality of life in order to reduce poverty and ensure sustainable development in the country (CMO no. 42, series of 2010).

More so, research gives rewarding learning experiences for students, producing graduates capable of high personal and professional achievement (Fishbein & Ajzen, 1975, cited in Wilson, 2008). Thus, colleges and universities worldwide play a vital role as higher education providers whose graduates possess the academic and professional qualifications which are responsive to the requirement and challenges related to the globalization of societies, economy, and labor markets (Van der Wende, 1997).

UNO-R as an Augustinian Recollect academic institution also aims to educate the mind and the heart by providing the climate, the structure, and the means to develop the vocation, knowledge, skills, talents, and attitude of the community (cf. UNO-R Vision-Mission, 2016). This mission statement is translated into the following four domains of schooling which includes the academic, non- academic, community extension, and research. Specific on research, the university aims to enrich the existing academic programs and broaden knowledge through functional, ethical researchers for the authentic good of the individuals and the society. This aim should start from the graduate studies going down to the elementary level.

Statement of the problem

Graduate students are expected to already master the competencies required of a researcher. However, as observed in the classroom, research has been a major problem because students lack the skills needed. Many students indicated that they lacked research knowledge, preparation, and competence upon beginning graduate study and during the first year of study, lacked development in important research skills like statistics and communicating in writing, and were somewhat hindered in research organization and progress (Rogers et al., 2010). Thus, the paper was conducted to explore the lived experience in research competence of the graduate students of a Catholic University.

Methodology

Utilizing a qualitative research design, this study used the phenomenological approach to explore the meaning of research competence among graduate students (Sarantakos, 1998, cited in Owusu-Bempah, 2014). Phenomenology is an inductive descriptive method which aims to describe participants' lived experiences (phenomena) in an attempt of drawing out its meaning (Holloway, 2005). Further, a phenomenological approach provides a more contextual approach to decision making through probing, uncovering, and interpreting the meanings of "stories" of participants (Greenfield et al., 2010). Moreover, Moustakas (1994) suggests that the primary purpose of phenomenological research is to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions, general or universal meanings are derived, in other words the essences of structures of the experience.

The data were collected from the two groups of participants using the focus group discussion. These two groups include the master's degree of eight participants and the doctorate degree of another eight participants for a total number of 16 participants all in all. Focus group discussion provides speedy results, simultaneously covering a variety of ideas, opinions, experiences, needs, evaluations, or concerns coming from a group of participants (Gaizauskaité, 2012).

The iterative process was observed during the focus group discussion until the researcher reached the saturation point, that is, no new insights can be developed from the participants. The process involved recursive textual data analysis which involved organization, classification, categorization, search for patterns and synthesis to cull out insights from the transcribed interviews. Litchman's (2010) three C's-coding, categorizing and identifying concepts was utilized to help the researcher achieve an in-depth, holistic understanding of the phenomenon.

Results

From the narratives of the participants on their lived experiences in research competence, the following themes and sub-themes were culled out.

The Importance of the Past. When compared to education with children, adolescents and students, graduate education has particular opportunities and challenges, depending on stronger biographical influences: adults have developed their own learning style and learning competence and apart from more formal learning opportunities facilitated through digital learning and/ or learning in schools/ universities, there are many opportunities for informal learning, often influenced by experiences of education in the past. In this regard, learning offers opportunities for transformational, organic, remembrance and experiences (Franzenburg, G., 2017). Although past experiences can take many and different forms, all shapes of experiences (e.g., planned, incidental) can be associated with practitioners' learning (Cousins, 1998). Virany, Tushman, and Romanelli (1996) even argue that learning occurs only after experience has been gained. Actions, even mistakes, provide new information that forms the basis for learning. Therefore, examining past events (retrospective reviews) is an essential process in fostering learning.

Prior knowledge serves as the foundation of quality research. Fundamental knowledge is required for a researcher to be properly guided in the conduct of research. A higher level of research will be achieved once a researcher is grounded in sufficient concepts and knowledge. Students in the graduate levels are expected to acquire the foundation of knowledge at the undergraduate level which will only be enriched in the higher level of education. It is well known that students build on what they know. The absence or presence of prior knowledge may hinder or promote their learning. The narratives of the participants were,

…so if you have no prior knowledge on research, you will definitely find it difficult to do research.

…sad to say but we were not provided with those knowledge in research when we were still in college.

Untaught skills cause unpreparedness. Research is to be done systematically and scientifically. This can only be made possible if students were exposed to the different skills in research which will prepare them to do research on their own. Deprivation of skills or the absence of opportunities for development may cause lasting effects to students. This might cause negative outcomes for the opportunities that these students will have in research. Continuous research skills development might also be adversely affected. The participants shared,

…we were not trained of the research skills and were just left nowhere. We work without guidance, and we always did it wrong.

…we are just told to go to the library and look for a topic. We were not taught properly of the steps that is why we really need to cope up with everything now.

Previous experience serves as the best teacher. Experiences in the past would always be considered the best teacher for they contribute in the understanding of the present situation most especially in terms of decision making and problem- solving. The learning experiences the students underwent in the past will stimulate them to continue the passion for learning in the present and even in the future. However, bad experiences in the past would surely affect the present perception and even the attitudes of the students in terms of research. Thus, rich experiences must be provided to students for them to be ready to acquire new skills in the present. The participants expressed,

…Because of my experienced, I tried my best to learn the things that my teacher before should have taught us in the first place. With this, my students now will never experience what we experienced before.

…What we experienced before was a traumatic one that we still carry until now. It was tiresome, very burdensome, very difficult. I did not know a lot of things about research.

Wrong perception creates confusion. The research arena is the haven for wrong perceptions. If this kind of perceptions will not be corrected, this can lead to the destruction of students. Negative attitude towards research is mainly caused by mistaken view in the field caused by improper orientation. These faulty perceptions were also caused by their past experiences that gave them unconstructive memories of what research is. Fear is also one possible effect of negative impression towards research. As most of them expressed,

…we perceived research as bulky, that you need to render more time and effort and it feels so heavy for us. The fear really affects our attitude towards research and it confuses us the more.

…Before, we perceived research as very complicated and very difficult. When you hear the word, it is really complicated for me.

The Influence of Teachers. The unique role that teachers play relative to students and the kinds of experiences that teachers create for students suggest that teachers may exert a powerful influence on whether students like school. Since attachment to school has been shown to affect students' learning and academic performance, identifying the characteristics of teachers that have a positive effect on students' feelings about school is very significant (Hallinan, M. T., 2008). More so, teachers could affect learning in larger contexts more effective by inspiring students. Inspiration refers to the stimulating influence that teachers have on students. Teachers' inspiration has a positive influence on students (Van, d. Z., 2012).

Teacher's motivation opens opportunities. Motivation is an essential process of effective teaching. Teachers, as the key person in the classroom, can increase learners' motivation which will inspire students' determination and perseverance to learn. Teachers' achievement and good examples can also encourage students to strive harder. If the motivation is powerful and strong, the rest of the learning process will be easy and effective to students. Motivation from teachers can build confidence and character among students. The participants shared,

…Research is an interesting topic but sometimes it is the teacher that makes it so difficult. And we are very lucky to have this teacher in our class. It is definitely a teacher factor.

…Another inspiration for me is to see people from this university who were awarded outstanding paper in the international arena. We told ourselves that someday, we can also be like them.

Suitable approaches unlock difficulties. The ease in understanding research is very much dependent on the way the teacher teaches the students. Since research is a complicated subject as perceived by students, teachers must find ways on how to deliver in the simplest way to promote learning. Teaching approaches which are translated in the classroom must be leading into the achievement of the specific goals in research. Approaches are considered suitable for students if they were designed based on the needs of the students and they will engage students in the learning process. The participants narrated,

…I realized that research indeed is very simple. And it depends on how it is delivered or thrown to us by our professor.

…The approach in our research class is really different than what we experienced before. It was a nice approach for me as a beginner.

Quality instruction mirrors the quality of teachers. Committing to quality instruction would entail quality teachers. Quality teachers are evident in the achievements of students. Students must meet certain learning targets and must make continuous progress. Instead of the students adjusting to their teacher, teachers should adjust the instruction to fit the diverse learning needs of the students. Through this, all learning gaps will be filled in. The participants mentioned,

… These teachers must know how to handle students to lessen the burden of work. These teachers must have the grasp for research and must have an eye for research as what our professor told us.

…The one who will handle research must be that somebody who knows research. They must have level of competence in handling research who know what to teach and how to teach it.

The Reflection of Oneself. As a distinct component of self-concept, self-worth is not simply a summary statement of self-perceptions across different domains of competency (e.g., academics, social, behavioral, physical). Rather, it is measured by its own set of items that tap general happiness, satisfaction, and overall affect about oneself (Bear, et al., 2002).

Attitude and beliefs affect one's appreciation. The action of the person depends on his attitude and beliefs. It is even reflected on the quality of his works and his dealings with the situations. Positive attitude most likely will have positive effects and negative attitude will create unconstructive effects.

Same is true with research. Quality output can only be achieved in the presence of positive attitude and belief. The participants responded,

… That is why I appreciate research very much because I found value in it.

… I am very much positive towards research. With this, I would still do research if given a chance. I think I will still be willing to do it. My realization is that, when you really put your effort on a topic, you will really enjoy doing it even if it is tiring.

Interest and Appreciation motivate creativity. External factors may contribute to the researcher but his interest would be the greatest aspect in the achievement of his intended goal. It is of great help when a person works on something of significance. Interest changes the attitude of a person toward something he is interested in. Curiosity and the determination to learn are also products of one's interest on a certain idea. Appreciation comes after the achievement of one's own objective. The participants verbalized,

…It is important that your study is something near to your heart, something related to our field, something we can relate on, and something that can trigger my imagination and creativity.

…Research really motivates me to experience brand new things. Without the passion and focus, you will never be the best in anything. The experience should be at its best.

Self- Redirection and Realization opens possibilities. Challenges are dealt in different ways by different people. It is just a matter of re- directing oneself towards the ultimate goal. It is therefore necessary for the students to have a clear direction as to where research is leading them. One has to focus and set clear objectives which will serve as his guide in the research journey. The achievement of these goals will lead into the total understanding of what research really is. The participants narrated,

…So far, research is still bulky and heavy, but by studying through and through and with constant practice, research will just be easy. I learned a lot and the more I read, the more I realized that I need to learn more.

…You really have to search for more studies of the different authors. This way, you will be guided. Using other authors would give you proper directions.

Independence and Confidence maximize new discovery. Confidence is always paired with skill and with skill, one can be independent. Independence is a requirement for leading your own way towards your goal. It is being able to do things on your own appropriately with confidence. However, independence does not mean that you do not need anybody because in research, other people's perspectives are very much significant. The participants verbalized,

…And here comes research. You will really stand on your own. You have to discover things and understand things by yourself.

… If I am working alone in my research, I can design techniques on how to do things. Before, I became so dependent on them that I lost my confidence of doing my own work.

Conflict and constraint limit quality and innovation. Research requires time and energy and it also requires organization and planning. It requires total dedication to be able to come up with a good study. However, graduate students are also working and they cannot give all their time in research. Thus, curriculum is also one factor to be considered to lessen the burden to our students. It must be well-planned in consideration to the load of work of the students who are also working at the same time. As shared by the participants,

…It is difficult when you teach research and you will also be the adviser at the same time. It's an overload of work. You'll teach the concept and then you will be reading their works one by one.

… Our problem is the placement of our subject in the curriculum If we just have one research subject this semester, maybe we can focus more on our work and we can give better output. This kind of schedule is something very difficult and complicated to handle.

Discussion

The development of research competence among graduate students is a collaboration of one's experiences (retrospective learning), continuous practice (experiential learning), and self-concept (self-knowing). It cannot be learned in one setting. It is learned through past experiences and continuous practice knowing one's strengths, weaknesses, capabilities, and attitude.

Learning from past experiences requires a process of reconstruction. Practitioners can generate and reorganize professional knowledge through their ongoing discussion of past experiences. The analysis of past experiences leads practitioners not only to a new understanding of practical situations but also to an exploration of preconceived tacit assumptions about teaching. Consequently, learning from past experiences leads to a better self-understanding, a better understanding of the teaching profession, and a better integration between the two (Grimmett, 1988).

Further, experiential learning, described as learning through participation in experiences, is often cited as a foundational tenant of teaching (McKim, A. J. Et al., 2017). Experiential learning is not a new concept, in fact, early apprenticeship models of education were experiential in nature (Furco, 1996). Dewey's contributions to our understanding of experiential learning extended beyond identifying the importance of experiences in education. As Dewey sharpened his focus, he articulated a process by which experiences lead to learning which in turn led to a pragmatic model of reflective thought and action (Dewey, 1916/2007, cited in McKim, A. J. et al., 2017).

In addition, self-concept is the nucleus of personality and a core factor affecting individual behavior; in addition, self-concept gradually develops from the infant stage and could evolve substantially as people grow in considerably diverse environments, such as the environment in which they interact with various people, or receive a specific type of education (James, 1890 cited in Chen, B. H., Chiu, W., & Wang, C., 2015). Academic self-concept indicates students' perceptions and self-evaluations of their overall abilities, compared with the abilities of others in achievement situations (Marsh, 1990; Waugh, 2002).

Based on the narratives of the participants, several themes were culled out from their lived experiences. They considered their experience very important on how they look at research at present, and their experience includes their prior knowledge, the untaught skills that they should have learned, and the wrong perceptions they have about research. These are all from their experiences from the undergraduate level and even from secondary level. Several studies focus on the effectiveness of undergraduate research programs. Undergraduate research experiences in a class were distinguished from those involving individualized participation in a research program. Students' experiences and perceptions about research from mentoring emerge as both an important component of a successful experience and a target for improvement (Linn et al., 2015).

The influence of teachers also affects their experiences most especially the motivation given by teachers, the suitability of the approaches used in introducing research to them and the quality of instruction that teachers had given them. One way to promote learning in the classroom is through the teacher's instructional style, as flexible methods of instruction focus on the learner and his/her interests and needs, raises the motivation to learn and naturally may reduce misbehavior (Lambert & McCombs et al., 1998, cited in Baloglu, N., 2009).

Further, the way they look at research is the reflection of themselves, their attitude and beliefs, their interest and appreciation, and their independence and confidence. It is also dependent on how they redirect themselves and what they realized amidst challenges in doing research. Conflict and constraint also affect the way they define research (Shah et al., 2013). The importance of attitudes in research education is of great importance because once the attitudes are formed, they are long-lasting and difficult to change (Ajzen & Fishbein, 1980). Attitudes towards research affect students' participation and impacting performance in the said field.

Conclusions

Research is considered the most important aspect to be developed among students for them to become globally competitive, competent, productive, and employable. However, research is also perceived to be the most difficult subject in the curriculum even in the graduate school. Doing research can either be easy or difficult to graduate students regarding their perception of what research is or in the actual writing process. The presence of desirable and undesirable elements would create the positive or negative effect on the competence (knowledge, skills, and attitude) of students in doing research. What they have learned in their experiences in the past affect their personal way of handling research at present and even on how they will handle research in the future.

Recommendations

In the light of the findings, the researcher recommends the creation of a research culture in the institution that would encourage students to participate, learn, and embrace research not only in school but in all their dealings in life. Likewise, there is a need for the re-orientation and training of teachers most especially on how to bridge the gap of students' readiness in terms of knowledge, skills, and attitudes toward research. Further, training on teaching pedagogy specifically in teaching research must also be given to teachers to help motivate students and not to discourage them. For future researchers, further study on a wider range can be conducted to validate the findings of the study.

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Indicating Career Path through Aptitude and Academic Performance of Fine Arts Students

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ABSTRACT

Career pathing is a series of structured and connected education programs and support services that enable students, often while they are working, to advance over time to better jobs and higher levels of education and training. In the educational process, career pathing equips students with the tools to help them prepare for and adjust to the unpredictable society that they will be in. Using the sequential explanatory mixed-method, this paper investigated the levels of aptitude and academic performance and their relationship. Further, their lived experiences on the mentioned variables were also investigated. The quantitative data were generated using the researcher-made survey questionnaire for the level of aptitude and the cumulative GPA for the level of academic performance. The qualitative data were gathered using the unstructured interview. The result regarding the level of aptitude in all line of specializations is beginning, and the academic performance is satisfactory in all areas. Also, the findings of the study revealed that student's aptitude has a significant relationship to student's academic performance. From the narratives of the participants, the following themes were culled out: personal involvement, teachers' contribution, and school's support. It was also revealed from the narratives of the participants their insights that experiential learning bridges aptitude and academic performance. The findings provided the baseline data for designing an electronic aptitude test for Fine Arts students that will guide them in choosing their career.

Keywords

Fine Arts aptitude, Academic performance, Fine Arts competencies, Life skills, Career pathing

Introduction

Career pathing is a series of structured and connected education programs and support services that enable students, often while they are working, to advance over time to better jobs and higher levels of education and training (White, 2012). In the educational process, career pathing equips students with the tools to help them prepare for and adjust to the unpredictable society that they will be in. Further, navigating these career pathways is a lifelong process of getting ready to choose and continuing to choose from many occupations available in our society (Witchger, 2011). This career pathing is also seen very significant in the field of Fine Arts because of its various areas for students to choose from. Further, students' aptitude and academic performance are also considered very important to make a successful and effective career pathing.

Fine Arts is primarily a human faculty of producing beautiful objects whose attributes are the results of a free and intentional activity (Bolzano, 1849 cited in Lapointe, 2011). Through the work of fine arts, the most reflective interests of people and spiritual truths of the widest range are brought home to consciousness and expressed (Rollins, 2012). As defined, fine arts is a way to communicate beliefs and express ideas about the human experience which is related to intelligence, and therefore, it should be integrated into education (Dewey, 1998 cited in Goldbatt, 2006). Creating an artistic environment that supports divergent thinking and problem solving cultivates students' ability to reflect and think through their world (Galda & Cullinan, 1994, cited in Nderu-Boddington, 2008).

Furthermore, in the context of ASEAN 2015 Integration Framework, the Philippine Commission on Higher Education (CHED) has issued a Memorandum Order No. 43, series of 2017 which outlines policies, standards, and guidelines for the undergraduate programs in Fine Arts and Design. As a baccalaureate program, Fine Arts and Design includes a wide range of disciplines characterized by the pursuit of aesthetics concerns creatively conveyed through different visual-based media. Accordingly, the industry expects that the graduates of Fine Arts program must be equipped with the fundamental knowledge, skills, and techniques in translating concepts into artworks and products so that they can contribute significantly to the growth and development of Philippine culture and the creative industries.

Guided by the Outcomes-Based Education approach, concerned Higher Educational Institutions (HEIs) are expected to develop and train Fine Arts students with critical and creative thinking, visual literacy, technical and technological competence, and ethics to professionally practice their discipline, meet the local and international quality standard in art and design, and respond to the creative needs of the industry and society (McMurray & Fetherston, 2013).

Statement of the Problem

The study aims to assess the levels of aptitude and academic performance of Fine Arts students of LCC- Bacolod for the academic year 2017-2018 to check whether the acquisition of knowledge, skills, and attitude relates to the performance of the students in school in preparation for their future job in the real world of work. Specifically, this study investigated on the level of aptitude in the five specializations and the level of academic performance in the five areas. Further, their lived experiences of Fine Arts students will also be looked into.

Framework of the Study

This study is anchored on the five theories: Theory of Constructivism, Outcome-Based Education (OBE) Theory, the Theory of Art Assessment, and Theory of Multiple Intelligence. The theory of constructivism is the anchor of this study because its focus is not on memorization and factual kind of learning, but constructivism is a theory where the student will be involved in activities and do hands-on activities in class. The theory underscores the thinking, analyzing, understanding, and applying skills (Marlowe & Page, 2005). Students gain knowledge through experiences and activities. Moreover, the study is further linked with the Outcome-Based Education (OBE) theory because its emphasis is on outcomes measurement rather than inputs of the curriculum covered. Outcomes may include a range of knowledge, skills, and attitudes. According to (Spady, 1996, cited in Berlach et al., 2008) the basic principle of transformational OBE is the precision of focus.

This study is also grounded in the Theory of Art Assessment. Arts have unique influences to make (to that end) through their emphasis on the expression of distinctiveness and the exercise and development of the creative capabilities (Eisner, 2002). He added that one of the aims of arts education would be to develop the learner's awareness, or perceive through the senses, and foster their imagination and creativity. It is not the goal or desire of art education to aid in non-art outcomes (Eisner, 1998, cited in Paufler et al., 2015). In addition, the study is also linked with the Gardner's Theory of Multiple Intelligence since Gardner's theory described intelligence as a set of aptitude, talents, or mental skills, which he referred to as intelligence (Gardner, 1993, 2006). Gardner wrote that in the light of a pluralistic view of the intellect, the question immediately arises whether there is a separate artistic intelligence. According to his analysis, there is none. Multiple intelligences and the grant of art experiences, creativity, and inquiring in a learning situation encourage unique, unbridled thought (Davis, 2000).

As legal background, this study is also based on Commission on Higher Education Memorandum Order (CMO) No. 46. The arts and design practice, focused on the study of culture, conscious of the need to develop the personal and national identity, sharpens intelligence and creativity, and develops a worldview that enables social participation and service to the community. Program in Fine

Arts and Design will shift from an Input-Based to an Outcomes-Based Education (OBE) system to form graduates with critical and creative thinking, visual literacy, technical and technological competence, and professional ethics. The graduates who will be able to practice professionally in the expanding local and international markets and meet globally-accepted Quality Standards in art and design.

As an OBE program, Commission on Higher Education (CMO) No. 43 provides specific policies and standards on Fine Arts. It states that the learning outcomes at module or unit level should seek to enable students to fulfill in his or her tracks. Unit briefs will mix creative expectations with more specific, often skill-based outcomes. The focus should be on the significance rather than on measurability bearing in mind the support structures put in place to ensure the required the skills and abilities of the students. Furthermore, the shift to the OBE provides the standards for a general framework and direction for Higher Educational Institutions (HEIs). It is expected that these will be expressed through the institutions/discipline's assessment criteria. CMO No. 43, Section 5, the degree program described shall be called "Bachelor of Fine Arts" with the following specializations clustered: Advertising, Fashion Design, Industrial Design, Painting, and Digital Media Arts.

Methodology

The study employed a sequential explanatory mixed-method design because this method involved two phases: the quantitative followed by qualitative (Creswell, 2015). The design started with the collection and analysis of quantitative data, which has the priority for addressing the study questions. This first phase was followed by the subsequent collection and analysis of qualitative data. The second phase (qualitative) of the study was designed so that it follows from the results of the first phase (quantitative). The researcher interpreted how the qualitative results help to explain the initial quantitative results.

Quantitatively, the study used descriptive-correlational research approach. The researcher used the descriptive method to collect information from the participants to statistically analyze every aspect of the data (Ritchie et al., 2013). The aim is to establish and test the instrument to conduct depth inquiry (Creswell & Clark, 2013) regarding the assessment of the aptitude and academic performance of the fine art students.

Qualitatively, to gather more information about the lived experiences of fine arts students, the phenomenological approach was used. A phenomenology is an approach that focuses on the commonality of a lived experience within a particular group (Creswell, 2013). The researcher aimed to specify, explain, and interpret the phenomenon (Maxwell, 2013).

Using the phenomenological method, the hermeneutical process investigated the lived experiences of fine arts students. The process involved the hermeneutics interaction between the researcher and what is being portrayed (Lichtman, 2010, cited in Harreveld, 2016). The focus is to define the individual’s experiences of the participants (Hays & Wood, 2011). Thus, phenomenology is the learning of “participant’s experiences” regarding how they make meaning in their lives by examining the relationship between what happened and how they have come to understand these events (Chenail, 2011).

The participants of the quantitative phase of this study were the Fine Arts students of La Consolacion College- Bacolod who were enrolled officially during the second semester of the school year 2017-2018. Participants included 180 Fine Arts college students from La Consolacion College-Bacolod coming from different major courses: Advertising, Fashion Design, Industrial Design, Painting, and Digital Media Arts.I

However, the participants for the qualitative phase were determined using maximal variation method. As a purposeful sampling strategy, the researcher selected a small number of participants that take advantage of the diversity relative to the research question (Cohen & Crabtree, 2006). The process was done by choosing participants from each line of specialization for the interview in the qualitative inquiry of the study, that is, one student with the score of 14 equivalent to the beginning level of aptitude and the score of 29 equivalent to developing aptitude. Further, students with the grades of 77.4 equivalent to poor academic performance and the grades of 89 equivalent to good academic performance.

For the quantitative phase of the study, the researcher-made survey questionnaire was used to gather the data. The survey questionnaire was constructed by the subject matter experts who are all Master's degree holders in Fine Arts. These experts are knowledgeable in the field of Fine Arts. The questionnaire was then reviewed by the test writers who are all doctorate degree holders with expertise in test construction. The survey questionnaire was subjected to item analysis, validity and reliability procedures. The significance of measuring the accuracy and consistency of research instruments is known as validity and reliability (Bolarinwa, 2015).

After establishing the validity of the questionnaire, item analysis followed to measure the whole test and assess the quality of those items (Freddano, 2011). The purpose is to improve the test items and disregard confusing items in the test to make it valid and reliable. The procedure was done in three rounds of testing the items to the thirty identified students for analysis. It involved measuring the difficulty and discrimination indexes of each item. For an item to be retained, its difficulty index must range between easy and difficult, while its discrimination index must have an acceptable index of greater or equal to .20. Items which failed to obtain the required indexes were subjected to revision or rejection.

After which, the researcher proceeded to establish the reliability of the instrument. Reliability often refers to the measuring method used, its consistency over time and its validity. The process involved pilot- testing the instrument to 30 Fine Arts students at LCC-Bacolod. Using KR21 and Cronbach alpha, the reliability index yielded 0.837 and 0.848, respectively. Meanwhile, for the academic performance of the participants, the data were obtained through the Registrar's Office with the written consent of the participants.

The qualitative data were gathered using the unstructured interview. Interviewing is the most common form of data collection in qualitative research (Lichtman, 2012). The use of the in-depth interview helped the researcher gather detailed, useful information which can provide the context and broad perspective to the quantitative data (Boyce & Neale, 2006; Leedy & Ormrod, 2010). For the gathering of the qualitative data, the interview was done face-to-face among the six participants. Guided by the interview protocol the researcher explained the purpose of the research, duration of the interview, the interview approach, (content, confidentiality, consent, and recording methods), and the use of the data.

Qualitatively, on the lived experiences of Fine Arts students of LCC-B, the recursive textual analysis was employed to produce a manageable set of verbal information (Cohen, 2010). The purpose was to obtain insights from the record of comprehensive interviews from the participants for the qualitative inquiry. The Lichtman's three C's – coding, categorizing, and identifying concepts helped the researcher earn an in- depth, comprehensive understanding of the phenomenon. Further, the iterative process was observed until the researcher reached the saturation point, that is, no new insights can be developed from the themes (Creswell, 2005, cited in Petalla & Madrigal, 2017).

Results

Quantitatively, the result as a whole in terms of the level of aptitude is beginning. The result in general shows that the students were not able to meet the expected knowledge, skills, and attitudes that are required of them as Fine Arts students.

Factors like the proper implementation of the curriculum intended for these students may be considered in this case. The quality of instruction and the quality of teachers should also be taken into consideration. Facilities and well-planned learning environment to promote learning should also be provided. The focus must be given to the competencies that the students should have as Fine Arts students in all the activities given to them in school.

A decent, coherent curriculum is a curriculum with topics and standards collectively selected by a team of teachers from the school - that is taught. The number of power standards (Ainsworth, 2003) must not be excessive; it should account for about half of what is contained in the standards documents (Marzano, 2003).This allows teachers to teach the essential standards in sufficient intellectual depth, with adequate time for deep reading, writing and talking.

Further, the level of academic performance of LCC- B Fine Arts students is satisfactory. As a whole, the academic performance of LCC Fine arts students is “satisfactory” in all areas which means that the cumulative GPA of the students are on the average level.

The academic performance of a student summarizes the quality of his experiences in school. If the school provides excellent services to students, students in return will perform well. The performance of the students is influenced by the school in which they studied. The number of facilities a school offers usually determines the quality of the school, which in turn affects the performance and accomplishment of its students (Kwesiga, 2002, cited in Khan, 2013).

The classroom is where they will gain an understanding of their place in the world and the gifts that they have to offer it. It is where the student acquires what they want their future to look like, as well as knowledge of the skills required to attain that goal. With the classroom being such an essential place in the growth of a child, it is important to understand how this affects the environment to receive maximum effectiveness in instruction (Hannah, 2013).

Inferentially, the result showed significant relationship between aptitude and academic performance as a whole and in terms of anatomy. However, there was no significant relationship between aptitude and academic performance in terms of creative design and color, freehand drawing, mechanical drawing, and computer. As a whole, the findings of the study revealed that student’s aptitude has a significant positive relationship to student’s academic performance. This was proven true in the study of Newton and Moore (2009) that showed a significant relationship between students’ aptitude and students’ academic performance. Further, there is an international consensus that aptitude is an important predictor of academic performance (Ciorbea, 2013).

Qualitatively, it was revealed from the narratives of the participants their insights that experiential learning bridges aptitude and academic performance. College students need hands-on training by integrating their knowledge (learning to know) to the seamless experiences (learning to do) with functional equipment and facilities. Students need to be ready to meet specific employer/ industry needs and high-quality task (learning to be), the need to learn how to work well with others and find different ways to offer solutions (learning to live together). This is supported by Kolb's experiential learning theory which states that the impetus for the development of new concepts is provided by new experiences. Learning is the process whereby knowledge is created through the transformation of experience (Kolb, 1984 cited in McLeod, 2017).

It was revealed from the narratives of the participants their insights on their aptitude and academic performance. The educational process is mainly affected by the quality of involvement that the students, the teachers, and the school had contributed. Specifically, it is revealed in the participants’ claims the following insights related to their aptitude and academic performance: personal involvement, teachers’ contribution, and school’s support.

The narratives of the participants disclosed their claims that the acquisition of their educational training was indicated their aptitude and academic performance is dependent on their personal involvement. Their involvement is inclusive of one's interest, self- motivation, innate skills, and their perseverance. Meaningful student involvement challenges schools to transform learning activities by fostering accountability, transparency, and interdependence between students and educators (Fletcher, 2003). The prospect of accountability between students and educators shifts the burden of school change from sitting solely upon educators shoulders and shares the responsibility of school improvement with students. Transparency is the deliberate attempt to move from a secretive or opaque organization to one that encourages open access to information, participation, and decision making, which ultimately creates a higher level of trust among partners (Meyer, 2003).

As shown in the participants' accounts, they considered teachers' contribution as a strong factor affecting their aptitude and academic performance in school. Teachers' contribution includes the provision of activities to students for skills development, quality of teachers, teachers' presence and professional competence. A positive student-teacher relationship has been defined as the teacher's perception that his or her relationship with the child is characterized by closeness and a lack of dependency and conflict (Birch & Ladd, 1997 cited in Topor, 2010). Closeness is the degree of warmth and open communication between the student and teacher, dependency is the over-reliance on the teacher as a source of support, and conflict is the degree of friction in student-teacher interactions. Specifically, a close student-teacher relationship is an important predictor of a child's academic performance (Birch_& Ladd, 1997, cited in Topor, 2010).

As reflected in their narratives, the participants also believed that school support given to the students affects their aptitude and academic performance in school. School support would include the implementation of the curriculum, the adequacy of the facilities for skills development, the sufficiency of the services given to students, and the supervision of instruction given to teachers to maintain the standards of quality teaching. Upon entering any school, one is quickly able to locate the vision/mission statement that presumably guides the daily practices of the school. Typically these statements include phrases such as lifelong learner, community membership, diversity, and support for all students. Reinforcing coaching and mentoring programmes for school leaders, to support the school in the search for solutions, and creating networks of schools to achieve durable change in practices and sustainable improvement (Muijs, 2007).

Conclusions

The aptitude and academic performance of the students are products of a collaborative effort of students themselves, their teachers, and the school administrators. Further, the aptitude and academic performance of the students are affected by several factors including curriculum implementation, quality of instruction, quality of teachers, and facilities of the school. Also, the aptitude of a student is a determinant of his/her academic performance.

Recommendations

The school administrators have to strengthen their support concerning the facilities, student services, and the supervision of teachers. They have also to consider the findings of this study for the improvement of the curriculum to remain competitive in the global economy. That faculty members be trained to give support to the Fine Arts department to motivate and educate exceptional artists and professionals who can contribute to the creative fields of art, design, and craft. That student be guided on an exact track that they will be taking. The findings of the study will also serve as a guide and standards to assess their creativity on how far they have gone in the field of arts. The parents have to understand fine arts and its major courses connecting with their son/daughter over an art activity. The study will also serve as a guide on what major course of fine arts their son/daughter is very potential of.

The industry partners have to bring partnership in business and arts since the quality fine arts professional produced by the school can increase exposure and prestige for a company regarding its products, services, and social responsibility. That Fine Arts practitioners be motivated to train students in an actual work environment through the help of their studios and galleries. That Fine Arts schools be informed on the importance of leading the students in the right track based on their aptitude and interest. Lastly, that future researchers be encouraged to produce more studies specific to art education.

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Impact of the Implementation of SBM Program among Public Elementary Schools in Cavite

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ABSTRACT

The study aimed to develop a school improvement (SIP) plan based on the impact of the implementation of School-Based Management (SBM) Program. The researcher used a combination of qualitative method and quantitative data using descriptive survey research. There were 108 public elementary schools in Cavite included in this study, 40 from small schools, 36 from medium schools and 32 from big schools. The respondents included the following: 108 school heads, 391 public elementary teachers, 108 parent officers and 108 barangay/local LGUs (Board on Education Chairpersons). Findings of the study revealed that 715 or 100% of the respondents' assessed that the variables of the implemented School-Based Management (SBM) programs such as (a) educational outcomes of schools, (b) roles and competencies of school heads, (c) competencies of teachers, (d) involvement of parents, community and other stakeholders and (e) outcomes of pupils had observable impact (OI) to the respondents or effect or change in performance for development is achieved/manifested. Moreover, learning outcomes of students/learners as assessed by the four groups of respondents revealed that there is a strong impact (SI) on the implementation of SBM program. The proposed school improvement plan is recommended for utilization among public elementary schools in Cavite in order to determine its effectiveness or weaknesses so that improvements/ modification can be made and could be adjusted to the needs and context of different schools.

Keywords

Impact of School-Based Management, public elementary schools, Cavite, learning outcomes, School Improvement Plan (SIP)

Introduction

Implementation of School-Based Management (SBM) in the Philippine educational system runs in almost a decade and a year starting from its pilot testing together with some of the projects implemented by the Department of Education [DepEd] in the year 2001. It was continuously implemented and included in some government schools to majority of all public schools nationwide during the year 2003 up to present (Cabardo, 2016). Moreover, the Department of Education (DepEd) continuously engaged leaders, administrators, educators and school-community stakeholders/part- takers in modifying and revisiting School-Based Management Framework. The latest is the implementation of the Revised School-Based Management, Assessment Process and Tool (SBM- APAT) issued by DepEd under DO No. 83, series of 2012. This nationwide implementation and adoption of the revised SBM-APAT as a process and assessment tool contributed on enhancing and carrying out of reforms under the K-12 curriculum or the enhanced basic education program of the Philippine government which serves framework of this study.

Consequently, one of the main goals of the Philippine government is to improve education and to make such education accessible to all. According to Forbes (2011), the Philippine Public Educational System is marching towards the most demanding ages of the 21st century which is behooving all educational leaders to reflect, analyze, plan and take action in order to cope with multifaceted changes in the borderless marketplace. Today's school environment become more complex and diverse and all learners/students are expected to perform and achieve educational success. Educational leaders must therefore recognize and actualize their collective roles, competencies and responsibilities for the total educational development of learners, and ensure participation of the school community (DepEd Order No.32, s.2010). Thus, teachers' competencies play pivotal roles in the implementation of SBM program together with the role and competencies of school heads, parents, community and other stakeholders.

Decentralization as part of the SBM has the potential to improve service delivery and education quality, strengthening accountability in public education and thus, providing strong incentive for better performance and improvement of variables that are determinants of school and learners' development. Thus, a need in paradigm shift in educational governance, from being school-centered to community- and child-(learner) centered and towards enhancing the principle of shared governance to support the stewardship of pupil's learning outcomes (DepEd Order No. 37, s. 2009).

In view of the above-mentioned, one of the current issues and concerns in the implementation of SBM program is the decisions made by school heads, teachers, parents and other stakeholders to operate the school. Since the school has greater control and autonomy over their own policy, allocation of resources, and the curriculum, decisions must be consensus and there are instances that other stakeholders disagree that there is lack of leadership. S some school heads and other stakeholders are confused of their responsibilities. Parents' volunteerism and participation in school activities should also be increased despite significant efforts to include them. Furthermore, there is comparison among the achievements and performance of public schools in Cavite specifically in government funding.

However, longevity of SBM implementation whether three or more years of its implementation would like to be determined if it has gained impact and changes overtime (improved for the better) with regard to educational outcomes of every schools; dwelled into the roles functions and competencies of school heads and teachers; students/learners' performances, achievements and learning outcomes in schools and involvement of parents and other stakeholders among public elementary schools in Cavite. This long range of implementation from being a neophyte school-implementer to becoming expert, competent, mature, or even advance in the implementation of SBM really took much effort, time, resources (monetary or human), skills, competencies, performances in most areas.

Statement of the Problem

This study was conducted to determine and assess the impact of the implementation of School Based-Management (SBM) program in selected public elementary schools of Cavite as basis for a proposed school improvement plan.

Specifically, this study sought answers to the following questions:

1. What is the impact of the implementation of the School-Based Management (SBM) program as assessed by school heads, teachers, parent officers and barangay LGU committee on education chairperson on *1.1educational outcomes of schools; 1.2 roles and competencies of school heads; 1.3competencies of teachers; 1.4 involvement of parents, community and other stakeholders and 1.5 outcomes of pupils/learners?*
2. What is the impact of the implemented School-Based Management program on the learning outcomes of students?
3. What plan can be proposed for school improvement (SIP) to enable continuous implementation of School-Based Management (SBM) program?

Paradigm of the Study

Figure below demonstrates the paradigm of the study. The research paradigm gives a clear illustration of the variables involved in the study using IPO (input, process and output) model. The *input* box shows the important variables of the implemented School-Based Management (SBM) program that the researcher wanted to measure. These variables included the assessment of school heads, teachers, parent officers and Local LGU officials (Board on education chairpersons) on educational outcomes of schools, roles and competencies of school heads, competencies of teachers, involvement of parents, community and other stakeholders, and outcomes of pupils. The perceptions and/or assessments of the respondents on the learning outcomes of students on the implementation of the SBM program were also included. The *process* box indicates the methodology used in the research design (Descriptive survey method, documentary analysis and interview), the research instrument, and the statistical done on the data gathered. The *output* box contains the expected outcomes which is the proposed School Improvement Plan (SIP).

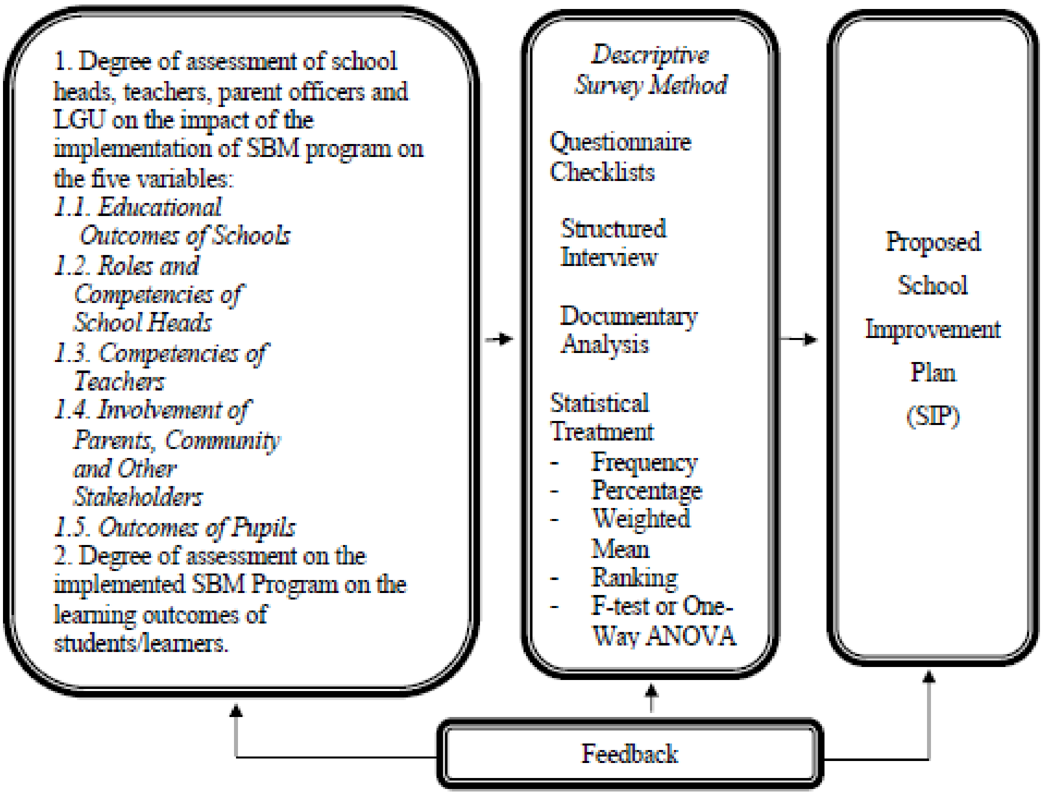

Figure 1: The I-P-O Model Used on the Impact of the Implementation of SBM Program

Methodology and Research Design

To obtain clear answers to the problems, the researcher utilized a descriptive method of research employing adapted survey-questionnaire on the revised SBM Assessment Process and Tool under DepEd Order No. 82.series 2012. The study is supplemented with a structured interview and documentary analysis (performance indicators such completion, cohort-survival, graduation, drop-out rates, etc.) taken from each participating schools in the seven (7) Districts of Cavite. Hence, the researcher employed a combination of the qualitative method with quantitative data. According to De Franzo (2011), qualitative research is used to gain an understanding of underlying reasons, opinions, and motivations while quantitative method uses measurable data to formulate facts and uncover patterns in research. The qualitative strategy (structured interview form) was employed to get the opinions of the respondents and to verify the validity of the gathered data for the development and enhancement of school improvement plan (SIP). The quantitative strategy was likewise employed in the survey technique such as in tallying the collected information and data.

The main data gathering instrument used was Likert Scale in a form of survey questionnaire to assess the impact of the implementation of School-Based Management program in each schools which were validated by the experts in the field of SBM Program in Cavite. They were the Division SBM Coordinators from the three (3) divisions in Cavite: namely Division of Cavite, City Division of Imus and City Division of Dasmarińas. The instrument was adapted from the following: a) Revised SBM Assessment Tool (based on ACCESs principles) provided by the Department of Education Central

Office under the DepEd Order No. 83, series of 2012; b) National Competency-Based Standards for School Head-Training and Development Assessment (NCBS-SH) Guide and Tool issued under DepEd Order No. 32 s. 2010; c) National Competency-Based for Teacher Standards-Teachers' Strengths and Needs Assessment (NCBTS-TSNA) Guide and Tool enclosed in DepEd Order No. 32, s. 2009; d) A Primer on School-Community Partnership issued by DepEd last January, 2009; and e) RA 10533 or the Enhanced Basic Education Act of 2013 (K-12 Program: The 21st Century Curriculum Learning for Work and Life) signed last May 15, 2013. Furthermore, the study was pursued to assess the impact of the implementation of School-Based Management (SBM) program likewise determine if such implementation has strengthened educational outcomes of schools; roles and competencies of school heads; competencies of teachers; involvement of parents, community and other stakeholders and improved learners' outcomes.

Moreover, instruments are constructed and utilized based on the variables needed in the development of proposed School Improvement Plan (SIP) to enhance and strengthen the leadership of school teams and improve community participation, address gaps, challenges and further improve school performance with focus on the principal areas of concern including 1.) curriculum and development of instruction 2.) development of resources and physical plant facilities 3.a.) administrative development, 3.b.) teacher/faculty development, 4.) development of school-community partnership and 5.) pupil/student development. Likewise the tool is employed in assessing the impact on the implementation and utilization of the revised School-Based Management Assessment, Process and Tool (SBM-APAT) to most schools at present. The survey-questionnaires were answered by the school heads (principals/head teachers/ teacher–in-charge/OICs), public elementary school teachers, parent officers (president or any active officers of the PTCA) and Barangay-LGUs (Board on Education Chairperson).

Questionnaires covered the items that would assess the impact of the implementation of SBM program based on the individual perspectives of the four (4) groups of respondents on a.) educational outcomes of school b.) roles and competencies of school heads c.) competencies of teachers d.) involvement of parents community and other stakeholders and e.) outcomes of pupils among schools in Cavite (consisting 7 districts or 5 schools division). In addition, another set of questionnaire was established to assess the impact of the implementation of SBM program on the learning outcomes of students. Through a 5 point Likert Scale with an interval of 0.79 where 5 is the highest and 1 is the lowest, each indicator of the five (5) development variables used to assess the impact of the implementation of SBM program among schools in public elementary of Cavite was measured. The obtained scores were interpreted as follows:

Table 1: Scale Used in Assessing the Impact of the Implementation of SBM Program among Public Elementary Schools in Cavite

Scale	Statistical Limit	Verbal Interpretation	Response Code
5	4.21 – 5.00	Strongly Observable Impact or Very Strong Impact (Very Strong effect or change in performance for development is achieved/manifested)	SOI
4	3.41 – 4.20	Observable Impact or Strong Impact (Strong Effect or change in performance for development is achieved/manifested)	OI
3	2.61 – 3.40	Moderately Observable Impact or Moderately Strong Impact (Neither effect or change in performance for development is achieved/ manifested nor not achieved/manifested)	MOI
2	1.81 – 2.60	Rarely Observable Impact Or Somewhat Strong Impact (Minimal effect or change in performance for development is achieved/ manifested)	ROI
1	1.00 – 1.80	No Observable Impact Or Weak Impact (Effect or change in performance for development is not achieved/manifested	NOI

Table 2: Scale Used in Determining the Impact on the Learning Outcomes of Students/Learners on the Implementation of SBM Program among Public Elementary Schools in Cavite

Weight	Range of Weighted Mean	Verbal Interpretation	Symbol
5	4.21 – 5.00	Very Strong Impact (Highly Evident)	VSI
4	3.41 – 4.20	Strong Impact (Evident)	SI
3	2.61 – 3.40	Moderate Strong Impact (Moderately Evident)	MSI
2	1.81 – 2.60	Rarely Strong Impact (Rarely Evident)	RSI
1	1.00 – 1.80	No Impact (Not Evident at All)	NI

Table 3: Number of Respondents from Each of the Participating Schools by Districts

SD	Research Population of School Heads				Research Population of Teachers				Research Population of Parent Officers				Research Population of Barangay LGUs				OAT
	S	M	B	TO TAL	S	M	B	TO TAL	S	M	B	TO TAL	S	M	B	TO TAL	
1ST	5	5	5	15	7	13	35	55	5	5	5	15	5	5	5	15	100
2ND	5	5	5	15	8	13	40	61	5	5	5	15	5	5	5	15	106
3RD	5	5	5	15	7	13	32	52	5	5	5	15	5	5	5	15	97
4TH	5	5	5	15	6	14	50	70	5	5	5	15	5	5	5	15	115
5TH	5	5	5	15	5	13	36	54	5	5	5	15	5	5	5	15	99
6TH	5	5	5	15	8	16	35	59	5	5	5	15	5	5	5	15	104
7TH	11	5	2	18	14	15	11	40	11	5	2	18	11	5	2	18	94
TO-TAL	41	35	32	108	55	97	239	391	41	35	32	108	41	35	32	108	715
OAT	*108*				*391*				*108*				*108*				*715*

Legend: SD = Schools by District S = Small School M = Medium School B = Big School OAT= Over-All Total

Table 3 shows the research population of the study which consist of 108 school heads with 41 in small schools, and 32 in medium schools; 391 teachers with 55 in small schools, 97 in medium schools and 239 in big schools; 108 parent officers with 41 in small schools, 35 in medium and 32 in big schools; and 108 barangay-LGU officials (board on education chairperson) with 41 in small schools, 35 in medium and 32 in big schools.

Results and Discussions

Problem 1. What is the impact of the implementation of the School-Based Management (SBM) program as assessed by school heads, teachers, parent officers and barangay LGU board on education chairpersons on: *1.1educational outcomes of schools; 1.2 roles and competencies of school heads; 1.3 competencies of teachers; 1.4 involvement of parents, community and other stakeholders; and 1.5outcomes of pupils?*

Table 4: Summary Distribution of Impact of the Implementation of SBM Program on the Five Variables

SBM Program Variables	School Heads		Teachers		Parent Officers		Local LGUs (BECs)		OAWM		
	OWM	**VI**	**OWM**	**VI**	**OWM**	**VI**	**OWM**	**VI**	**OA WM**	**VI**	**R**
A. Educational Outcomes of Schools	4.27	SOI	4.06	OI	3.85	OI	4.09	OI	4.07	OI	1
B. Roles and Competencies of School Heads	4.28	SOI	4.05	OI	3.76	OI	4.05	OI	4.04	OI	3
C. Competencies of Teachers	4.22	SOI	4.07	OI	3.86	OI	4.05	OI	4.05	OI	2
D. Involvement of Parents, Community and Other Stakeholders	4.08	OI	3.94	OI	3.70	OI	3.86	OI	3.90	OI	5
E. Outcomes of Pupils	4.09	OI	3.95	OI	3.74	OI	3.84	OI	3.91	OI	4
OAWM	4.19	OI	4.01	OI	3.78	OI	3.98	OI	3.99	OI	

Scale:

4.21 - 5.00	-	Strongly Observable Impact	(SOI)
3.41 - 4.20	-	Observable Impact	(OI)
2.61 - 3.40	-	Moderate Observable Impact	(MOI)
1.81 - 2.60	-	Rarely Observable Impact	(ROI)
1.00 – 1.81	-	No Impact Observed	(NOI)

Legend:

M = Mean
VI = Verbal Interpretation
R = Rank
OWM = Over-all Weighted Mean
OAWM = Over-all Average Weighted Mean

Table 4 reveals the summary of the respondents' assessment on the impact SBM on the five variables. Item A, *educational outcomes of schools*, ranks 1 with an OAWM of 4.07 and verbally interpreted for having an observable impact on the implementation of SBM program. This further illustrates that the effect or change in performance for development of school is achieved/manifested. It signifies that pupils have improved in their academic performance and applied what they have learned in real life situations. The finding shows that the school has a big responsibility in molding the personal and academic performance of the pupils and should provide quality education for all. The 1987 Philippine Constitution, Article XIV, Section 1, declares that "the State shall protect and promote the right of all citizens to quality education at all levels, and shall take appropriate steps to make such education accessible to all”.

Item D, *involvement of parents, community and other stakeholders,* ranks the least with an OAWM of 3.90 and verbally interpreted for having an observable impact on the implementation of SBM program. This implies that parents, community and other stakeholders have collaboratively worked with the teachers and school heads for the growth and development (physically, cognitively, socially,emotionally, etc.) of their children. Henderson et al., (2007, p.8) said that “the degree of parent and community interest in high quality education is the critical factor in the impact of the school environment on the achievement and educational aspirations of pupils/learners.

AN OAWM of 3.99 signifies that the five variables included in the implementation of SBM program have an observable impact, meaning the effect or change in performance for development in public elementary schools in Cavite are achieved and/or manifested. Hence, a must to include all the least sub-indicators/items in the school improvement plan.

The above findings suggest that in the implementation of SBM, unity of school heads, teachers, parents and other stakeholders will have a positive result in ideas, concepts and policy undertakings of the school. Nonetheless, school heads should take into consideration the importance of parents and other stakeholders’ involvement in school activities. All the variables and their respective indicators have observable impact. Thus, it is safe to assume that the educational outcomes of schools, roles and competencies of school heads, competencies of teachers, involvement of parents, community and other stakeholders and outcomes of pupils and their respective indicators (obtained the lowest) could be the bases in the proposed school improvement plan.

Problem 2. What is the impact of the implemented School-Based Management program on the learning outcomes of students/learners?

Table 5: Assessment of the Impact of the Implementation of SBM Program on the Learning Outcomes of Students/Learners

Learning Outcomes	School Heads Assessment		Teachers Assessment		Parent Officers Assessment		Local LGUs (BEC) Assessment		OAWM		
	OWM	VI	OWM	VI	OWM	VI	OWM	VI	OA WM	VI	R
1. Increased learners/students level of assessment *(diagnostic, achievement, summative, quarterly examinations, etc.)*	4.02	SI	3.98	SI	3.96	SI	3.95	SI	3.98	SI	9
2. Improved learners' academic performance in all subject/learning-areas.	4.03	SI	4.04	SI	3.98	SI	3.97	SI	4.01	SI	6
3. Learners became proficient/ skillful in the manipulation of school-related equipment and current ICTs.	4.12	SI	4.09	SI	4.06	SI	4.04	SI	4.08	SI	3
4. Developed conceptual and higher order thinking skills.	4.02	SI	3.99	SI	3.89	SI	3.87	SI	3.94	SI	10
5. Developed competencies and awareness in working with others *(collaborative work despite gender and cultural differences)*.	4.23	VSI	4.22	VSI	4.13	SI	4.10	SI	4.17	SI	2
6. Learners have applied learning experiences *(relevant life skills)* to real life situations.	4.04	SI	4.03	SI	4.01	SI	3.98	SI	4.02	SI	5
7. Developed abilities to use language effectively to speak, write, read and listen (English, Filipino, etc.)	4.06	SI	4.02	SI	3.97	SI	3.94	SI	4.0	SI	7
8. Learners have shown skills in leadership in most of the classroom/school activities and programs conducted.	4.08	SI	4.04	SI	3.99	SI	4.01	SI	4.03	SI	4
9. Learners became self-directed, independent and flexible individuals who can adapt to changes and environmental transitions.	4.20	SI	4.22	VSI	4.17	SI	4.14	SI	4.18	SI	1
10. Demonstrated abilities in processing, assessing and utilizing information obtained.	4.03	SI	4.01	SI	3.94	SI	3.96	SI	3.99	SI	8
OAWM	4.08	SI	4.06	SI	4.01	SI	4.0	SI	4.04	SI	

Scale:

4.21 - 5.00	- Very Strong Impact	(VSI)
3.41 - 4.20	- Strong Impact	(SI)
2.61 - 3.40	- Moderately Strong Impact	(MSI)
1.81 - 2.60	- Rarely Strong Impact	(RSI)
1.00 –	- No Impact	(NI)

Legend

:	= Mean
VI	= Verbal Interpretation
R	= Rank
OWM	= Over-all Weighted Mean
OAWM	= Over-all Average Weighted Mean
BEC	= Board on Education Chairpersons

Table 5 shows the assessment of the respondents in relation to the impact of the implementation of SBM program on the learning outcomes of students (learners). Data reveals that Item No.9, where "learners became self-directed, independent and flexible individuals who can adapt to changes and environmental transitions", ranks 1 with an OAWM of 4.18 and verbally interpreted as having a strong impact (SI) or the implementation of SBM program is evident in most schools in Cavite. Finding reveals that the respondents believed that independent learning is similar to personalized learning and is vital to the continuing development of a system of school education that promotes high quality and lifelong learning and social equity and cohesion (Meyer, 2010)

Item No. 9, developed conceptual and higher order thinking skills as part of the learning outcomes of students/learners ranks last with an OAWM of 3.94 and verbally interpreted as having a strong impact (SI) or the implementation of SBM program is likewise evident in most schools in Cavite. The result of the finding signifies that higher order thinking skills should be an integral part of teaching and learning especially at the higher education level. Thinking skills lessons should be a part of the curriculum if students are to think and solve problems individually; cooperatively and creatively, teachers on the other hand must be conversant with relevant techniques needed in teaching higher order thinking (Chidozie, et.al 2014)

An OAWM of 4.04 proves that all items included in the learning outcomes of students/learners have strong impact (SI) and/or the implementation of SBM program is evident.

The above findings show that learning outcomes of students/learners are measureable and verifiable knowledge, skills, abilities, and/or attitudes that students have at the completion of a course, level or degree. Student learning outcomes articulate what a student/learner should know or can do after completing a course, program, curriculum and/or quarter. The assessment of student learning outcomes provides information that puts student learning at the forefront of academic/curriculum planning processes on the part of the educator to improve learning and performance in all subject areas.

Problem 3. What plan can be proposed for school improvement (SIP) to enable continuous implementation of School-Based Management Program?

Table 6: Proposed School Improvement Plan *(An Enhanced 3-Year Development Plan)*

Key Results Area	Performance Indicators	Objectives	Programs/ Activities	Logistics	Time-line	Target Source of Funds	Success Indicators
A. Educational Outcomes of Schools *Management of Resources/ Facilities (4.4.3)*	The school has provided stakeholders and pupils with adequate, safe, functional and well-organized physical facilities	Conduct of regular planning and resource programming that is accessible and inclusive.	Resource Mobilization/ Inventory Fund Raising Projects Management of School Physical Facilities	School Property Custodian All School Stake-holders	Weekly Monthly Yearly (Whole Year Round for 3 Years)	PTCA LGU MOOE DepEd (Government) and Private Sector Donations/ Allocations	Well managed resources. Improved physical plant and facilities.
B. Roles and Competen-cies of School Heads *Accountabi-lities and Continuous Improvement Advocate (3.3.4)*	School head has recognized achievement /performance goals through a system of rewards or incentives.	Establish an organized performance and reward system.	Regular conduct of school program and activities for learners and stakeholders active participation.	School Head Teachers Learners PTCA	Twice a month (Whole Year Round)	School/ Canteen MOOE PTCA LGU LSB SEF National Appropriation/ or DepEd	Well-oriented school-community stake-holders on developed/ on-going perfor-mance

							accounta-bility system.
C. Compe-tencies of Teachers *Planning, Collaborative Assessing and Reporting (4.4.4)*	Teachers have contex-tualized the results of the assessment to pupil and local situation and the attainment of relevant life skills.	Contex-tualize results of learners' assessment to local situation.	Conduct of Formative Summative Periodic/ Quarter Assessments	School Head Teachers Learners	Daily Weekly Monthly Every Quarter *(Whole Year Round)*	MOOE PTCA LGUs	Became skilled teacher-planner and assessor of learners' welfare.
D.) Involve-ment of Parents, Community and Other Stakeholders *Support in the Development of Curriculum, Instruction and Assessment (2.2.3)*	Parents, community and other stakeholders have given their support in improving methods and learning materials that enhanced pupils' creative thinking and problem solving skills.	To aid as support in the enhance-ment of curriculum and instruction that lead to high quality learning.	Regular conduct of GPTA meetings/ conferences for the implemen-tation of school activities, programs/ projects in relation to curriculum and instruction. Institutiona-lization of M&E system	School Head Teachers Learners (pupils) Parents Other Stake-holders in the school-commu-nity	Monthly (Whole Year Round)	MOOE School-Canteen Donations -DepEd	Parents and community stake-holders have their own initiatives in supporting and improving the school.
E.) Outcomes of Pupils *Demonstra-tion of 21st Century Skills (2.2.8)*	1.3 Pupils have manifested development of conceptual skills and gained mastery in most of the learning/ subject areas that improve achievement.	Develop conceptual skills and gain mastery in all subject areas both in oral and written dimensions.	Provision for various classroom practices and exercises Simulation Activities Differentiated Instruction and Content Pedagogy	School Head Teachers Learners (pupils) Parents and Commun ity Stake-holders	Daily Weekly Monthly (All Year Round)	School/ Canteen -MOOE -PTCA -LGU -DepEd Appro-priations	Learners gained compe-tency and mastery in all learning areas. Conceptual skills of learners are enhanced

Conclusions

The variables and their respective indicators of the implemented school-based management (SBM) program have observable impact (OI) to all the groups of respondents thus, necessary to be included in the school improvement plan.

All the variables and/or items on the learning outcomes of students/learners on the implementation school-based management (SBM) program have strong impact, meaning implemented SBM program are evident.

Recommendations

School heads, teachers, parent officers and board on education chairpersons (Local LGUs) should strengthen their collaboration to maintain the status of the school and do their very best to improve for the development of the school and successful academic performance of the learners/students. Since all the variables and their respective indicators have observable impact in the implementation of the SBM program to the respondents, it is a must for school heads to regularly conduct a forum/conference to orient and inform all teachers, students, parents and other stakeholders on the importance and benefits of School-Based Management program in school. School heads must not dominate the decision-making process but a collaborative decision-making must be in place. Moreover, there should be a balance perspective on the implementation and outcome of SBM program as a practice and should regularly monitor, review, assess, report, modify and implement its program to improve school and stakeholders' performances. The proposed School Improvement Plan should be tried out among public elementary schools in Cavite (composed of five divisions or seven congressional districts) in order to determine its effectiveness or weaknesses so that improvements can be made and could be adjusted to the needs and context of different schools.

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The Quality of Catholic Education in Pandan Bay Institute Relative to the Philippine Catholic School Standards

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ABSTRACT

The paper primarily intends to assess the level of quality of Catholic education in Pandan Bay Institute (PBI) in accordance to the five domains of the Philippine Catholic School Standards (PCSS). A standardized survey questionnaire was used to gather data from 337 respondents—administrators, teachers, non-teaching personnel, students, and parents of the school. Using descriptive and inferential data analysis, the results revealed that PBI adheres to the quality standards for Catholic education but needs to continuously improve to meet the highest possible standards. Of the five domains, learning environment was rated high by respondents, while leadership and governance ranked low. Moreover, it also showed that parents have significantly higher assessment compared to other respondents in terms of assessing the quality Catholic education of the institute. The findings further affirm the important role that school administrators play in the effective management of the school to achieve quality Catholic education and ensure operational vitality in responding to the challenges of the 21st century education. Hence, the active involvement of the members of the school community to this effect.

Keywords

Catholic Education, Educational Management, Descriptive-Comparative, Philippine Catholic School Standards

Introduction

The primary purpose of Catholic education is evangelization (The Catholic School [TCS], 7; Second Plenary Council of the Philippines [PCP II], 623, 628). Accordingly, Catholic schools are evangelical centers (TCS, 53) whose mission is to proclaim the Good News of salvation to the world for the conversion of humanity and the transformation of the society (Evangelii Nuntiandi [EN], 18). Given this context, Catholic education aims to provide an integral human formation and faith education of persons (Cornelio, 2018) with emphasis on the religious/values education in its curricular and co-curricular programs in accordance to the principles of the Catholic faith (Code of Canon Law, c. 803 § 2). By doing so, all members of the Catholic schools, especially students, acquire a systematic understanding of Christian faith and life (PCP II, 626).

However, given the strong influence of the secularism (Ozar & Weitzel- O'Neill, 2013) which slowly depreciates the quality of Catholic education (CBCP, Pastoral Letter on the Era of New Evangelization, 2012), the Catholic identity and mission of education in Catholic schools may have been affected, if not altered by it in the present-day. In addition, the instrumentalization of Catholic education, religious diversification, and emergence of creative catholics are contemporary social contexts that pose great challenge to the relevance of religious education in Catholic schools (Cornelio, 2018). To address the challenges of quality Catholic education, the Catholic Educational Association of the Philippines (CEAP) has developed the Philippine Catholic School Standards (PCSS) to help Catholic schools to evaluate, improve, and sustain quality Catholic education in order to be responsive to the demands of the 21st century education while at the same remaining faithful to their religious calling.

Responding to the challenges of the 21st century education, Pandan Bay Institute (PBI), a La Mennais-administered Catholic diocesan school, offers a Catholic education which focuses on the integral human formation of students so that they may become faithful, morally upright, and servant-oriented citizens and leaders of the Church and society. To achieve this, PBI works in collaboration with all its stakeholders to ensure quality and sustainability of the Catholic education it offers.

Thus, the study primarily intends to determine the quality of Catholic education in PBI in accordance to the five domains of the Philippine Catholic Schools Standards, namely: a) Catholic identity and mission; b) leadership and governance; c) learner development; d) learning environment; and e) operational vitality as assessed by school's stakeholders. Also, it investigates whether a significant difference exists in the assessment of stakeholders on the quality of Catholic education. The findings of this study will serve as baseline data for designing a strategic plan for the continuous improvement of the school.

Framework of the Study

This study is anchored on the Philippine Catholic School Standards (PCSS, 2016) as its framework. As an assessment tool, PCSS provides the context and measures which can assist Catholic schools in the Philippines to revisit and re-examine their institutional practices for continuous improvement. The goal is to determine the level of the quality of Catholic education in Catholic schools in the light of their Catholic identity and mission.

Moreover, PCSS define the eight (8) characteristics which make up an excellent Catholic school. Accordingly, Catholic schools must: (a) be centered in the Person and message of Christ, (b) actively participate in the evangelizing mission of the Catholic church, (c) be animated by the spirit of communion, (d) be established as an ecclesial institution, (e) be known for its culture of excellence, (f) be committed to the integral formation of the human person, (g) engage in the service of the church and the society with preferential option for the poor and, (8) promote dialogue on faith, life and culture (PCSS, 2016).

Furthermore, PCSS presents five important domains which focus on the different areas of operation of the Catholic school: (a) Catholic identity and mission, (b) leadership and governance, (c) learner development, (d) learning environment and, (e) operational vitality. Each domain is measured by sets of 15 standards, 62 benchmarks, and rubrics. The 15 standards are ideal competencies and expectations which the Catholic schools must meet and practice to achieve its excellence and effectiveness (PCSS, 2016). Under each standard, the benchmarks prescribe what a Catholic school can do to achieve these standards. Likewise, the rubrics for assessing the Catholic school present four levels of attainment in ascending order: 1 – Initially meets benchmark, 2 – Partially meets benchmark, 3 – Fully meets benchmark and, 4 – Exceeds benchmark (PCSS, 2016).

Viewed from the perspective of Total Quality Management (TQM), PCSS set the quality standards to ensure quality Catholic education in Catholic school. However, this quality standard can only be achieved when all systems and procedures in Catholic schools are put into operation and ensured that they are efficiently and effectively operational (Sallis, 2014) with end of satisfying the demands of the stakeholders. Consequently, school executives are expected to plan, monitor, assure and improve the quality standards and products in meeting these expectations (Sallis, 2014; Antonaros, 2010). Though this big task is based on the skills of the school executives (Antonaros, 2010), collaboration of all the members of the school is critically important to successfully create this culture of quality (Sallis, 2014). In this context, PCSS as quality assurance management process primarily intends to establish and sustain the culture of quality of Catholic education in all Catholic schools in the Philippines.
In relation to collaboration, Freeman (2004) noted that the primary role of managers is to mobilize and motivate the people to collaborate for the fulfillment of the organizational goals (Minoja, 2012). Moreover, it is also their role to secure not only the interests and benefits of the organization but also of the stakeholders who take part in the attainment of these goals (Freeman, 2004; Minoja, 2012).

Hence, the overall success of ensuring the culture of quality of education in Catholic school depends not only on the role played by the school administrators but from the collaboration of all stakeholders (Minoja, 2012).

Methods

The study utilized the quantitative research design using the descriptive-comparative approach. The design was employed to statistically describe and analyze the assessment of the stakeholders on the quality of Catholic education in PBI as a diocesan Catholic school using the domains of the PCSS instrument.

The respondents of the study were the whole administrators, teachers, non-teaching personnel, parent-officers, and college students of Pandan Bay Institute. For high school students, they were determined using a stratified random sampling. Table 1 shows the and profile of the respondents.

Table 1. Profile of the Respondents

Variable	n	%
Sex		
Male	138	40.90
Female	199	59.10
Designation		
Administration	4	1.20
Teachers	32	9.50
Non-teaching Personnel	15	4.50
Students	269	79.80
Parent-officers	17	5.00
Total	337	100.0

The data were gathered using the standardized Philippine Catholic School Standards (PCSS) questionnaire. Permission was obtained from the Executive Director of the Catholic Educational Association of the Philippines (CEAP) to use the instrument. The respondents assessed the quality of the school's Catholic education in terms of the five domains, namely: (a) Catholic identity and mission, (b) leadership and governance, (c) learner development, (d) learning environment and, (e) operational vitality. The domains were assessed using sets of 15 standards, 62 benchmarks, and rubrics with the following scoring levels: (1) Initially meets benchmark, (2) partially meets benchmark, (3) fully meets benchmark and (4) exceeds benchmark.

The descriptive and inferential analysis were utilized in the data analysis using appropriate statistical tools. The mean was used to determine the level of the assessment of stakeholders on the quality of Catholic education in PBI as a diocesan Catholic school using the domains of the PCSS when taken as a whole and when stakeholders were grouped according to administrators, teachers, non-teaching personnel, students, and parent-officers. Meanwhile, Kruskal Wallis was utilized to determine the significant difference in the assessments of stakeholders on the quality of Catholic education in PBI when stakeholders were grouped according to designations.

Results and Discussion

Level of Quality of Catholic Education

Tables 2 and 3 present the level of the quality of education in PBI in the Philippine Catholic Schools Standards. The level of quality as a whole (M=2.91, SD=0.40) fully meets benchmark. Comparably, all domains fully meet benchmark with learning environment (M=2.97, SD=0.44) as the highest and leadership and governance (M=2.86, SD=0.50) as the lowest. In terms of designation, administrators rated "partially meets benchmark" in leadership and governance (M=2.45, SD=0.13), learner development (M=2.29, SD=0.32), learning environment (M=2.35, SD=0.53), operational vitality (M=2.28, SD=0.58); while Catholic identity and mission was rated "fully meets benchmark" (M=2.57, SD=0.17). On the other hand, teachers, non-teaching staff, students, and parents rated all domains "fully meets benchmark."

Table 2. Level of Quality of Education in Pandan Bay Institute

	Philippine Catholic School Standards			Catholic Identity and Mission			Leadership and Governance		
	M	SD	Int	M	SD	Int	M	SD	Int
Sex									
Male (n=138)	2.89	0.43	FMB	2.87	0.43	FMB	2.85	0.52	FMB
Female (n=199)	2.93	0.38	FMB	2.90	0.40	FMB	2.87	0.49	FMB
Designation									
Administration (n=4)	2.40	0.32	PMB	2.57	0.17	FMB	2.45	0.13	PMB
Teachers (n=32)	2.81	0.40	FMB	2.73	0.40	FMB	2.72	0.44	FMB
Non-teaching Personnel (n=15)	2.74	0.30	FMB	2.79	0.35	FMB	2.63	0.53	FMB
Students (n=269)	2.92	0.39	FMB	2.90	0.40	FMB	2.88	0.50	FMB
Parents (n=17)	3.24	0.38	FMB	3.15	0.48	FMB	3.26	0.34	FMB
As a whole (n=337)	2.91	0.40	FMB	2.89	0.41	FMB	2.86	0.50	FMB

Note: IMB = Initially Meets Benchmark, PMB = Partially Meets Benchmark, FMB = Fully Meets Benchmark, EB = Exceeds Benchmark

Table 3. Level of Quality Education in Pandan Bay Institute

Variable	Learner Development			Learning Environment			Operation Vitality		
	M	SD	Int	M	SD	Int	M	SD	Int
Sex									
Male (n=138)	2.93	0.46	FMB	2.92	0.46	FMB	2.85	0.47	FMB
Female (n=199)	2.99	0.45	FMB	3.00	0.43	FMB	2.88	0.45	FMB
Designation									
Administration (n=4)	2.29	0.32	PMB	2.35	0.53	PMB	2.28	0.58	PMB
Teachers (n=32)	2.78	0.46	FMB	2.98	0.45	FMB	2.85	0.44	FMB
Non-teaching Personnel (n=15)	2.75	0.31	FMB	2.87	0.32	FMB	2.61	0.38	FMB
Students (n=269)	2.99	0.45	FMB	2.96	0.43	FMB	2.86	0.44	FMB
Parents (n=17)	3.19	0.38	FMB	3.31	0.44	FMB	3.35	0.46	FMB
As a whole (n=337)	2.96	0.45	FMB	2.97	0.44	FMB	2.87	0.46	FMB

Note: IMB = Initially Meets Benchmark, PMB = Partially Meets Benchmark, FMB = Fully Meets Benchmark, EB = Exceeds Benchmark

As a whole, the findings of the study revealed that PBI “fully meets” the PCSS standards which indicates adherence to the quality standards of a Catholic school. PCSS stipulates that a Catholic school is excellent when its educational objectives, curriculum, and programs conform to the teachings of Christ and the Catholic church. Moreover, the school executives exercise their leadership and governance in the form of ministry by observing the principles of collegiality, co-responsibility, and subsidiarity. By observing these principles, school executives actively support the well-being and development of teachers, empower them to take initiative in the mission, create a conducive faith learning environment, and involve all stakeholders for the integral formation of the learners and in sustaining the school's operation (PCSS, 2016).

However, PBI needs to improve more in the different domains to meet the highest possible standards to become excellent and effective Catholic school. In the context of total quality management theory, Sallis (2014) argued that quality is absolute and must reach the highest possible standards set for it. Correspondingly, one of the reasons why the assessment did not meet the highest quality standards because the school leaders do not extensively communicate, consult, coordinate, and collaborate in planning and implementing school activities which foster empowerment of personnel, faith-based and sustainable Catholic learning environment for the holistic formation of students (PCSS, 2016).

Accordingly, in the study of Hobbie et al. (2010), the findings revealed that if administrators promote collegial relationship, they enable teachers to persistently collaborate with them for the success of the school. Also, Quinn (2010) affirmed that inclusive leadership elicit positive relationship among school members to participate in Catholic education. In fact, Salagean et al. (2013) asserted the importance of extending the power of decision to all employees to achieve quality management. Added to this, leadership must be shared according to TQM because regardless of status or role each personnel plays in the school, everyone is manager of his or her own responsibilities (Sallis, 2014). Convey (2012) and Cho (2011) confirmed that educational objectives, values, formation, and curriculum rooted in the Catholic teachings impact Catholic identity and commitment of the personnel to collaborate in the attainment of the success of Catholic education.

Regarding domains, PBI has “fully met” the benchmarks set in the PCSS with learning environment as the highest and leadership and governance as the lowest. According to PCSS, an excellent Catholic school creates a conducive faith environment with adequate facilities that are safe and functional to help the members of the school community engage and grow in the culture of faith. By engaging and growing in faith, administrators, personnel, and parents serve as models and examples to learners (PCSS, 2016). In fact, the studies of Convey (2012) and Przygocki (2004) affirm the essentials of faith community, culture and religious environment in the assurance of Catholic identity, teachers’ commitment and satisfaction, and the success of operation in general.

On the other hand, leadership and governance ranked lowest among the five domains. This indicates that PBI needs to strengthen its leadership and governance to continuously and effectively operate. In the context of PCSS (2016), an excellent and effective Catholic school is governed and administered by school executives who fully understand the primary purpose of Catholic education, exercise servant leadership and extensively undergo formation programs for the realization of the school’s educational objectives and mission. By doing so, they exert effort to develop, empower, motivate, and inspire stakeholders to help the school in achieving its educational objectives and mission as affirmed by several studies (Spesia, 2016; Knowles, 2014; Zamora, 2013; Morten & Lawler, 2016; Imhangbe, 2012; Ozar &Weitzel-O’Neill, 2013).

Meanwhile, the findings of this study proved both the stakeholder theory and TQM on the vital importance of leadership and governance in the organization’s success. In fact, the study conducted by Ray-Timoney (2015) confirmed that when governance and leadership are high, all other domains are also high.

Accordingly, if all domains in PBI are to meet the highest quality standards of the PCSS, school leaders are expected to understand and embody the school’s vision and mission in their conduct, undergo further studies and attend formation conferences which will help them perform their duties and responsibilities as Catholic school leaders (PCSS, 2016; Spesia, 2016; Morten & Lawler, 2016).

On the other hand, the domain of Catholic identity and mission was rated by all stakeholders “fully meets benchmark.” The result indicates that PBI’s educational objectives, curriculum, programs, and governance are aligned to the teachings of Christ and the Catholic Church. To do this, the members of the school community must have a shared understanding of its educational objectives, roles, and mission (PCSS, 2016). In fact, the findings of the study of Brasco (2008) affirms the necessity of shared vision or common understanding of the school’s mission to successfully attain the goal of the Catholic school.

Also, for the Catholic school to strengthen its faith formation, religion must be the core of curriculum and be integrated with all subjects (Costello et al., 2008). Besides, both Cho (2011) and Convey (2012) argued the critical need for religion to be the center of the formation to promote and support the school's Catholic identity and mission.

Moreover, the mean result of learner development indicates that the curriculum of PBI promotes the integral formation of the learners. Respectively, PCSS (2016) stipulates that for the Catholic schools to become effective and excellent, it's curriculum must align with the educational objectives of the school and must ensure the competence of its academic personnel to effectively model learners to grow in their own faith as supported by the study of Imhangbe (2012).

Furthermore, the low mean result of operational vitality manifests the need for all stakeholders including alumni and community sectors to collaborate to ensure the school's sustainability of operation. In PCSS, an excellent Catholic school endeavors to provide formation for the school community to plan on how to effectively sustain the school to continuously operate. Consequently, for PBI to survive the participation of the school members together with the alumni and other agencies is essentially needed as supported by the studies of Ray-Timoney (2015) and Knowles (2014).

Difference in the stakeholder's assessment on quality of Catholic education

Kruskal Wallis was used to determine the significant difference in the stakeholder's assessment on the quality of Catholic education in PBI when they are grouped according to designation. There was significant difference in the stakeholder's assessment on the quality of Catholic education in PBI in terms of Catholic identity and mission [H(4)=15.261, p=0.004], leadership and governance [H(4)=19.887, p=0.001], learner development [H(4)=21.024, p=0.000], learning environment [H(4)=14.790, p=0.005], operational vitality [H(4)=22.910, p=0.000], and Philippine Catholic school standards [H(4)=19.914, p=0.001] in general when grouped according to designation.

Post hoc test using Dunn's test revealed that parents' assessment is significantly higher than the other stakeholders in the areas of Catholic mission and identity, leadership and governance, learner development, learning environment, and operational vitality. This indicates that parents seemed to be more satisfied with the quality Catholic education offered in PBI. Also, despite their indirect involvement in the operation of the school, they trust the quality of education of the Catholic school in terms of resources, environment, quality of teaching, leadership, and formation of their children compare to the kind of education public schools provide (Thornton, 2010; Litton et al., 2010). PCSS stresses the necessity for these parents to collaborate with all other stakeholders in the school to help the learners achieve the curriculum goals and objectives. Litton et al. (2010) pointed out that parents play a vital role in both the formation of the learners and at the same time on the sustainability of the school's operation. For this reason, the school should exert effort to satisfy them as partners and beneficiaries of the services of the Catholic schools to address their needs and sustain their interest and stake in the school (Shaheen et al., 2016). In the view of stakeholder theory, indeed, the satisfaction of customers is critical to ensure their interest in the organization (Sallis, 2014; Bibu & Saris, 2017; Antonaros, 2010).

On the other hand, administrators rated significantly lower level of assessment compared to other stakeholders. The result showed that administrators seemed to be less satisfied with the quality of Catholic education that PBI provides. According to the study of Amanchukwu & Ololube (2015), one of the educational management roles of administrators is to effectively keep accurate custody and protect all institutional files of the school. This implies that administrators rated convincingly low because they have the direct access to the school records and information on the status of the school among other members of the school community, providing them concrete idea of the strengths and weaknesses of the operation of the school and the quality of Catholic education it offers. Another reason why administrators rated significantly lower compare to other stakeholders is the different reforms being made in the school which pressure administrators as the school's executives to be accountable whether the school meets the standards, framework, curriculum, and forms of assessment as confirmed by the findings of Marks & Printy (2003).

Implication of the Findings

Generally, PCSS instrument helps assesses the practices and performance of the Catholic schools. Moreover, when these practices and performance are assessed, Catholic schools can identify means and ways to improve the school to effectively respond to their mission of evangelization. Hence, when the school faithfully responds to this evangelical mission alongside with academic excellence, Catholic schools are guaranteed of the quality of its Catholic education.

At the organizational level, the school and its community extensively improve all domains of the Catholic schools when they are able to exhaust all their means. Thus, when all domains function effectively, the Catholic school can meet the highest possible standards set by PCSS. Consequently, when the school can meet these standards, everyone in the school is empowered to fulfill this indispensable mission of evangelization. Also, strong alignment of all its educational objectives, processes, and curriculum to the principles and doctrines of the Catholic Church is essential. Likewise, when all programs and activities of the school are in accord with the pastoral directions and works of the church, both the church and the school fulfill the critical mission of evangelization.

At the individual level, the embodiment of the administrators of the school's vision, mission, core values, and objectives is necessary for the operation of the Catholic schools. Accordingly, when administrators conduct themselves following the school's educational objectives, they can perform their essential roles and functions in the school's operation in the ministry of servant leadership. Henceforth, when administrators practice their responsibilities as servant leaders, the full operation of all domains become outstanding.

Also, the results express the importance of shared understanding in the attainment of quality Catholic education. When all have the same understanding of this fundamental reason, everyone in the school is empowered to collaborate in building a strong Catholic learning environment and culture. So, when everyone is willing to participate in creating this climate in the school, the members of the school community can model each other in the growth and maturity of their faith.

Conclusion and Recommendations

The level of quality of Catholic education in the light of the PCSS as a whole “fully meets benchmark” with learning environment as the highest and leadership and governance as the lowest. When stakeholders are grouped according to designation, there was significant difference in the assessment of the quality of Catholic education in PBI. Parents rated significantly higher and administrators rated significantly lower.

The diocesan Catholic schools fulfill the quality of its Catholic education when it is able to meet the highest quality standards of the PCSS. Moreover, these schools exert effort to comply with these standards to improve all domains of school’s operation to effectively respond to its primary purpose of evangelization. For this reason, strong alignment of school’s educational objectives, practices, formation, and curriculum to the principles and directions of the Catholic Church is essential. Correspondingly, the role of administrators as servant leaders who embody and exemplify the Catholic school’s vision and mission is vital to perform this strong alignment and to empower all stakeholders to collaborate and support them in fulfilling the educational apostolate and sustainable operation of the Catholic school.

It is recommended, therefore, the need for the school administrators to undergo further studies to hone their leadership and governance skills for the effective management of the Catholic school. Likewise, professional growth and development opportunities for teachers must be made available to enhance their teaching competence in response to the needs of the 21st century teaching and learning. Also, the school must sustain the conducive learning environment to continuously foster and develop their knowledge, skills, and attitudes to prepare them for life and global employment. In addition, parents' active involvement in school's programs and activities must be encouraged to ensure their continued support to the school. A comprehensive strategic plan which will address the five domains of PCSS for the school's continuous improvement is also in order.

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Factor Analysis for Evaluation of Lifelong Learning Skills of Teaching Profession Program in Ramkhamhaeng University

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ABSTRACT

This study aimed to develop the measurement of lifelong learning skills which is defined as an ongoing process of person to learn throughout their life by using learning process, innovation, and educational technology in order to enhance person's wisdom, keep up with the ever-changing global social context and continuously acquire new knowledge all over their lifespan. Data were collected from 370 students of teaching profession program (50 males and 320 females). An exploratory factor analysis (EFA) with extraction method of principal component analysis was performed to analyze the data. The result of the EFA identified a three-factor structure for the lifelong learning skills measurement with 30 items. The three factors including (1) Information technology and communication skills, (2) Learning skills and (3) Thinking skills, together explained 54.708 % of the total variance. This measurement assesses an ability of lifelong learning skill among teaching profession to reflect their strengths and weakness so that professionals are able to suggest and give a guideline appropriate for their student individually.

Keywords

Lifelong Learning Skills, Factors Analysis, Teaching Profession Program

Introduction

Globalization and the growth of the fast-changing knowledge economy mean that people require upgrading their skills throughout their adult lives to cope with modern life, both in their work and in their private lives. Nowadays, there is an increasingly important basic skill in the ever-changing technological universe: an ability to learn and adapt to the needed new skills and training (OECD, 2007).

Knowledge is no longer handed down from above (either from specialists in design, from managers in organizations, or from teachers in courses), but is constructed collaboratively in the context of work. Learners must be able to use LLL facilities to upgrade their knowledge, skills, and competence in a discipline as required. They can also contribute to the facilities by sharing knowledge and supporting other learners (Marjan Laal, 2011).

According to Phuthong and Srisan (2002), global economy and society have been developed and focused on human expertise and proficiency. This developmental idea was adopted to Thai education in connection with a lifelong learning concept. Lifelong learning (LLL) was defined as an educational view which could be arranged by educational organizations in order to enhance students' knowledge and skills. Meanwhile, it was able to be created by students who might have a personal learning objective (Cropley, 1978). Lohittaviset (2005) supported that the lifelong learning could also be included for all age groups. Phongpaiboon et al. (2003) claimed that the lifelong learning concept could support Thai students to improve their competences. In addition, this concept could relate to an educational guidance in the 21st Century which was provided by the United Nations Educational, Scientific and Cultural Organization (UNESCO). According to the International Committees of Education (1997), the UNESCO' educational guidance was titled as "Learning: The Treasure Within". Four educational principles for the 21st Century were also pointed out in terms of "Learning to Know, Learning to Do, Learning to Live Together and Learning to Be". These principles could be considered as a requirement for Thai students' lifelong learning skills. Candy et al. (1994) asserted that the skills were relevant for undergraduate students to regarding their academic experience and collaborative skills. Additionally, the students were able to design a learning process based on their individual propose and learning style.

In a Bachelor of Education (B.Ed.) programs, the lifelong learning skills were considered as an educational concept for students who studied in the B.Ed. programs. Not only the students were able to improve their knowledge and skills for a field experience, but they also learned about a pedagogical preparation for their future career as a teacher. Furthermore, the lifelong learning skills could be required for Thai B.Ed. students with regard to a Thai educational policy and educational standards. Due to the importance of the lifelong learning skills within a Thai context, my research project intends to study the students' lifelong learning skills in order to develop their learning outcomes in connection with Thai universities' character education and the educational standards.

Methodology

Sample and Instrumentation

The populations of the study were 616 students enrolled in the course of *Field Experience in Teaching Profession* during the second semester of the academic year 2017 at RU. The sample group, convenience sampling in which the samples of the study were 370 students who have enrolled in the Teaching Behavior course or in 4-year student and ones who have the cumulative credit not less than 106 credits. Theoretically, minimally adequate sample size for conducting Exploratory Factor Analysis (EFA) should be at least five times as many observations as the number of variables to be analyzed, and a more acceptable sample size would have a 10:1 ratio (10 observations per variable: Hair, et. al., 2006). Therefore, the adequate sample size for this study which initially consisted of 30 variables should be at least 300 or greater.

The instrument of the study was a 2-part questionnaire collecting the following data. Part I collected student's demographic data including gender, age and major. The questions were in the form of a checklist and fill in the blank. Part II, containing three sections, asked students to rate the three predictor variables in a Likert 5-point scale. Each section had 10 questions, for a total of 30 questions. The verification consists of the examination on the content validity, the determination of the appropriateness and clarity of the language used, and the determination of Index of Item Objective Congruence or Index of Concordance (IOC), evaluated by 3 experts. The attained IOCs rank more than 0.5.

Procedure and data analysis

Analysis factors for evaluation on lifelong learning skills consisted of four stages: (1) conceptual definition of the construct, (2) development of the items, (3) testing the assumptions, (4) development of the lifelong learning skills scale.

Stage 1: Conceptual definition of the construct
Defining the construct was the first step to develop the instrument and was based on a model or theoretical reference that identified the relationships among the construct and its components (Hair, et al., 2006). For this study, *lifelong learning skills* was defined as an ongoing process of stimulation and encourages people to acquire knowledge, values, skills, and understanding of what they need to know throughout their lives. This skill helps people to apply the new knowledge, create, and feel delighted with all the aspects of their life (Mckenzie. 2001: 368 ; Kearns. 1998. *Lifelong Learning : Implication for Vocational Education and Training*: unpaged). The results of this synthesis found that three main

lifelong learning skills (Subin Chaiya, 2015). The components of lifelong learning skills are describe in more details in Table 1.

Table 1 Components of Lifelong Learning Skills

Component	Definition
Thinking	Critical thinking, Problem solving, Numeracy skills and Creativity, collectively referred to as "Cognitive skills,"
Learning	Information Literacy, Self-directed learning, Team work, Human relations and Research skills
Information Technology and Communication	Language with Communication , ICT skills and Digital literacy

Stage 2: Development of the items

For this study, items were generated from the Lifelong Learning skills definition and its components, together with previous Lifelong Learning skills addiction scales. A total of 30 items were selected after excluding duplicate or unrelated items. Then, three professionals (among them were two academic education and an academic lifelong learning) were asked to select items and scored on the Index of Item-Objective Congruence (IOC). Finally, 30 items remained for further analysis. The developed instrument utilized Likert-type response categories assessing frequency on a five-point scale.

Stage 3: Testing the assumptions of the Exploratory Factor Analysis (EFA)

Testing assumptions of EFA required both conceptual and statistical consideration. A strong conceptual foundation supported the assumption that a factor structure existed before the EFA was performed. Test of statistical assumption ensured that the variables were sufficiently intercorrelated to produce representative factors and possessed 'factorability'. Several empirical measure were calculated to aid in assessing the factorability of the correlation matrix, including the anti-image correlation matrix, Bartletts test of sphericity, and the measure of sampling adequacy. The *Anti-image correlation matrix* is the negative value of the partial correlation matrix; in each case, smaller anti- image correlation coefficients (less than .70) are indicative of a data matrix suited to factor analysis. *Bartletts test of sphericity* is a statistical test for the presence of correlations among the variables. A statistically significant Bartletts test of sphericity (p-value < .05) indicates that sufficient correlations existed among the variables to proceed. Lastly, *Measure of sampling adequacy (MSA)* requires that MSA values must exceed .50 for both the overall test, as indicated by a value of Kaiser-Meyer-Olkin (KMO), and each individual variable. Variables with values less than .50 should be omitted from the factor analysis (Hair, et. al., 2006; Yong & Pearce, 2013). For this study, all of the conceptual and statistical assumptions were met. The conceptual assumption was conceptually based on the Concept of lifelong skills. Testing the statistical assumptions confirmed that: (1) the anti-image correlation coefficients were not greater than .70, indicating that the factors structure can be explained by the variables loading on the factors, (2) a statistically significant Bartletts test of sphericity (chi-square = 6.382, df = 435; p-value < .000), indicated that sufficient correlations existed among the variables, and (3) The KMO values was .960 and the MSA values for each individual variable were .3 and above, indicating that each variable was able to predict without error by the other variables. Taken all of this together supported the factorability of the correlation matrix.

Stage 4: Development of the Lifelong Learning skills scale by using an EFA

The primary purpose of EFA is to condense data by regrouping a large number of variables into a limited set of factors based on shared variance, so that relationships and patterns can be easily interpreted (Hair, et. al., 2006; Yong & Pearce, 2013). Therefore, for this study, an EFA was used to develop the Lifelong

Learning skills, by the extraction method of principle component analysis and the rotation method of Promax with Kaiser Normalization. The outcome of the EFA is reported in the results section.

Results and Discussion

The findings of the study answering the research objectives were presented in Table 2-5. Almost all of the samples were female (86.05%) with the students of them in the age range of 20-24 years old (51.10%). The most major is Social Study (26.50%) and the less major is Computer (0.80%)

Table 2: Demographic Data of the Sample Group

Demographic Category		*f*	□
Gender	Female	320	86.50
	Male	50	13.50
Age	20-24	189	51.10
	25-30	141	38.10
	30 up	40	10.80
Major	Early Childhood	71	19.20
	Elementary	65	17.60
	Thai	71	19.20
	English	12	3.20
	Chinese	6	1.60
	Social Study	98	26.50
	Mathematic	15	4.10
	Science	20	5.40
	Art Education	9	2.40
	Computer	3	0.80

Results of the EFA

The purpose of the EFA was to find a way to organize the information contained in a larger number of original variables into a smaller set of new, composite dimensions or factors with a minimum loss of information (Hair, et. al., 2006). In meeting this purpose, four steps were introduced: (1) selecting the variables (items), (2) specifying the number of factors, (3) examining extraction methods and factor loadings, and (4) examining rotation methods and interpretations.

Selecting the variables (items)

First, items were selected based on consensus among professionals and scores on the IOC. Three items (from an original pool of 30 items) that showed IOC < .06 were 30 items remained for further analysis. Second, in the EFA, it was important to determine *Communality* or the variance accounted for by the common factors. Items with low communalities (e.g. less than .20 so that 80% is unique variance) were eliminated from the analysis since the aim of factor analysis was to try and to explain the variance through the common factors (Yong & Pearce, 2013). In this study, all of the 30 items shown communality larger than .20; therefore, all of them were retained for the analysis, as described in Table 3.

Specifying the number of factors

In consideration of the number of factors to extract, eigenvalues and the scree plot are commonly used to guide decisions. Kaiser's criterion suggests retaining all factors that are above the eigenvalue of 1. The scree plot consists of eigenvalues (X-axis) and number of factors (Y-axis). The number of factors to be retained is represented by the data points that are above the break, revealed by drawing a horizontal line and a vertical line starting from each end of the curve (Yong & Pearce, 2013). In this study, determining eigenvalues (greater than 1 per Kaiser's criterion) together with the scree plot (shown in Figure 1) lead us to extract 3 factors accounting for 54.708% of the total variance. These three factors were sufficient to meet a specified percentage of variance explained.

Table 3: Communalities for all the 30 items of the Lifelong Learning Skills Items

Items	Initial	Extraction	Items	Initial	Extraction
Item 1	1.000	.540	Item 16	1.000	.561
Item 2	1.000	.471	Item 17	1.000	.602
Item 3	1.000	.615	Item 18	1.000	.459
Item 4	1.000	.562	Item 19	1.000	.541
Item 5	1.000	.466	Item 20	1.000	.527
Item 6	1.000	.497	Item 21	1.000	.488
Item 7	1.000	.611	Item 22	1.000	.504
Item 8	1.000	.589	Item 23	1.000	.464
Item 9	1.000	.563	Item 24	1.000	.549
Item 10	1.000	.514	Item 25	1.000	.587
Item 11	1.000	.473	Item 26	1.000	.532
Item 12	1.000	.586	Item 27	1.000	.706
Item 13	1.000	.577	Item 28	1.000	.722
Item 14	1.000	.500	Item 29	1.000	.575
Item 15	1.000	.509	Item 30	1.000	.526

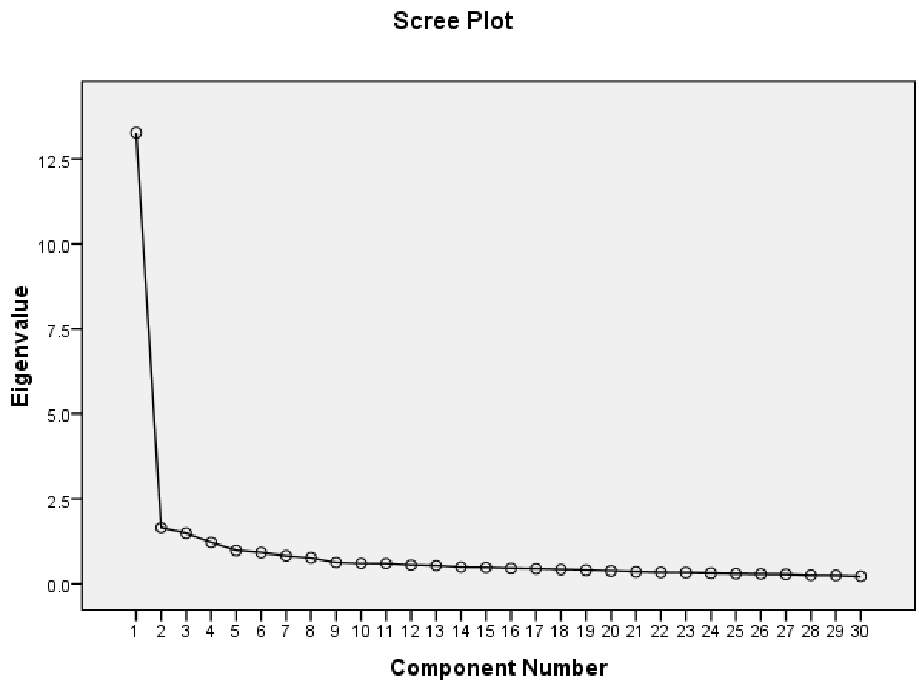

Figure 1: The scree plot generated in EFA for 30 items

Examining extraction methods and factor loadings

The extraction method of *principal component analysis* is used to extract the maximum variance from the data set with each component thus reducing a large number of variables into smaller number of components (Tabachnick & Fidell, 2007 as cited in Yong & Pearce, 2013). The results from our *principal component analysis* revealed that one items (item 20) had factor loadings < .30. These low factor loadings indicated that perhaps the items did not represent a sign of lifelong learning skills and should be excluded from the analysis. After discarding these one items, data were subjected to a final EFA with all factor loadings < .30 suppressed. Though the final EFA run, a three-factor structure of the lifelong learning with 29 items was identified.

Examining rotation methods and interpretations

Factors are rotated for better interpretation since unrotated factors are ambiguous. The goal of rotation is to attain an optimal simple structure which attempts to have each variable load on as few factors as possible, but maximizes the number of high loadings on each variable (Rummel, 1970 as cited in Yong & Pearce, 2013). In this study, an oblique rotation method -*Promax with Kaiser Normalization*- was employed in eight iterations, explaining together 54.708% of the total variance. Factor 1 consisted of ten items ; factor 2 consisted of nine items ; factor 3 consisted of ten items, as described in Table 4.

Table 4: Rotated factor matrix for a reduced set of Lifelong Learning skills items (discarded item 20)

Item No.	Item in brief	factor		
		1	2	3
29	Can use English language to Introduce yourself.	.870	-.325	
27	Have a clear point when answer the questions.	.853		
28	Summarize the reading contents correctly.	.834		
26	Use speaking skills in Thai language to respond and suitable conversation circumstance.	.678		
21	Have Information Technology (ICT) skills.	.664		
30	Understand what is the others want.	.642		
25	Your writing skills in Thai language can understandable.	.600		
22	Search many learning resources.	.503	.320	
24	Use Information Technology in classroom management.	.432	.320	
17	Have an idea and open mind, Listen to the opinions of the others.		.880	
18	Teamwork Without conflict.		.773	
12	Like to learn new things		.745	
13	Interest in learning to improve knowledge and skills.		.698	
15	To Know what you need to improve knowledge and skills.		.638	
11	Other than reading in the library and lectures in the class, you have the other ways to learn.		.601	
16	Use multiple data to make decisions.		.554	
10	When experiencing bad things, look for opportunities to improve, rather than being inactive.		.497	.430
14	Follow up the information, news and knowledge.	.309	.487	
23	Use internet to search for the reporting purposes.	.399	.426	
19	Have a working plans that appropriate in the objective.		.411	
7	Interpretation of information that show as numbers, graphs, charts, diagrams, tables or text.			.773
3	To know what does information say and also describe the relationship of information			.768
8	Use statistics data to explain the issues.			.756
1	Can use the knowledge in various fields to explain the situation.			.733
2	Compare the results Effects between two or many situations.			.712
4	Adapt the ideas to suit the changing situations.			.708
9	Identify the problems that you are facing.			.629
5	When data from different sources is found to be inaccurate, Then select the data from officially accredited sources.			.617
6	Create new work that different from the original.			.489

N = 370; Factor loadings < .30 were suppressed
Extraction Method: *Principal Component Analysis*/ Rotation Method: *Promax with Kaiser Normalization*

Before interpretation and naming of the factors, two items cross-loading between the factors (item 23) needed to be identified. Specifically, item 23*(Use internet to search for the reporting purposes)* was cross-loaded on both Factor 1 and Factor 2 with loadings of .399 and .426 respectively. Item 10 *(When experiencing bad things, look for opportunities to improve, rather than being inactive.)* on both Factor 2 and Factor 3 with loadings of .497 and .430 respectively. We regrouped item 23 to be under Factor 1 and item 10 to be under Factor 3 for the best conceptual fit, even though the factor loadings were slightly smaller. Thus, the resulting interpretation and naming of the factors in the final lifelong learning skills is shown in Table 5.

Table 5: Interpretation and naming of the factors in the final Lifelong Learning skills.

Factor	Naming	Definition	Item No.	Item in brief
1	Information technology and communication skills	Language with Communication, ICT skills and Digital literacy	29	Can use English language to Introduce yourself.
			27	Have a clear point when answer the questions.
			28	Summarize the reading contents correctly.
			26	Use speaking skills in Thai language to respond and suitable conversation circumstance.
			21	Have Information Technology (ICT) skills.
			30	Understand what is the others want.
			25	Your writing skills in Thai language can understandable.
			22	Search many learning resources.
			24	Use Information Technology in classroom management.
			23	Use internet to search for the reporting purposes.
2	Learning skills	Information Literacy, Self-directed learning, Team work, Human relations and Research skills	17	Have an idea and open mind, Listen to the opinions of the others.
			18	Teamwork Without conflict.
			12	Like to learn new things
			13	Interest in learning to improve knowledge and skills.
			15	To Know what you need to improve knowledge and skills.
			11	Other than reading in the library and lectures in the class, you have the other ways to learn.
			16	Use multiple data to make decisions.
			14	Follow up the information, news and knowledge.
			19	Have a working plans that appropriate in the objective.
3	Thinking skills	Critical thinking, Problem solving, Numeracy skills and Creativity, collectively referred to as "Cognitive	7	Interpretation of information that show as numbers, graphs, charts, diagrams, tables or text.
			3	To know what does information say and also describe the relationship of information
			8	Use statistics data to explain the issues.
			1	Can use the knowledge in various fields to explain the situation.

		skills,"	2	Compare the results Effects between two or many situations.
			4	Adapt the ideas to suit the changing situations.
			9	Identify the problems that you are facing.
			5	When data from different sources is found to be inaccurate, Then select the data from officially accredited sources.
			6	Create new work that different from the original.
			10	When experiencing bad things, look for opportunities to improve, rather than being inactive.

Conclusion and Recommendations

The objective of this review article was to study the theoretical framework of lifelong learning skills of university students by synthesizing data which related to lifelong learning skills from concepts, theories, and researches. The results of this synthesis found that three main lifelong learning skills are Thinking skills consist of ten items : Critical thinking, Problem solving, Numeracy skills and Creativity, collectively referred to as "Cognitive skills". In accordance with the standard framework of higher education in the country, qualifications under the bachelor's degree include an ability to acquire new knowledge and skills in the profession, develop higher cognition abilities such as synthesizing, analyzing, planning and creativity, develop an ability to communicate with other efficiently, able to apply advance technology with new project, as well as the ability to improve self-competency, increase morality and develop teamwork skill.

Learning skills consist of nine items : Information Literacy, Self-directed learning, Team work, Human relations and Research skills. Lifelong Learning Skills is defined as an ongoing process of person to learn throughout their life by using learning process, innovation and educational technology in order to enhance person's wisdom, keep up with the ever-changing global social context and continuously acquire new knowledge all over their life span (Lohitwisas Snong, 2005).

And 3) Information technology and communication skills : Language with Communication , ICT skills and Digital literacy conform to As Walters S. (2010) claims; our planet won't survive, if it is not a learning planet, and sustainable development will be achieved by learning through life. And Michael W. McGarrah.(2015). Lifelong Learning Skills (LLS) provide the foundation for learning and working. They broadly support student thinking, self-management, and social interaction, enabling the pursuit of education and career goals. Collectively, LLS are the means by which students master academic content and translate knowledge into action.

This research result provides a guideline to identify the best learning outcome and desirable performance of a teaching profession. These knowledge should be well-defined in the Bachelor of Education program, as it is an important competency to be fully functioning person and to be a qualified teacher in the development of students and Thai society later on.

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Career Aptitude and College Course Preference of Senior High School Graduates

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ABSTRACT

This study examined the significant growth of career aptitude of the senior high school students' after they were classified into their senior high school academic strand. It also investigated the alignment of their college courses with their senior high school academic strand. A sample of 399 students' test results was used and 136 (or 32%) individuals were sorted whether their courses are aligned with their academic strands. Descriptive research design was followed utilizing standardized tests results, personal interview and on-line chat to gather information from the senior high school graduates. Results revealed that the mean scores of each career aptitude showed an increase from the first time assessment. With regards to the alignment of the students' current college course and their academic strand, about 69.8% of the sample are enrolled in their intended field, while 30.1% are enrolled in a different field.

Keywords

Career Aptitude, College Course Preference, Senior High School

Introduction

School Year 2016-2017 marked the onset of the Senior High School (SHS) Program in the Philippine Basic Education System. The Senior High School Program is a two-year specialized upper secondary education. Students are given the opportunity to choose a specialized field to pursue based on their aptitude, interest, and school performance or capacity/ability. Every student that goes into the school system possesses an aptitude and or the natural ability to do something. This aptitude, which others commonly call talent, is something unrelated to practiced skills or learned knowledge. Thus, learning environments in schools are primarily designed to develop these students' talents and potentials within the institution's primary mandate of instruction. Equally important is guiding students to rightly choose their field of interest, and ensure higher success rates in their chosen field. In school, varied activities are facilitated as opportunities for them to plan and choose their careers. Given these occasions, students are consistently encouraged to "think about their life and career goals" (Reinersman, 2017). Students under the High School level have an age range of 13 to 19 years old. Known as "adolescence stage," this period is the stage when the person compared with what they "feel they are and with the question of how to connect the roles and skills cultivated earlier with the occupational prototypes's" (Erickson, as cited by Merritt, 2016). It is but fitting to determine their aptitudes when they reach their "adolescence."

Upon entering the Senior High School Program, students have a choice of the track based on their inclination and guided by their aptitude and academic achievement. Each track defines the content of the subjects a student takes in Grades 11 and 12. In the current SHS model, the student has the option to choose among the four (4) tracks, namely: (1) Academic; (2) Technical-Vocational-Livelihood, and; (3) Sports, and; (4) Arts and Design. In this research setting, the school offered only the Academic Track under which are four strands, namely: *Accountancy, Business, and Management (ABM); Humanities and Social Sciences (HUMSS); and Science, Technology, Engineering, and Math (STEM)*. This study determined the students' aptitude in Senior High School and further established the extent of their alignment of their respective tracks to the college courses they have enrolled in. The valuable information on students' aptitude to support curriculum development efforts will further enhance students' potential in Senior High School and prepare them in their chosen careers or field of work. Result of this study may provide valuable information for the school administration to further enrich the existing curriculum geared towards enhancing students' potentials of students as well as their capability to choose their field of interest, ensuring higher success rates in their chosen fields according to their academic preparation in the Senior High School.

Theoretical Framework

Career Aptitude. Aptitude is defined as "an innate component of a competency (the others being knowledge, understanding, learned or acquired abilities (skills) and attitude) to do a certain kind of work at a certain level. Aptitudes may be physical or mental. The innate nature of aptitude contrasts with achievement, which represents knowledge or ability that is gained" (Kaplan, 2016). Aptitudes are a person's natural talents (Reinersman, 2017). They characterize the student's ability to perform certain aspects stronger than the other areas of his "spectrum of abilities" (Fourie, 2009). In assessing aptitude, aptitude tests "measure the potential to learn or acquire a new skill." Such tests also evaluate an individual's potential for future performance" (Watson, 2015). Aptitude assessment in schools is done to assist and guide the students in making career decisions and "aptitude tests are used to determine if a person is capable of performing the requirements of certain jobs. They are frequently used in high school settings to help students decide about future academic or employment options" (Capuzzi, 2017). Why is knowing your aptitude and interest important in progressing to higher learning and making career choices? Sperry (2015) wrote that "the purpose of career assessment is to obtain information about a person's interests, abilities, talents, and capacity for growth related to his or her own aspirations." The use of career assessment tools, with the guidance of a career counselor or advisor, enables the person to streamline and discern the suitable career options in line with his "work-related goals" (Sperry, 2015). In a study of the early stage of senior high school implementation, it was discovered that there are combinations of achievement, interest and aptitude factors that are needed for learners' success in each of the senior high school track (CLADAsia, 2015; Magno, 2016). Furthermore, academic preparedness (McCannon, 2012) and pre-college educational aspirations (Mattern et al, 2010) are significantly related to undergraduate persistence. Grefenstette-Moon (2011) specifically found out that high school ranks and scholastic aptitude test scores moderately predict academic success in first year of enrolment. Reviving cognitive assessment in career counseling promises to help counselees better understand their career options and how to enhance their competitiveness for the ones they prefer. This study therefore assumed that valuable information on the SHS students' current aptitude and performance in educational programs, as well as determining improvements in their career aptitude is vital data needed for developing the curriculum especially in addressing potential/aptitude development of students towards career appropriateness, which eventually would have translated to their enrolment in the college course of their choice.

The following specific objectives guided the direction of this study. Specifically, data on the Grade 11 students for School Year 2016-2017 were determined such as: 1. aptitude performance result; 2. difference in the students' career aptitude performance when the students were in Grade 9 with that of their latest Grade 11 career aptitude performance; and 3. their current college course.

Methodology

The study used descriptive research design using quantitative method as the main approach in gathering the data. The population of the study consisted of Grade 11 Senior High School (SHS) students enrolled in a Catholic, exclusive for boys' school for SY 2016-2017. Out of a total of 421 enrolled in the Senior High School program for SY 2016-2017, 399 students participated in the study. The study used the Philippine Aptitude Classification Test (PACT), a standardized test developed by the Center for Educational Measurement (CEM). PACT is a standardized test which "aims to measure the students' aptitudes and help them decide on the course they will take after high school. It measures probable performance in various courses of study" (CEM, 2012). The scores on these aptitudes are reported as Ability Indexes (AI) which refer to the degree of competence in relation to the aptitudes measured by the test" (CEM, 2012). The reliability values per subtest range from .775 to .927. The test measures 10 specific aptitude areas: are *Symbol Discrimination*, *Form Discrimination*, *Verbal English*, *Number Facility*, *Induction*, *Flexibility of Closure*, *Verbal Filipino*, *Spatial Aptitude*, *Mechanical Reasoning* and *Perpetual Acuity*.

Ability Index	Ability Category
25 to 89	Low
90 to 110	Average
111 to 175	High

Career Aptitudes	Description[1]
Symbol Discrimination	The ability to recognize quickly and accurately similarities and differences among series of letters and numbers.
Form Discrimination	The ability to recognize quickly and accurately similarities and differences among geometric figures.
Verbal English	The ability to understand the English language.
Number Facility	The ability to solve simple arithmetic problems accurately.
Induction	The ability to discover a general rule or principle behind a series of figures.
Flexibility of closure	The ability to recognize figures from complex or distracting patterns and to construct them mentally.
Verbal Filipino	The ability to understand the Filipino language.
Spatial Aptitude	The ability to visualize a 3-dimensional object from its 2-dimensional representation.
Mechanical Reasoning	The ability to visualize the assembly of parts and the operation of simple machines.
Perceptual Acuity	The ability to detect the pattern of change in a series of geometric figures and the differences in written information.

[1]*The aptitude description is taken from the Score Interpretation Guide of Philippine Aptitude Classificatio Test, (CEM) Center for Educational Measurement, Inc. 2012.*

Figure1. Score Interpretation of PACT

In addition to the batch profile, the data were compared with their aptitude scores in 2014-2015, that is when they were in Grade 9, using the same test. The use of data was limited only to those students with aptitude and interest scores, from the same test, obtained from two (2) school years: 2014-2015 and 2016-2017. The paired scores were also grouped according to their current Academic Track in Senior High School. The PACT results of the batch, from the same test given when they were in Grade 9 SY 2014 to 2015, were utilized to conduct a comparative analysis and determine the significant difference in their aptitude performance as they transitioned from Junior High School to Senior High School. The study utilized the descriptive statistics such as Frequency, Percentage, and Mean. T-test of Paired sample was used. The Paired T-Test "compares the means between two related groups on the same continuous, dependent variable" (Lund Research, 2013). Likewise, data from the university admission office and individual interview was used to determine the alignment of their SHS track and their actual college course.

Results

Aptitude test results of Grade 11 students for School Year 2016-2017. Table 1 shows the overall mean aptitude performance of Grade 11 students for SY 2016-2017. The results show that students have "High" Ability Index in Symbol Discrimination (mean AI=139.8), Verbal English (mean AI=113.87), Number Facility (mean AI=112.03), Spatial Aptitude (mean AI=116.77). Students display outstanding skills in handling similarities and differences on symbols and figures, solving mathematical problems, and having a firm grasp in using the English language. Students were found to be in the "Average" category or students scored a mean AI of 102.45 to 107.94, aptitudes in this range include Mechanical Reasoning, Perceptual Acuity, Form Discrimination, Induction, and Flexibility of Closure. It is expected that students perform satisfactory work output on tasks that may require recognizing figures from complex to unusual patterns, detecting changes in situations, and transmitting thoughts to form mechanical parts and operations. Looking further, Verbal Filipino is the only aptitude that falls under the "Low" ability category with an AI of 89.06. Students tend to exhibit difficulty in understanding the Filipino language and using it in daily activities.

Most of the reported standard deviation (SD) are 18 and below. It means that the scores of the students are most likely concentrated around the mean. However, SDs for Number Facility, Spatial Aptitude, Perceptual acuity, and Form discrimination are >18 which indicate that the scores of the students are dispersed from the mean (CEM 2012).

Table 1. *Overall Mean Aptitude Performance of Grade 11 students for SY 2016-2017*

Aptitudes	Mean (n=399)	SD	Ability Category
Symbol Discrimination	139.80	18.631	High
Form Discrimination	105.75	19.904	Average
Verbal English	113.87	14.237	High
Number Facility	112.03	21.784	High
Induction	103.29	18.852	Average
Flexibility of closure	102.45	17.616	Average
Verbal Filipino	89.06	17.356	Low
Spatial Aptitude	116.77	21.115	High
Mechanical Reasoning	107.94	18.297	Average
Perceptual Acuity	105.75	20.373	Average

Tables 2, 3, and 4 present the mean aptitude performance and frequency of ability categories of students grouped according to their current academic strands in Grade 11 SY 2016-2017.

Table 2 shows mean aptitude performance, frequency and percentage distribution of ability index categories of Grade 11 SHS under the academic strand for STEM. As seen on the results, STEM students obtained "High" ability category on *Symbol Discrimination, Verbal English, Number Facility, Spatial Attitude, Mechanical Reasoning*, and *Perceptual Acuity.* Among these aptitudes, Symbol Discrimination posted the highest mark with 184 or 96.8% of students obtained the "High" mark. This was followed by Spatial Aptitude with 154 or 81.1% and Number Facility with144 or 75.8%.

Given the result of the standard deviations (SDs), aptitude scores of the STEM students were concentrated around the mean, indicating that their scores were comparable, also implying homogeneity of aptitudes.

Students, under the STEM track, "should exemplify science and mathematics skills, plus the students should have the aptitude in syllogism, number and letter series, visual discrimination and series" (CLADAsia, 2015; Magno, 2016). In this study, STEM students, having been assessed as "high" in the above-mentioned aptitudes, are said to be ready for STEM careers.

Table 2 *Mean Aptitude Performance, Frequency and Percentage Distribution of Ability Index*(STEM, SY 2016-2017)

Aptitudes	STEM (n=190)								
	Mean	SD	VC	Ability Index Category					
				High		Average		Low	
				f	%	f	%	f	%
Symbol Discrimination	141.75	16.73	High	184	96.8	5	2.6	1	.5
Form Discrimination	108.45	19.22	Ave	84	44.2	84	44.2	22	11.6
Verbal English	119.44	12.24	High	146	76.8	42	22.1	2	1.1
Number Facility	124.09	18.72	High	144	75.8	41	21.6	5	2.6
Induction	109.52	16.92	Ave	92	48.4	85	44.7	13	6.8
Flexibility of closure	109.35	16.42	Ave	75	39.5	101	53.2	14	7.4
Verbal Filipino	91.41	16.10	Ave	15	7.9	90	47.4	85	44.7
Spatial Aptitude	124.56	17.50	High	154	81.1	31	16.3	5	2.6
Mechanical Reasoning	116.99	16.61	High	118	62.1	67	35.3	5	2.6
Perceptual Acuity	114.70	17.963	High	112	58.9	61	32.1	17	8.9

(*Source:* CENTRO-EIP Testing Unit, 2017)

Table 3 shows mean aptitude performance, frequency and percentage distribution of ability index categories of Grade 11 SHS under the academic strand – HUMSS.

Table 3. *Mean Aptitude Performance, Frequency and Percentage Distribution of Ability Index* (HUMMS, SY 2016-2017)

Aptitudes	HUMSS (n=81)								
	Mean	SD	VC	Ability Index Category					
				High		Average		Low	
				f	%	f	%	f	%
Symbol Discrimination	137.83	20.64	High	70	86.4	10	12.3	1	1.2
Form Discrimination	99.16	18.51	Ave	21	25.9	37	45.7	23	28.4
Verbal English	109.63	14.69	Ave	32	39.5	44	54.3	5	6.2
Number Facility	96.90	18.34	Ave	16	19.8	41	50.6	24	29.6
Induction	97.30	17.94	Ave	14	17.3	41	50.6	26	32.1
Flexibility of closure	95.96	14.67	Ave	11	13.6	38	46.9	32	39.5
Verbal Filipino	88.37	15.983	Low	4	4.9	35	43.2	42	51.9
Spatial Aptitude	106.06	18.86	Ave	34	42.0	34	42.0	13	16.0
Mechanical Reasoning	96.77	15.10	Ave	16	19.8	39	48.1	26	32.1
Perceptual Acuity	96.65	19.94	Ave	16	19.8	35	43.2	30	37.0

(*Source:* CENTRO-EIP Testing Unit, 2017)

Results show that students obtained "High" only in one category. Seventy (70) students or 86.4% of them scored "High" on Symbol Discrimination (mean AI=137.83). They were found to be "Average" in the rest of the aptitudes except in Verbal Filipino, with a mean ability index of 88.37, interpreted as "Low" ability category. Based on the SDs, aptitude scores of the HUMSS students were clustered around the mean. According to CLADAsia (2015) and Magno (2016) students under the HUMSS track need to "show aptitude in verbal analogy, syllogism, number and letter series". In this study, students may need to further prepare for HUMSS related courses to ensure an above average performance and success in handling college work in this field.

Table 4 shows mean aptitude performance, frequency and percentage distribution of ability index categories of Grade 11 SHS under the academic strand – ABM.

Under this, generally, the students were assessed to be High in two aptitudes: symbol discrimination (mean AI=138.16) and spatial aptitude (mean AI=111.99). On the other hand, they were, however, found to have an "Average" ability category in Form Discrimination (mean AI=105.93); Verbal English (mean AI=108.28), Number Facility (mean AI=103.70), Induction (mean AI=97.82), Flexibility of Closure (mean AI=96.32), Mechanical Reasoning (mean AI=101.59), and Perceptual Acuity (mean AI=98.21). As to Verbal Filipino, said students obtained a "Low" rating, where the mean was AI=86.01. Based on the SDs, half of aptitude scores, were within the mean (SD=<18) while the other half however (SD=>18) tended to move away.

Table 4. Mean Aptitude Performance, Frequency and Percentage Distribution of Ability Index (ABM, SY 2016-2017)

Aptitudes	ABM (n=128)			Ability Index Category					
	Mean	SD	VC	High		Average		Low	
				f	%	f	%	f	%
Symbol Discrimination	138.16	19.80	High	118	92.2	8	6.3	2	1.6
Form Discrimination	105.93	20.91	Ave	52	40.6	56	43.8	20	15.6
Verbal English	108.28	13.67	Ave	55	43.0	65	50.8	8	6.3
Number Facility	103.70	17.90	Ave	39	30.5	65	50.8	24	18.8
Induction	97.82	19.33	Ave	38	29.7	47	36.7	43	33.6
Flexibility of closure	96.32	17.32	Ave	20	15.6	61	47.7	47	36.7
Verbal Filipino	86.01	19.49	Low	9	7.0	42	32.8	77	60.2
Spatial Aptitude	111.99	23.04	High	74	57.8	34	26.6	20	15.6
Mechanical Reasoning	101.59	15.87	Ave	36	28.1	64	50.0	28	21.9
Perceptual Acuity	98.21	18.44	Ave	34	26.6	56	43.8	38	29.7

(*Source:* CENTRO-EIP Testing Unit, 2017)

Students under the ABM track need to be equipped with "aptitude in verbal analogy, number and letter series, visual discrimination and series" (CLADAsia, 2015; Magno, 2016). In this study, students are only "average" in these said aptitudes and therefore may need more interventions to increase this potential.

Comparison of Grade 9 Aptitude with Grade 11 Aptitude. With the same cohort analyzed for the comparison of means and the same instrument used, Table 5 shows the result of the paired t-values of the two sets of aptitude in 2014-2015 with that of 2016-2017.

Students' career aptitudes were compared when they were in Grade 9 (SY 2014-2015) and when they were Grade 11 (2016-2107). The paired t-test results to determine the difference between mean aptitude scores. The table disclosed that generally there was a significant improvement in their aptitude. Specifically, for *Symbol Discrimination*, although this was already high, it had increased significantly given the t-value of 8.11, P = 0.00. Worth mentioning is the observed improvement from *Average* to *High*, were aptitudes on *Verbal English*, *Number Facility* and *Spatial Aptitude*.

There were aptitudes that remained *Average*, although there were significant improvements based on the t-values, and these were on the areas of: *Form Discrimination, Induction* and *Flexibility*. It is also noticed that *Verbal Filipino* remained *Low*. This finding also reinforced the previous observations in Tables 2,3 & 4, where *Verbal Filipino scores* were also reported as *Low* among ABM and HUMSS students. STEM students were found to be *Average*. Based on the T-value and significance level, the results indicated a significant difference on all career aptitudes of the students. The mean scores of each career aptitude showed an increase from the first time, SY 2014-2015, the students took the aptitude test and when the test was re-administered to them in SY 2016-2017. Generally, it can be said that career aptitudes of the students increased overtime which implies possibilities of introducing interventions for students to further improve their readiness for career choices.

Table 5. Paired T-Value of the difference in the Mean Scores of Selected Grade 11 SHS Students' Career Aptitude Performance

Aptitudes	School Year	Mean (n = 338)	Ability Category	T-Value	Sig.
Symbol Discrimination	SY 2016-2017	139.58	High	8.11 (sig)	.000
	SY 2014-2015	128.39	High		
Form Discrimination	SY 2016-2017	105.32	Average	10.98 (sig)	.000
	SY 2014-2015	92.36	Average		
Verbal English	SY 2016-2017	114.18	High	9.281 (sig)	.000
	SY 2014-2015	108.97	Average		
Number Facility	SY 2016-2017	111.87	High	6.96 (sig)	.000
	SY 2014-2015	104.98	Average		
Induction	SY 2016-2017	102.82	Average	3.71 (sig)	.000
	SY 2014-2015	98.75	Average		
Flexibility of Closure	SY 2016-2017	102.03	Average	4.55 (sig)	.000
	SY 2014-2015	97.84	Average		
Verbal Filipino	SY 2016-2017	87.66	Low	3.88 (sig)	.000
	SY 2014-2015	83.76	Low		
Spatial Aptitude	SY 2016-2017	115.80	High	11.90 (sig)	.000
	SY 2014-2015	104.84	Average		
Mechanical Reasoning	SY 2016-2017	107.80	Average	8.58 (sig)	.000
	SY 2014-2015	99.08	Average		
Perceptual Acuity	SY 2016-2017	104.94	Average	11.15 (sig)	.000
	SY 2014-2015	89.66	Low		

(Source: CENTRO-EIP Testing Unit, 2017)

To establish whether the graduates actually enrolled in their choice college, individual interviews and on-line video chat was used. Out of the 421 graduates, 136 (or 32%) individuals were sorted whether their courses are aligned with their academic strands. For the STEM graduates, there are 54 or 72.9% who are enrolled in their intended strand, while 20 0r 27.1% are not aligned. Among the graduates of ABM, 18 or 66.6% are aligned with their preparation in SHS, while 9 or 33.3% are not enrolled in their intended courses. There are 23 or 65.7% of the HUMSS graduates enrolled in their intended courses, while 12 or 34.3% are not enrolled or in the aligned field. Overall, there are about 95 or 69.8% of the sample who are enrolled in their intended field, while 41 or 30.1% are enrolled in a different field. Table 6 shows the summary.

Table 6. Frequency and percentage of SHS graduates' actual college courses

Academic Strand	ALIGNMENT					
	Aligned		Not Aligned			
	F	%	F	%		
STEM	54	72.9	20	27.1		
ABM	18	66.6	9	33.3		
HUMSS	23	65.7	12	34.3		
Total	95	69.9%	41	30.1%	136	100%

To summarize, the following findings highlight the study:

1. Overall, the students seem to be highly skilled on tasks that require recognizing similarities and differences in a series (*Symbol Discrimination*), understanding the English language (*Verbal English*), accurate performance in different numerical problems (*Number Facility*), and ability to deduce objects with varying dimensions (*Spatial Aptitude*).
2. They can adequately perform and sufficiently cope with tasks that demand skills in identifying "similarities and differences among geometric shapes and perceived changes in a series of pattern and design" (*Form Discrimination and Perceptual acuity*), determining "principles and logic behind series of figures and patterns" (*Induction and Flexibility of Closure*), and conceptualize the creation and operation of simple machines (*Mechanical Reasoning*). As seen across the three
3. (3) academic strands, the ability to *discriminate symbols, patterns and various characters* (alpha and numerical) is a major strength.
4. There was a remarkable improvement in the students' aptitudes, measured by the test, based on results obtained from two (2) school years.
5. The difficulty in accomplishing tasks that require skills in handling *Verbal Filipino* or working using the Filipino language is considered a set-back on all three (3) strands. Although there is an increase in the aptitude means score in *Verbal Filipino*, the ability index remains unchanged.
6. Overall, there are about 95 or 69.8% of the sample who are enrolled in their intended field, while41 or 30.14% are enrolled in a different field.

Conclusion and Recommendations

Aptitudes are essential in predicting their performance in different courses related to Senior High School or college life. The significant improvement of the students' aptitude reflects the quality of student learning experiences in and outside the classroom, although some students deviated from their aligned courses. However, seeing the strong potential of the students in learning and acquiring new skills as essential for their chosen track, perhaps there is a need for the school administration to review the various assessment tools that are meant to improve quality of instruction to ensure that students are fully prepared for their career choices.

The study recommends that school administrators and policy makers to consistently encourage the use of classroom-based assessment as a tool for curriculum development. Scholars asserted that "during Grades 11 and 12, classroom-based assessment, assessment of achievement, and international benchmarking help students to acquire the necessary competencies that need to be learned, where the accountability of the classroom-based assessment is directed to the quality of instruction and how it is supervised in the school setting (Magno, 2016).

Given the administration support, the guidance counselors should strengthen the career guidance program. With the administrators and faculty, counselors should continue to take active roles in guiding the students in aligning their skills, interests, and abilities to appropriate careers they have potentials to succeed. The study further recommends a Tracer Study of the Senior High School graduates, considering other variables related to their persistence in college such as senior high school grade point average, first term grade average, and personality factors.

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Impact of Unisba Young Entrepreneur Club (UYEC) to Strengthen Student Entrepreneur

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ABSTRACT

UYEC was established at Faculty of Economics and Business in 2014 as part of a program organized by Economic Ummah Empowerment Center, Faculty of Economics and Business Bandung Islamic University (Unisba). UYEC started with an ordinary workshop that brought a number of speakers from business mentors which accommodate to open up new ideas and networks in the business circumstances. Then, these activities became a community of students who interested start a business or already have a business. The results of a survey conducted in 2016, there are various profiles of students businesses in the field; culinary, fashion and clothing, photography, interior goods, ticketing, and others. Entrepreneurial students are a new form of a business trend that is supported by technological development. Almost all club participants actively use social media and fully supported by technological developments. Entrepreneurial activities for some members have also started since a few years before they even became a student. This new generation of entrepreneurs is marked with very adaptive in using new technology. They are not only grouped physically in their own club but also utilizing active communication through the Line (name one of the social media). The identification of their expectations for UYEC is; the establishment of communication among fellow entrepreneurship and open up networks with fellow students who have the same interests. The source of information they know UYEC is information from word of mouth, socialization of UYEC board, brochure and open recruitment event. This study uses a descriptive quantitative method by spreading questionnaires on each member of UYEC analysis of data that is used is the Likert scale which is able to become a benchmark of impact on the creation of new knowledge, business network, and entrepreneurship decision. The result indicates Unisba Young Entrepreneur Club (UYEC) has positive impacts. UYEC is one example of small entrepreneurial institutions, although it can contribute to community independence. Therefore, when the government is able to manage entrepreneurial institutions on a larger scale, the resulting impact will be greater on sustainable economic development.

Keywords

UYEC, entrepreneurial institution, student club, entrepreneurship

Background

The role of Entrepreneurs in this era of globalization is indispensable to support economic development in a country and as an effort to create a society that is the main goal of Sustainable Development Goals (SDG'S). Sustainable Development Goals (SDG'S) are aimed at bringing developing and underdeveloped countries into a far better direction, the sustainable development not only in terms of infrastructure but also social and economic. The development of a country can be said to succeed if it has more than 2% of entrepreneurship population, in developed countries the ratio of entrepreneurs on average reaches 14%, while in 2018 Indonesia reached 3.1% thus Indonesia as a developing country should facilitate entrepreneurs by establishing institutions that can shelter entrepreneurs in order to have the means that can strengthen and develop their business.

Institutions also become one way to increase the quantity and quality of entrepreneurs. Institutions are state-based or private because the two side by side advancing entrepreneurs. Unisba Young Entrepreneur Club (UYEC) is one example of an institution that houses a young entrepreneur in the scope of the Unisba campus (Entrepreneurship Society). Entrepreneurs are now more profitable because it can take advantage of technological progress is very rapid to reach marketing without knowing the distance, where the information system that can be accessed globally.

Institutional strengthening is still an important agenda to increase student interest in joining UYEC. There are two major problems in student entrepreneur community. Firstly, the college program has a very tight curriculum which is offering in a four-year program. Fast process in education system restricts knowledge transfer among generation. Secondly, the final stage students mostly stay focus in their final examination. On the other hand, they ignore their part-time business and organization. UYEC requires several strategies namely; involve actively as campus institutions that manage all of the program sustainability, accelerate the process of UYEC regeneration, and deliver various activities that contribute to all members.

Research Question

This study is conducted by two research question below.

1. What is the student's perception regarding the impact of UYEC?
2. How is the club to support entrepreneurship milieu?

Research Purposes

1. Elaborate the students' perceptions about the impact of UYEC
2. Describe UYEC's role to support entrepreneurship capacity

Conceptualization

Young Entrepreneur and Nation Development

The development of entrepreneurship in Indonesia cannot be separated from the role of the young generation of the nation, where many young people are already aware of the importance of growing entrepreneurship spirit. Therefore, today many emerging entrepreneurs-young entrepreneurs who are competent in their respective fields of business. Joseph Schumpeter an economist from Russia defines an entrepreneur as someone capable of reforming the economic system, changing new ideas or inventing new forms into a successful innovation. These innovations are (1) new products (in the form of goods and services), (2) new organizations or management, (3) new ways of producing, (4) using new raw materials. Meanwhile, understanding entrepreneur by Adi Putra Widjaya and Aries Wiranata in his book GarudaPreneur, "Entrepreneurship is living a few years of your life like most people will not, so that you can spend the rest of your life like most people cannot". The same thing as written by Chandra Liang CEO Esprecialo Group who said, being an entrepreneur is different from trading. For entrepreneurs, there must be buying and selling activities (trading), while trading only goods, given the margin and then sold without a concept and without a target. Thus, young entrepreneurs can be summed up as someone in the productive age who has the ability to create new innovations based on business concepts that have been matured in order to achieve the target of establishing a better and efficient business market.

The role of young Entrepreneurs is very influential on the development of the nation. According to Todaro (2011: 6) "development is a process that can improve the quality of life and ability of human beings by raising the standard of life, self-esteem, and individual freedom." Not as different from the previous opinion, the notion of economic development according to Todaro (Tarmidi, 1992: 11) "as a multidimensional process involving major changes in social structure, community attitudes, national institutions as well as accelerated economic growth, reduced inequality and poverty eradication absolutely ". Where, when young entrepreneurs succeed in implementing their new innovations in their respective fields of business, it will have a tremendous impact on nation-building.

The development in question is in the economic, educational, and social fields. In the economic field, an increase in the number of young entrepreneurs can help communities in finding jobs that will ultimately reduce the unemployment rate and improve the welfare of the community. Then in the field of education and social, entrepreneurs develop their business not only want to gain profit, but they also usually have a charity community that aims to help the poor in the form of educational scholarships to improve the quality of human resources and training to the community at the field of entrepreneurship to create an independent and quality society. The emergence of competent young entrepreneurs is expected to assist the government in an effort to improve the nation's development. As Ir has said. Soekarno in one of his speeches that "Give me 1000 parents, will undoubtedly I pulled off from the roots. Give me 10 youths, will undoubtedly shake the world ". This shows that young entrepreneurs as agents of change in the development of a nation are a key element in poverty alleviation.

Principles of Good / Smart Governance Management at Institutions

The success of an institution depends largely on its management. The concept of good governance is the most prominent issue in the present era in line with the increasing knowledge and education level of the community. The government is required to implement good governance in every policy making and decision making and bureaucracy implementation in the implementation of public service function. Understanding good governance by Mardiasmo (1999: 18) is a concept- oriented approach to public sector development by good governance. Meanwhile, according to the World Bank quoted Wahab (2002: 34) that good governance is a concept in the implementation of solid and responsible development management in line with democracy and efficient markets, avoidance of misallocation and investment and the prevention of corruption both politically and administratively, run the budget discipline and the creation of legal and political framework for the growth of entrepreneurial activity. In addition, the World Bank also defines good governance as a synergistic and constructive relationship between state, sector, and society (Effendi, 1996: 47). According to the United Nations Development Program (UNDP) through LAN cited Tangkilisan (2005: 115) states that the existence of synergistic and constructive relationships between the State, private sector and society compiled nine characteristics of good governance are:

1. *Participation*. Community participation in the decision-making process is also freedom of assembly and association.
2. *Application of Law (Fairness)*. The law should be fair, without distinction enforced and obeyed, especially about human rights.
3. *Transparency*. The existence of freedom of information in various institutions so easily known by the public.
4. *Responsiveness*. The processes undertaken by each institution should be directed to serve the needy
5. *Orientation (Consensus Orientation)*. Serve as a mediator to achieve business together.
6. *Justice (Equity)*. Giving equal opportunities to men and women in an effort to improve the quality of life.
7. *Effectiveness*. All processes and institutions that are directed to produce something are really needed and in accordance with the resources they have.
8. *Accountability*. Decision makers should be accountable to the general public in accordance with an agreed decision.

9. *Strategic Vision*. Leaders and communities have a broad and long-term effort in the implementation of government and human development by understanding the various aspects that exist in people's lives.

The nine principles are a characteristic in the implementation of good governance that must be applied by the institution (include university), so that it can be realized that institution is healthy and trusted by the community.

The Role of Institutions in Encouraging Young Entrepreneurs

The government design a program that can encourage young entrepreneurs to expand their business by organizing the Student Entrepreneurial Program (PMW). The government through an intermediate Directorate of Higher Education (Dikti) undertakes entrepreneurship development efforts among students in the form of training, practices and capital provision. But the provision of this capital is only given to state universities in Indonesia, such as PMW ITB, PMW UGM, PMW IPB, and others. While for private universities is handled by the Coordinator of Private Higher Education (Private HEI). In fact, there is still access disparity between state and private university.

The government can not stand alone to encourage young entrepreneurs. The government need support from other parties, institutions which are engaged in the field of entrepreneurship. In the world, there are some related institutions such as group founded by Daniel Epstein. The company gathers influential entrepreneurs from around the world to provide world-class teaching and education, start-up capital, and global business networks each year. Then WAMDA.com, an entrepreneurial support platform for the Middle East and North Africa region founded by Fadi Ghandour. In Indonesia, itself has an entrepreneurial institution that is HIPMI (Association of Young Indonesian Entrepreneurs) as a non-partisan independent organization of young Indonesian entrepreneurs engaged in the economy.

The role of entrepreneurial institutions is very important in helping young entrepreneurs to grow their business, through entrepreneurship training, and open up a wider business network. When the role of government/institution and entrepreneur institutions is directly proportional and mutually supportive to one another, it can help young entrepreneurs to grow their business so that it will encourage new entrepreneurs to be more motivated and more confident to entrepreneurship. Therefore, with the development of entrepreneurial institutions, both national and international scope can give birth to entrepreneurs-young entrepreneurs who can become agents of change of the nation.

According to sociologist David McClelland, to achieve a minimum standard of 2% as a success indicator of economic development of a country, where Indonesia needs about 5.2 million entrepreneurs from the total population of Indonesia. This information indicates there are still many young entrepreneurs who are needed to encourage the country's economy.

The Concept of New Entrepreneur (WUB)

The development of entrepreneurship is an effort to explore the potential and competence of human resources to support the absorption of employment and face the Economic Community Asean (MEA). There are three important things in studying the basic concepts of entrepreneurship, namely:

1. Entrepreneurship as a process.
   Being an entrepreneur can learn when they passed various levels of the entrepreneurship development process. The process of development will be influenced by the amount of

one's internal drive or group, planned or unplanned.

2. Emphasis on creativity in consolidating organizational resources (company)
   Every entrepreneur has the individual creativity that has been developed through imaginative strength, experience and exposure to the environment. So, entrepreneurs work hard to optimize limited resource resources in a way that can benefit the organization (company). Entrepreneurs must maximize the use of various organizational resources (companies) such as finance, human resources, time, information, reputation, and networks, by identifying various alternatives for each issue.
3. The desire to improve environmental life
   Entrepreneurs must prove what activities the entrepreneurship they carry out, will be beneficial both in the short term or the chancellor.

Previous Research

Research on the role of educational institutions in encouraging young entrepreneurs is contained in the thesis entitled "The Role of Entrepreneurship Education in Growing Entrepreneurship Attitude Class X Office Administration (API) Public Vocational Secondary Schools 1 in Salatiga" compiled by Novi Eka Yuda P in 2016 by using descriptive method to understand social situation in depth in society. Based on the results of research that have been done by Novi Eka Yuda P (2016) entrepreneurship education in growing entrepreneurship attitude of students of public vocational secondary schools 1 in Salatiga is entrepreneurship education conducted by teachers to students by developing the potential owned by students. The not only theory is given but teachers also provide entrepreneurial practice. Students involved directly as a startup entrepreneur from planning, producing, marketing their products. These experiences produce an attitude of confidence, honesty, independent, risk-taking and others.

Research and learning for young students in journals entitled "Building Student Entrepreneur Character through Entrepreneurship Education compiled by Dwi Wahyu Pril Ranto in 2016. He said that entrepreneurship education can shape a student's mindset, attitude, and behavior into an entrepreneur significantly true. An entrepreneur is a good option as a career choice. Entrepreneurship education on campus develops students' potential academic and personality, science and technology, according to the needs and developments in the world of work.

Entrepreneurship education has a positive effect on student entrepreneurship motivation. Therefore motivation is needed for students to encourage students interested in entrepreneurship. In addition, motivation is no less important in growing the entrepreneurial spirit because most entrepreneurs are motivated by the desire to determine their own destiny is to try as optimal as possible to achieve a goal to meet the needs of life

In another journal entitled "The Role of Universities in Motivating Scholars into Young Entrepreneurs" compiled by Yohnson in 2003 says that the role of universities in motivating students to become young entrepreneurs is very important. College parties need to apply a concrete entrepreneurship learning pattern based on empirical input to equip students with meaningful knowledge in order to encourage the enthusiasm of students to entrepreneurship.

The role of the university in providing a container that provides the opportunity to start a business since the lecture is very important in accordance with the opinion of Douglas A Gray that starts a business can be during college. Especially the role of universities in terms of motivating students to be incorporated in the container. Because without giving a clear picture of what are the benefits of entrepreneurship, it is likely that the students no one is motivated to deepen the skills of doing business.

According to the thesis written by Asri Pebrianti, 2018 with the title " Effectiveness of New Entrepreneurs Program by Technical Implementation Unit Regional Office Education and Training Cooperatives and Entrepreneurs of West Java Province to Support Local Economic Development on 2017" which discuss about local economic development through the new entrepreneurs program with 100 thousand New Entrepreneurs contained in the West Java Regional Medium Term Development Plan (RPJMD), very important support for Entrepreneurs by the government provinces in order to achieve a better local economy. This research uses a quantitative descriptive method. Data used is primary data that can be obtained through a survey of 128 program participants. The analysis is carried out quantitatively by doing Gap test Analysis and scoring of the answers of respondents using a Likert scale with 2 criteria that are used as a reference to measure effectiveness in this research is Administrative Reform (PAN) criteria No.Kep/ 25 / m / m / Pan / 2/2004) and Local Economic Development (PEL) criteria.

The results of the study show the effectiveness of the program with 6 indicators namely: New Entrepreneurs Training, Assistance and Monitoring of New Entrepreneurs, Energy Absorption Work, Product Promotion and Market Access, Access to Capital and Business Networks. The highest achieved by the New Entrepreneurs Training, the indicator with a percentage of 83.71% included in the criteria very effective on the PAN and PEL criteria, participants assessed New Entrepreneurs Training indicators have been carried out very effectively so that they are capable equip participants to enter the business world. The lowest results are achieved by Capital Access indicator with a percentage of 75.33% including the criteria for being quite effective on PAN criteria and very effective on the PEL criteria. Participants judge if capital access indicators facilitated by the UPTD have not been able to provide interest or lower profit sharing so that not all entrepreneurs are able to take a loan to become capital. The overall average indicator is 78.44% which is included in the criteria is quite effective while on PEL criteria have reached very effective criteria.

Therefore, the university also needs to know the most dominant factor in motivating students in entrepreneurship. From the results of research conducted on alumni of Petra Christian University shows that the most dominant factor motivating scholars to become entrepreneurs is opportunity factor, freedom factor and life satisfaction factor. These three factors are what make them entrepreneurs. This research is very helpful to the university in providing information to the students that becoming entrepreneurs will get some opportunities, freedom and life satisfaction The delivery process must be done so that students are more motivated to start entrepreneurship. Because many students are afraid to face business risks that may arise that make them cancel the business plan early on. Increasing motivation in the students causes the container prepared by the university is not in vain but will give birth to reliable young entrepreneurs.

Concept Framework

The impact of the Entrepreneurship Club on young entrepreneurs is a process of learning to change the attitudes and mindsets of young entrepreneurs by developing their businesses. Wherever they engage in forming an Entrepreneurship Club, young entrepreneurs can gain knowledge about Entrepreneurship that can help them determine their own business strategy. On the other hand, they can exchange ideas and experiences with other entrepreneurs.

Unisba Young Entrepreneur Club (UYEC) oversees its members who are already young entrepreneurs or who are still planning to become an entrepreneur to learn how to become a good entrepreneur. Therefore we are very interested to examine how the impact of Unisba Young Entrepreneur Club (UYEC) in strengthening the entrepreneurial spirit of young Entrepreneur. Therefore, this study will focus on the variables that will be described in Figure1 below.

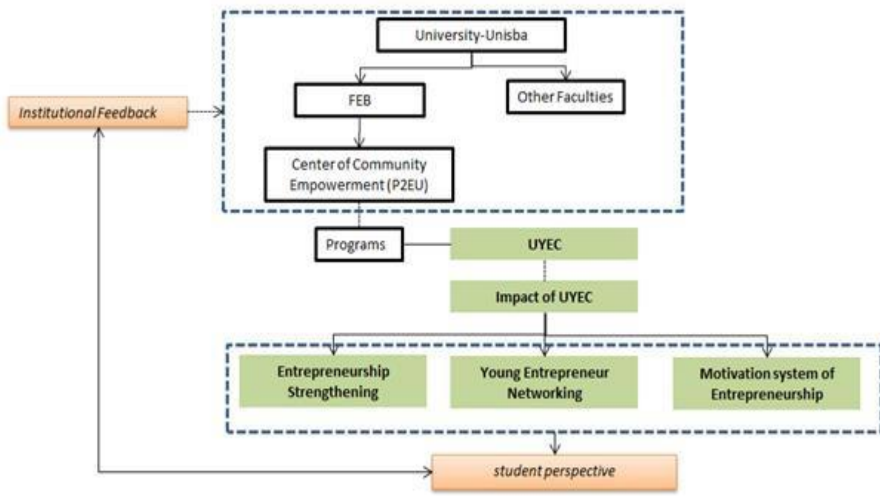

Figure 1 Concept Framework of Study

Based on Figure 1, it can be explained that in this research, we want to elaborate how the impact of Unisba Young Entrepreneur Club (UYEC) in strengthening entrepreneurship young spirit by using three related variables namely impact on the creation of new knowledge, impact on social networking, and impact on decision in student entrepreneurship. A review of the impact can be used as an input of institutional policy to support entrepreneurship activities within the college. To find out the results of this study, we will use descriptive analysis by applying the Likert scale method. Based on the results of this analysis, it will be obtained conclusions and recommendations that will be the basis in strengthening the entrepreneurial spirit of students to become a successful entrepreneur who can provide a new job field for the community in the future.

Research Methodology

The scope of research

The limitations of this study consist of boundaries of objects and research areas. The object of this research are students of the Faculty of Economics and Business (FEB) at Bandung Islamic University. This object has chosen because of objective reason. The UYEC already announced as a student club in FEB and it is necessary to elaborate the impact of the club on the student as a part of community service in a higher education system. The further limitation of this study was impacted conception which was depended on student perception.

Method of collecting data

The data used in this paper are primary data derived from the survey. The sample measurement use sample calculator software in www.surveysystem.com. Student population calculated as the active student in the year 2017. The amount of active bachelor program was 2354. Sample measurement uses two assumptions as confidence level is 95% with interval confidence is 4.18. The sample size amounted to 100 students. The technique to distribute sample use random sampling model which means every active student has an opportunity as the sample to response the questionnaire.

Tabel 1 Validity And Reliability Test

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	100	100,0
	Excluded[a]	0	,0
	Total	100	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,923	24

Based on the results of calculations show in table 5.1 using SPSS, the questionnaire turned out to be 21 questions, all declared *valid*. While reliability testing is the consistency of a series of measurements or measuring instrument. This reliability test is shown to know statement items that have been prepared by researchers reliable or not. It is reliable if it has a *Cronbach Alpha* greater than 0.68 then the statement items examined can be repeated even though research time is different. The following table indicates the model passes the reliability because Cronbach's Alpha is 0.923 > 0.68.

Data analysis method

This research was conducted by descriptive quantitative analysis using descriptive statistic approach using Likert Scale analysis as a basic tool to elaborate the impact of student club using student perception. This study identifies the impact of UYEC by using three indicators namely; UYEC's ability to provide new knowledge, UYEC's ability to provide new networks, and the ability of UYEC to become a forum to build student motivation.

From the preliminary findings, it was theoretical dialogue with the interests of institutional management. The “dialogue” process uses a good governance approach. The impacts that have been identified from student perceptions are used as the main source of better institutional management over time

Result

This study indicates some important findings. UYEC has an impact on different proportions. Organizationally, UYEC is better able to encourage the creation of new knowledge and networking than anything else. This indicates that young entrepreneurs have enough confidence in self-innovation but need to be supported by surrounding institutions including a progressive campus environment.

Tabel 2 Weight Category of the Research Questionnaire

Number of Success Level Intervals		
0-19,99	P	Poor
20-39,99	NG	Not Good
40-59,99	N	Neutral
60-79,99	G	Good
80-100	E	Excellent

Tabel 3 UYEC Impact on Creation of New Knowledge

		Level of Success	
1	UYEC opens the opportunity to share new market information	60.6 %	G
2	UYEC facilitates gives knowledge sharing	81.6 %	E
3	UYEC gives facilitates for knowledge of new products	79.2 %	G
4	UYEC gives the opportunity to know about product price information	78.2 %	G
5	UYEC provides new information through workshops/ seminars/sharing sessions	81.2 %	E
6	UYEC opens knowledge sharing among participants	82.6 %	E
7	UYEC opens an opportunity to meet new people with new knowledge	84.2 %	E
	Average	78.2 %	G

Source: Primary Data (processed)

The results presented in Table 3 indicate that UYEC's impact on the creation of new knowledge about entrepreneurs is good. This is indicated by the calculation of the average questionnaire results of 78.2% (G). With these supporting data, the role of UYEC as an entrepreneurial organization is needed to help its members gain a new knowledge that can encourage young entrepreneurs to have the entrepreneurial knowledge to grow their business.

Tabel 4 UYEC Impact on Business Networking

No.	Statement	Level of Success	Annotation
1	UYEC opens the opportunity to open new business contacts	82.4 %	E
2	UYEC facilitates meeting potential new people to become future business networks	80.2 %	E

No.	Statement	Level of Success	Annotation
3	UYEC gives facilitates business meetings	79.4 %	G
4	UYEC provides an opportunity to know the business association	80.4 %	E
5	UYEC provides a new network through workshop/ seminar/sharing session	79.2 %	G
6	UYEC opens the opportunity to share business information between participants with other parties besides Unisba	79.2%	G
7	UYEC opens the opportunity to meet new people who have a wider business network	81.4 %	G
	Average	80.3 %	E

Source: Primary Data (processed)

Table 4 above shows that the impact of UYEC on the percentage of network expansion is 80.03% (E). This suggests that UYEC's role can help its members to expand their business networks, which will help young entrepreneurs gain wider opportunities for both business and new relationships. Besides, with the expansion of their business networks, it is expected that young entrepreneurs can exchange their knowledge and experience with entrepreneurship.

Tabel 5 UYEC Impact on Entrepreneurial Decisions

No.	Statement	Level of Success	Annotation
1	UYEC opens your chance to become a successful future entrepreneur	82.0 %	E
2	UYEC gives facilitates meetings with new people who inspire future business	81.6 %	E
3	UYEC facilitates the idea of becoming a tough entrepreneur	80.4 %	E
4	UYEC gives the opportunity to know the business where you will live now	80.4 %	E
5	UYEC gives the opportunity to know the business where will you live in the future	80.2 %	E
6	UYEC opened up an opportunity for me to convince parents/family about the decision of the entrepreneur	79.2 %	G
7	UYEC assured you that being an entrepreneur is the right choice	78.4 %	G
	Average	80.3 %	E

Source: Primary Data (processed)

The result of the measurement of the average student’s perspective, the impact of UYEC on the decision of entrepreneurship of its members amounted to 80.31% (G). Based on these data, UYEC has an important role in encouraging its members to become a young entrepreneur by attending seminars and workshops on entrepreneurship. This can affect the entrepreneurial desire of its members.

This study provides an important finding that UYEC has a very good impact on two indicators, namely the ability to provide a place for students to build new networks and motivate students to become entrepreneurs. UYEC is still in a good category of giving new knowledge. There are indications that information is currently very open so that students can gain new knowledge from the surroundings, not only from the club.

Student Perceptions of UYEC and UYEC's Role To Support Entrepreneurship Capacity

Based on the results of the calculations contained in table 5.2-5.4, it can be explained that the students' perceptions of the existence of Unisba Young Entrepreneur Club (UYEC) can positively influence the creation of new knowledge, the expansion of business networks, and affect their entrepreneurship desire. Thus, the existence and role of an organization or entrepreneurial institution that is UYEC are indispensable in facilitating young entrepreneurs to develop their business and creativity.

Economic Analysis

Based on the results that have been obtained 9 principles of good governance can support the implementation of entrepreneurial institutions that are able to encourage the growth of young entrepreneurs, here are the findings or impacts that can be applied when applying the principles of good governance to entrepreneurial institutions. Participation, The existence of community participation as one of the characteristics of the creation of good governance, of course, will also impact on an economy. When active community participation in an entrepreneurial institution, then the opportunity for the development of young entrepreneurs will increase. Thus the number of young entrepreneurs will increase as well. And will improve the quality of community independence, the results obtained from participation are in accordance with the theory.

Application of the Law, if the application of the law in terms of rules made by an entrepreneurial institution, especially in the human rights of its members. So every member will always use the code of ethics in terms of business competition. Which will affect the smoothness of business members, which automatically the economic influence of its members will increase as well.

Transparency when an entrepreneurial institution provides a variety of information related to business strategy, and issues related to entrepreneurship to its members or communities transparently, then this course will greatly assist them in developing their business, the results obtained from transparency are in accordance with the theory since transparency is the initial source of trust.

The responsiveness of the entrepreneurial circle should be an institution that can be used as an entrepreneur, in this case being a business consultant. responsiveness must work well and maximally so as to achieve a point of conformity with the expressed theory. The orientation of the entrepreneurial institution should act as an arbitrator if there is a dispute between the entrepreneur (unfair competition) to achieve joint efforts No business wheels apply to each party, but this orientation is relative so that it will not always be compatible with the theory. This entrepreneurial institution should be a pre-party to equality of rights between men and women to manage and establish the business in order to improve the quality of life. This can be attributed to law enforcement on human rights.

Related to effectiveness concept, an entrepreneurial institution is formed to gather people with the same vision and mission of creating new innovations in goods and services as a source of magazine solutions in society and helping people meet their needs efficiently. Part of the accountability view, an entrepreneurial institution as a forum for young entrepreneurs. In making any decision, it should be based on mutual agreement. So that any resulting decisions will have a good impact on each member. An institution needs to build vision Strategy. The entrepreneurial institutions (heads and members) have an important role in improving the quality of human resources from every level of society in a way with the vision of the mission/initial goal of the establishment to increase community independence.

Concluded those nine characteristics of good governance implemented in the management of entrepreneurship institutions will have an impact on economic development. The relationship of the existence of an entrepreneurial institution to the economic impact in Indonesia is when an entrepreneurial institution successfully gave birth to entrepreneur-young entrepreneur, then automatically the number of entrepreneurs in Indonesia will increase. Young entrepreneurs have an important role in economic development in Indonesia, the emergence of SMEs (Business Unit Medium) in Indonesia can affect the productivity of society that will stimulate output growth and improve transactions of goods and services in a region. It can be concluded that the higher the number of young entrepreneurs the higher the economic growth in Indonesia. Increasing the number of businesses developed by young entrepreneurs means increasing demand for labor so that it can reduce the unemployment rate as well as educate the community to be more independent. This will make it easier for the government to determine the policy direction to construct a sustainable economy.

Conclusion and Recommendations

Conclusion

Based on the urgency of the existence of an entrepreneurial institution, especially Unisba Young Entrepreneur Club (UYEC) has had a positive impact on the creation of new knowledge, expansion of business networks, and the decision to entrepreneurship. UYEC is one example of small entrepreneurial institutions, although it can contribute to community independence. Therefore, when the university and/or government is able to manage entrepreneurial institutions on a larger scale, the resulting impact will be greater on sustainable economic development.

Recommendations

This study delivers some recommendations which are stated below.

1. Active internal support of institutions is still highly needed to foster higher impacts of all aspects. The institution should be able to create new knowledge with innovative way.
2. Socialization and education of the community conducted by the entrepreneurial institution of the importance of entrepreneurship.
3. UYEC as an entrepreneurial institution within the scope of student associations can accommodate accurate information for students about entrepreneurial activities such as seminars and workshops.
4. The government needs to support private universities considering that institutions can have an impact on entrepreneurial interest. Opportunities must be opened wider by opening up new knowledge quickly present in the university.
5. General findings discussed the concept of good governance indicate a stronger institutional management is still needed so that the role of entrepreneurs is stronger.

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`"Batang Ama": A Metamorphic Journey To Maturity Of Young Unmarried Fathers

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ABSTRACT

This phenomenological research aims to describe and to explore the lived experiences of "batang ama," a Filipino term used to refer to young unmarried fathers enrolled at a chosen university in Southern Philippines during the first semester of Academic Year 2017 – 2018. This study utilized the purposeful sampling technique specifically the network or snowball sampling. An in-depth interview approach was used to answer the questions related to the participants‟ personal experiences, psychological adjustments, perceptions and aspirations, relationship status with their partner and child, as well as the role of parents as support system. The data gathered has been analyzed and classified through Moustaka‟s Method of Analysis. Six emergent themes were discovered from the interviews: The Moral Dilemma, Inevitable Circumstances, Personal and Financial Limitations, Transformation, Constant Support of Family, and Positive Relationship with their Partners. They were consolidated into five phases, namely, Concealment due to fear, Revelation of the Incident, Temporary Tension, Settlement and Maturity, and Support and Acceptance. One theme emerged during the first, second, third, and fourth phases while two themes emerged during the fifth phase. The themes that were culled spoke of their maturity and transformation as a human being, as well as finding the sufficient sources of income for the provision of their children and future spouse. Furthermore, implications for their employment chances while studying and how this life-changing experience foreshadows their priorities in terms of job, employment competitiveness and career opportunities for this special breed of students are also discussed in this paper.

Keywords

Maturity, young fatherhood, phenomenology, "batang ama", role acceptance

Introduction

Typically, fathers are viewed as male individuals who are in the most appropriate and mature age and are able to provide for the welfare of his family. However, rampant cases of male adolescents involved in early fatherhood are continually arising due to liberal perspective of the society.

Circumstances undergone by adolescent fathers are often overlooked since most studies and programs give emphasis on the lives of young mothers. The deficiency in terms of attention and support given to adolescent fathers further contributed to the idea that they are usually absent and unprepared to play their role as a father (Alderman & Hollman, 2008).

The purpose of this phenomenological study is to describe and explore the perspectives of young unmarried fathers in terms of fatherhood and child-rearing. In addition, it gives a glimpse of their capabilities for improving their educational performance as well as future employment. Moreover, this study aims to fill the gap in previous research literature in the Philippines about young fatherhood since the qualitative researches done on young unmarried fathers are sorely limited, thus, this study is conceptualized.

Furthermore, the justification of this study lies in the fact that young fathers face a lack of supportive adolescent parent programs since most researches and support services gives more emphasis in addressing the needs of women who had undergone teenage pregnancy. Apparently, like young unmarried mothers, their male counterparts are also affected by the concept of parenthood to take responsibility in raising their children. Appropriate recommendations in order to assist these young unwed fathers are advanced based on the major findings of the study.

Research Objective

This study aims to describe and explore the lived experiences of young unmarried fathers enrolled at a chosen university in Bacolod City, Negros Occidental, Philippines in the 1st semester of Academic Year 2017 – 2018.

Research Framework

The theoretical framework of this research is based on Husserl"s descriptive phenomenological philosophy. Modified Husserlian method is described and explained in the context of doing psychological research in the lived-experience of the participants in this research. The steps are: (1) assume the phenomenological attitude, (2) read entire written account for a sense of the whole, (3) delineate meaning units, (4) transform the meaning units into psychologically sensitive statements of their lived-meanings, (5) synthesize a general psychological structure of the experience based on the constituents of the experience. It is the first-person psychological perspective that is sought so that an empathetic position can be adopted by the end-user of the research (Broome, 2011).

This research is also anchored on Lev Vygotsky"s theory of Social Constructivism. According to Vygotsky (1984) as cited in McLeod (2014), cognitive development takes place when an individual"s structures are still in the process of maturity and only affected therefore under the guidance and collaborative communication and work with the other individuals or groups, or in this case, the environment and peers. It is stated that cognitive functions and role identity are mere products of social interactions and it is an influenced process by which these learners are supposed to be integrated into a knowledgeable society. Therefore, focusing on the external factors and experiences by the adolescent fathers through this research study has been conducted (Vygotsky, 1978 as cited in McLeod, 2014).

Methodolgy

In view of the nature of this study which is to determine the Lived Experiences of Young Unmarried Fathers of the college department of a chosen university in Bacolod City, Negros Occidental, this study used the Descriptive Phenomenological Design. The lived experiences of young unmarried fathers explores the hard work, struggles, and the difficulties the participants have gone through in their college life as they balance their roles as students and emerging adult fathers.

There were five participants included in this study utilizing the purposeful sampling technique. Due to the fact that it was difficult to determine the actual number of unwed fathers, the researchers used the network or snowball sampling wherein the previous participant had been asked if he knew someone who is in the same predicament as he is or through personal referrals from other people who have known the existence of such students in the university. The participants were chosen deliberately and the following inclusion criteria were used to qualify a participant: unwed, 17 to 22 years old, a bona fide college student who is currently enrolled in the university, and who has sired at least 1 child.

The researchers conducted a pre-survey in the chosen university in order to meet the previously mentioned criteria. To explain the study process and receive the participants‟ agreement to participate in the study, letters were sent to the participants approaching their consent to participate voluntarily. The purpose of this study was explained to the participants and the information gathered was treated with utmost confidentially.

In-depth interview with the participants

In order to collect valuable information about the phenomenon under study, the researchers conducted semi-structured, in-depth interviews with the participants. Upon finishing the interviews, the information was thought through and synthesized by the researchers. In this study, the researchers‟ analytical schemes employed were based on the written transcript of the interview and generalized the issues and concerns regarding the responses of the participants. It also described the participants‟ perspective and the sources of support of these unwed fathers in their transition throughout their entire teenage life.

Epoche

The researchers should first be subjected to an open-view (*epoche*) of the phenomenon disregarding their knowledge about the subject matter and flexing a fresh eye of the participants‟ experiences in order for the participants to reduce bias (Creswell, 1998; Moustakas, 1994). A transcendental- phenomenological-reduction is an essential step to describe the essences of the phenomenon (Moustakas, 1994), thus the researchers will be able to utilize this technique. Obtaining records of the phenomenon, encoding and clustering of themes were also steps that are taken into consideration when analyzing schemes and classifying the statements extracted from the participants (Moustakas, 1994). Individual member checking procedure was used for validation wherein the transcripts of the participants were brought back to them to review for further clarification, addition, omission and finalization of specific data gathered. Furthermore, the researchers apply the “horizontalization” of the data which refers to the listing of significant statements of the participants and will be given equality of the insights of the group (Creswell, 2013 as cited in Diaz, 2015).

Thematic Insights

The statements of the participants were the bases of their grouping into „meaning units‟ and were further encoded by the researchers into textual descriptions of their experiences as cited in the transcripts and were added verbatim quotes (Creswell, 1998, p. 150). The researchers assertively used the extracted themes afterwards as they were clustered and were inductively classified into five phases of Acceptance of Young Unmarried Fathers.

Constructing the Eidetic Insight

This process refers to the analogical comparison of the essential experiences of the participants by providing a written descriptive composition of the entire experience in general arriving to the whole„nucleus of truth‟ of the phenomenon (Creswell, 1998). In this case, the participants utilized a metaphor and articulated it in a final figure to illustrate the essence of the experience.

Ethical Considerations

The research strongly adheres to the ethical considerations that were implemented to protect the identity and welfare of the participants involved in the study. The research firmly acknowledges these considerations and willingly accepts it by taking necessary actions to comply with it:

1. by providing a letter of informed consent before the interview takes place,
2. confidentiality through the use of various questions,
3. use of pseudonyms to protect the identity of the participants,
4. beneficence of researchers,
5. justice in terms of autonomy of responses of the participants and avoidance of leading questions

RESULTS AND DISCUSSION

From the in-depth interview conducted with five participants, the following significant themes emerged and were grouped into five phases which eventually provided sufficient and rich understandings of fatherhood and the challenges each participant encountered at a young age:

Phase 1: Concealment Due to Fear

In this phase, young fathers felt anxious in confessing to their parents that they had impregnated their partners because of uncertainty about their possible reaction. This was also the time when they were still hesitant to unfold their situation with their friends because of the stigma that is being attached by the society to adolescent parents. Overwhelmed by the unexpected outcome of their actions and decisions, they preferred to keep it as a secret while they have not yet earned enough courage to reveal the ineluctable truth of becoming a young father. One theme seemed to emerge from this phase which is the Moral Dilemma.

The Moral Dilemma: When one is made to choose a path

The interplay between the Church‟s teachings and advocacy of valuing life and the personal will of these male adolescents to abort their child marked an impact in their decision-making process, as well as the development of fear and guilt feelings. Finer and Hussain (2013) emphasized the difficult choice that is often caused by unexpected pregnancies which is either to keep the baby and absorb the stigma of the society or to undergo an unsafe process of abortion which would free them from the responsibilities they have to face afterwards.

„*You want to do the things that please you but you are afraid of the punishment and there was a time when I thought of abortion. Then I started to realize and ask myself why would I do it because it"s a grave sin against God"s will and He"s giving me signs that abortion is like killing a person. I"m better off facing the consequences of my irresponsibility than to kill a person. So I prayed to God that if this is a test to change myself for the better, I would accept it because it still comes from Him*‟. (Chris)

Phase 2: Revelation of the Incident

In this phase came an enlightenment that these young fathers need help and support from their families. A lot of conditions brought about this experience in their life such as being dependent financially on their parents, and edified a tight relation toward their families during the rearing assistance in the long run of being a young father. A certain theme seemed to emerged from this phase which is the Inevitable Circumstance.

Inevitable Circumstance: When one is left with no choice

Men are oftentimes seen to be as firm and strong and usually do not seek for professional help. Thus, utilizing their time to being a „rock", seeking for job opportunities, caring for their baby and continue studying while trying to find their place in the society (Kiselica, 2011, p. 8).

Hiding the pregnancy of their partners was a challenge for these young fathers due to fear of disappointment from their parents for not meeting their expectations. Considering the fact that they were still college students and providing for the welfare of their own family was still beyond their capability, these young fathers ended up divulging their situation and seeking for help from their parents.

„We decided to continue it and around five months, we let our parents know about our situation. Just open up to your parents in the first episode of the pregnancy and ask for support from them". (Dajh)

Phase 3: Temporary Tension

During this phase, these young fathers redeemed themselves by compensating for their incautiousness that resulted to the impregnation of their partners. Despite the discouragement brought by the disapproval of their parents as well as the criticisms of the society regarding their early involvement in fatherhood due to pre-marital sex, they were pressured to prove themselves that they can surpass the stigma underlying the responsibilities of teenage fatherhood. The circumstance gave an insight and a positive reinforcement for these young fathers to strive and correct the succeeding events to come. A theme was derived from this phase which is Personal and Financial Limitations.

Personal and Financial Limitations: When one walks on a wire

This theme deals with certain adjustments and sacrifices that these young fathers undergone to surpass the crisis they had encountered when they accepted the responsibilities of being a father. The occurrence of financial constraints served as reinforcement for them to become more responsible through early involvement in the workforce and establishing businesses that would support their needs and to ensure the future of their family. Working became a major part of their priorities at this time considering that they needed to fend not just for themselves but also for their new baby.

„*Actually I don"t consider them as sacrifices, I take is as a responsibility. For example as a student, and also work as a service crew as a student. For me studying while working is not a sacrifice but more of a responsibility"*. (Chris)

Phase 4: Settlement and Maturity

In this phase, young fathers were able to practice independence and responsible parenthood at a very young age. They saw the necessity to find a part-time job or establish a business in order to earn money to support the needs of their children. This was also the time when they noticed positive changes in their lives through being involved in the workforce caused by the early arrival of fatherhood. One theme seemed to emerge from this phase which is Transformation.

Transformation: When one undergoes metamorphosis

These male adolescents noticed certain changes in their behavior and way of dealing with various situations which they simplified as a form of maturity that they had developed in the process of playing their role as a young father. This transformation happened as a result of their willingness to become a better person for their partner, as well as being a role model whom their child would look up to in the future. This transformation could be further linked to the concept of a change of identity which is highlighted in Kaufman and Uhlenberg‟s (2000) research where they use „Identity theory‟ (Stryker & Serpe, 1982, cited in Kaufman et al. 2000, p.932) as a framework to understand how new parents decide on the reallocation of their time to create a new role. This indicates that adolescent fathers are beginning to learn to set their priorities in life knowing that there are new responsibilities that they will have to face as they enter the world of fatherhood.

„*Before, you wouldn"t have to worry about anyone, only yourself. Now, you should have to worry about your child and that you have a partner to take care of him. Especially in my studies, before I was too lazy to study. I would prefer to cut classes than to participate. Now, I"d need to study because I"m hoping for a job in the future*.‟ (Bing)

Phase 5: Support and Acceptance

In this phase, young fathers commit to their obligation as the breadwinners of their own family and took chances of the support offered to them by their parents at the same time. Sealed by the support given, these young fathers had the opportunity of gaining reinforcements financially, as well as physically. Their parents have provided the same support through guidance and imparting knowledge of how to appropriately raise a child while going through their own transition of studying in college and being a father. A specific pair of themes emerged from this phase namely; The Constant Support of Family and Positive Relationship with their Partner.

Constant Support of Family: When one sips from nectars

Family has been the main foundation of these young fathers and the result of their experience provided a never-ending support of their parents as main providers for their own welfare. These adolescent fathers can never avoid the fact that they needed help and reached out to their parents for a hand in siring their children. Their mothers and fathers, in return, have contributed in keeping the equilibrium of the roles of these emerging adults as young fathers and sons.

A certain dilemma between independence and the provision of need for their child in that matter is recognized despite the positive impact dealt by young fatherhood to these young men. This particular dilemma is considered as the result of having to be dependent on the support on their parents as well as providing support for their children (Chideya & Williams, 2013).

Parents never fail to provide for their children despite the negative circumstances. In a study about Filipino mothers, they are stated to be more nurturing than fathers and their nurturing role starts after they have given birth to their children. Filipino mothers were viewed and expected to be the first to take care of their baby and to take hold of the punishments of their children (Carunungan-Robles, 1986 as cited in Tarroja, 2010).

„*So our parents supported us and they never left us even though we did something wrong to them. They still accepted it and they helped us that we could be able to graduate and support her. It"s for our baby"s welfare anyway*.‟ (John)

Positive Relationship with their Partner: When one starts to build bridges

These young fathers have foreseen their future together with their partners as a good couple and having plans of marrying them. It became a motivation for them to unveil the better versions of themselves by being loving and responsible partners for their girlfriends.

Jacobs (2015) showed that there is a firm establishment and importance to the participants‟ romantic relationships with their partners before they experienced the teenage pregnancy although it was unexpected. Adolescent fathers accept their responsibility and took a strong hold of the obligation despite the risks and difficulties that may tag along in siring an infant at a very young age. They give full support of the pregnancy regardless of the negative reactions that the society suggests of them.

„*Well, typical love story again, when I first saw her I told myself, "she"s the one", that same story all over again. I stood for my decision and I want to finish schooling first before I marry her*.‟ (Chris)

Final Eidetic Insights

Figure 1. The Journey of Fatherhood

"How in the midst of all this sorrow can so much hope and love endure?"

Adam Mitchell, Days in the Sun from Beauty and the Beast (2017)

Beauty and the Beast is widely known as a classic and wonderful fairy tale that had been known for generations and childhoods in particular. In this story, a song that had been sung in the duration of the movie had touched the hearts of the researchers which depicts the story of the Beast‟s transformation and its similarity to our insights of the lived experiences of the young unmarried fathers in the chosen university in Bacolod City.

Meanwhile, their greatest lesson was to learn to accept the mistakes of the past, to think well of the consequences of the actions before delving into the pleasure, and to love, cherish and enjoy fatherhood and take it as a blessing for maturity, positivism and transformation.

All those days in the sun, what I'd give to relive just one, Undo what's done and bring back the light;

All those precious days, one that my father made secure, couldn't last.

Beast has been dreaming of going back to his old self, his body, his appearance and the entertainment that surrounds his castle. He has been dreaming of the past where he was struggling to go back because of the curse that was conjured by the Enchantress for misjudging the true essence of her gift.

It is a journey of survival. The survival of the difficulties and mistakes that dimmed the skies of these young fathers. The mistake that brought a spell in their lives as students and opened their eyes to the real world.

This song summarizes the experiences of Prince Adam as well as the experiences of the young unmarried fathers, wanting to go back in time for the wellness of their futures and their parents‟ justice.

I can feel a change in me; I'm stronger now, but still not free.

We must believe as lovers do that days in the sun will come shining through.

Beast became strong yet vulnerable inside. He fought off the rejection of the mob and Gaston. He fought off the indicator that he was a monster because of his mistakes and because he was unrecognizable as Prince Adam was before. Fresh from the wounds he took from Gaston, he finally realized that love, no matter it would change him or not, was the greatest thing a man can feel and fight for and it was for his true love, Belle.

It is a journey of revival. The revival and redemption of these young fathers in order to gain acceptance and get back to their feet and move one. These young fathers also take refuge in the acceptance of their loved ones including their partners. Criticisms and prejudice were ignored by the young fathers because it was all overwhelmed by true love and acceptance. It was the strength, internally and externally that drove them to pursue their dreams despite the hardships and the experiences they have gone through as students, sons, and fathers at the same time.

Oh, I could sing of the pain these dark days bring,

The spell we're under; still, it's the wonder of us I sing of tonight.

Beast was under the spell of the Enchantress and was finding the heart for love until he found Belle, the woman who had become his companion and who accepted him, loved him and created imaginable memories with him. She was the woman who was able to break the spell and prevented his death and the castle‟s destruction. Beast fell in love with a woman in the midst of his darkest hours and truly found rest and peace with her.

It is a journey of love, the love that was meant for their partners and mothers and fathers in order to meet their expectations. These young fathers had undergone the same thing and it was because of their love for their partner that gave them the strength to endure the struggles they ran into as lovers. Despite all the difficulties of being fathers at a very young age, the baby and their partners became their tranquility and their solitude. Confidence was built because those courageous women were the propulsion of the fathers to speak out the truth to their parents as well.

We reckon that love does not only have its gains but also it has its pains – its sufferings. And these sufferings will be matched with experiences that are wondrous enough to be called a story, a journey. A journey that will be known as Fatherhood.

Conclusion

In conclusion, the themes emerged in the lived experiences of young unmarried fathers speak of their maturity and transformation as a human being, the importance of support system and the positive elevation of their relationship with the mother of their child. Aside from their conviction and acceptance of their role of being the brick wall of their newly founded young family amidst all the uncertainty, criticisms, and grueling challenges, they proved their strength of character as a young man rooted in faith in God, self-belief and unconditional love for their child. Above all, the young unmarried fathers emerged as individuals who are more than ready to lay down everything they have in securing desirable lives for their child.

Another conclusion drawn in this study is the concept of the phases of being an unwed young father, wherein they had to go through different points and circumstances that may prove vital in the overall acceptance of what they had experienced. They learned to overcome their fear of dealing with their employment opportunities when they took the risk to find a job and further elevated their self-esteem to contradict against the criticisms of young unmarried fathers as rebellious and uncertain in their future. Despite those inevitable situations and struggles, a light will finally show up at the end of the tunnel, a light of acceptance, a light which provides confidence in carrying their responsibilities and a light of fulfillment in being an unwed young father.

The findings of this research strongly recommend various developments primarily, in the field of guidance and counseling through the creation of an assistance program that would enable these young fathers to build positive relationships with other fellow young fathers by engaging in activities and group discussions where they could share their own sentiments among themselves while providing emotional support and acceptance for their own personal growth. Likewise, school administrators may provide an awareness campaign through talks and seminars about premarital sex, abortion, and other timely issues that greatly influence young people nowadays. In addition, educators can gain more understanding of the students who might be in the same circumstances as young fathers and their conditions in balancing their education and their parenting. Finally, this research suggests the reduction of stigma placed on these young fathers by treating them with positive regard and at the same time, embracing the coequality between men and women in the society.

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Assessment of Students on the Phd Modular Schedule

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ABSTRACT:

The College of Education Graduate Studies (COEdGS) of De La Salle University-Dasmariñas (DLSU-D) offers graduate education programs ranging from master's to doctorate degrees. The COEdGS administrators, mindful of the situations of their students who have difficulty in combining work and studies, offered the modular schedule for the PhD programs. This schedule is likened to intensive courses, time shortened courses, compressed courses or condensed semester format used in other universities abroad. This paper presented the assessment on the modular schedule of 183 PhD students enrolled from SY2012-2013 to SY2017-2018. Using the descriptive method of research, a self-made questionnaire and mean to statistically treat the data, this study revealed that the PhD students preferred the modular schedule for the following reasons: they can concentrate more in the lesson, they understand the subject matter better, there is stronger bonding among the students, and there is better camaraderie between the teacher and the students. However, difficulties may still arise in the completion of the requirements on time. The students found the modular schedule as both efficient in terms of time, cost and convenience and effective in terms of its impact to student learning. Hence, this schedule is recommended to be retained because of the positive feedback given by the students who have first-hand experience on such a schedule. This schedule may also be introduced to the master's programs to determine whether this is really effective and efficient.

Keywords

Modular schedule, graduate education, time shortened course

Introduction

Graduation from college is not the end of the educational ladder. One can still pursue graduate education. Why should one go to graduate school? Tucker (2014) emphasized that going to graduate school will give a person an internationally recognizable qualification, provide him/her the opportunity to contribute to the world's knowledge, increase his/her financial prospects, and expand his/her connections, among others. Harrison (2013) also mentioned that going to graduate school will give one a competitive motivation and financial gain, as well as improve his/her knowledge and perspective. In the same light, Sharon (n.d.) explained that graduate school offers one the opportunity to change careers, a chance for intellectual growth, and a prospect for more job opportunities in a field that one likes. All in all, Martin (2012) summarized that graduate school allows for personal growth, greater employment opportunities, greater career advancement, financial reward, sense of accomplishment, and greater recognition and credibility.

With the importance of graduate education, De La Salle University-Dasmariñas (DLSU-D) offers several graduate education programs ranging from master's to doctorate degrees. The College of Education Graduate Studies (COEdGS), specifically, offers the following programs: Master of Arts in Education major in Educational Management, Master of Arts in Education major in Guidance and Counseling, Master of Arts in Education major in Religious and Values Education, Master of Arts in Education major in Special

Education, Master of Arts in Education major in Physical Education, Doctor of Philosophy major in Educational Management, and Doctor of Philosophy in Counseling with specialization in School and Community Counseling. It previously offered Doctor of Philosophy major in Language Education but this program was transferred to the College of Liberal Arts and Communication Graduate Studies (CLACGS) for vertical alignment.

The administration of the COEdGS are mindful of the situations of their students, since majority of them are public and private school teachers and administrators. Although the enrollment in the college steadily increases annually, the administrators noticed that not all of them are able to finish their degrees. A study of the reasons for the non-completion of degrees in the college revealed that students do not complete their degrees primarily because of work factors (Legaspi, Abiador, & Gagasa, 2012). Specifically, they are busy with their jobs (rank 1) and they have difficulty in combining work and studies (rank 3). In an effort to help these graduate students in their studies, the college administrators experimented on offering modular schedule for the PhD programs. Prior to 2009, the modular schedule followed was morning session and afternoon session with 5 hours straight class for 9 consecutive Saturdays, for a total of 45 hours of contact and 9 hours of independent study, totaling to 54 hours. Then in the first semester of SY2009- 2010, the modular schedule was changed to 7 hours of class for 6 consecutive Saturdays, for a total of 42 hours of contact with 12 hours of independent study, still totaling to 54 hours. Until now, the same schedule is followed in the PhD programs.

In other universities abroad, the modular schedule followed in COEdGS is called intensive courses, time shortened courses, compressed courses or condensed semester format. Spurling (2001) found out that students in the condensed format have significantly higher pass rates than students in the traditional semester format, although no control was made on student differences in ability, age, etc. Austin & Gustafson (2006) investigated the link between course length and student learning. Findings of the study revealed that after controlling for student demographics and other characteristics, intensive courses do result in higher grades than traditional 16-week semester length courses and that this benefit peaks at about 4 weeks. Similarly, Geltner and Logan (2000) found that students perform better (GPA, success rate) in 6-week than 16-week classes and retain the material equally well in both formats. The study of Daniel (2000) contained a literature review for articles on time shortened courses across disciplines. She revealed that these courses yielded comparable and often superior learning outcomes in comparison with traditional semesters or quarter length courses. Gamboa’s (2013) findings also followed previous studies that students enrolled in condensed courses are more likely to be successful than students in traditional length courses.

Several studies were also made on the importance of compressed courses. Edgecombe (2011) and Kretovics et al. (2005) noted that compressed courses allow the student to maintain the same contact hours with the instructor as a traditional length course. The same number of hours allows for the same academic rigor but requires instructors to restructure how lessons are delivered and assessed. Daniel (2000) summarized that students took condensed courses for convenience, perceived higher quality instruction, increased interaction, and innovative instructional modalities. She also found that faculty preferred condensed courses due to increased student motivation and classroom interactions. On the other hand, Ross-Gordon (2011) noted that mature, non-traditional students thrive in the intensive learning environment provided by condensed courses. Similarly, Ewer et al. (2002) found that only the students with high ACT scores or with high GPAs perform significantly higher in the condensed semester format.

With this varied information on condensed semester format, the present researchers deemed it necessary to look into the assessment of the PhD students in COEdGS on their modular schedule. The results of the study will help the college administrators to decide whether to continue offering the modular schedule or change it into the traditional semester schedule.

The following questions were raised in this study:

1. What is the assessment of the students on the current PhD modular schedule?
2. What is the rating given by these students on the efficiency and effectiveness of the current schedule?

Method:

This study made use of descriptive method of research as it presented the assessment of the PhD students on their modular schedule. A self-made questionnaire was prepared by the researchers based on the initial verbal comments given by the PhD students during the course of their enrollment prior to the conduct of the formal evaluation of the modular schedule. This was subjected to content validation by the faculty of the COEdGS and was distributed by the COEdGS secretary to the new PhD students after a semester of their enrollment. The distribution of the questionnaire was done during a six-year period covering the following school years: SY2012-2013 (64 students), 2013-2014 (34 students), 2014-2015 (33 students), 2015-2016 (21 students), 2016-2017 (16 students), and 2017-2018 (15 students). A total of 183 students or 41.50% from the average students enrolled during the last six school years answered the questionnaire.

The respondents were asked to rate the items using this Likert scale: 1 – not applicable, 2 – to a low extent, 3 – to a moderate extent, 4 – to a high extent, and 5 – to the highest extent for the items on the students' assessment of the modular schedule and 1 – needs improvement, 2 – fair, 3 – good, 4 – very good, and 5 – outstanding for the items on efficiency and effectiveness of the schedule.

The weighted mean for each item was computed and interpreted following these given scales: (a) 1.00-1.80 not applicable (NA), 1.81-2.60 to a low extent (LE), 2.61-3.40 to a moderate extent (ME), 3.41-4.20 to a high extent (HE), and 4.21-5.00 to the highest extent (THE) as to the assessment of the students on the modular schedule; and (b) 1.00-1.80 needs improvement (NI), 1.81-2.60 fair (F), 2.61-3.40 good (G), 3.41-4.20 very good (VG), and 4.21-5.00 outstanding (O) as to the efficiency and effectiveness of the schedule.

Results and Discussion:

On the assessment of the students on the current PhD modular schedule, Table 1 shows the details.

Table 1. Assessment of the students on the current PhD modular schedule

ITEMS	WM						AWM	VI
I like the current PhD modular schedule because:	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**	**2017-2018**		
1. I can arrange my work/personal schedule better.	4.70	4.74	4.64	4.67	4.69	4.53	4.66	THE
2. I can avoid conflict between my school and work/personal schedule.	4.64	4.59	4.48	4.43	4.63	4.27	4.51	THE
3. I have adequate time to complete my research and other requirements.	4.22	4.41	4.52	4.38	4.75	4.07	4.39	THE
4. My time for independent study is maximized.	4.38	4.50	4.61	4.67	4.50	4.53	4.53	THE
5. I understand the subject matter better.	4.53	4.59	4.61	4.90	4.69	4.80	4.69	THE
6. I can concentrate more in the lesson.	4.64	4.71	4.82	4.81	4.69	4.80	4.74	THE
7. There is more in-depth discussion.	4.50	4.47	4.79	4.76	4.50	4.73	4.63	THE
8. There is more time in sharing ideas.	4.52	4.53	4.79	4.81	4.56	4.80	4.67	THE
9. There are more chances for creative activities in the classroom.	4.47	4.35	4.64	4.71	4.56	4.67	4.57	THE
10. There is a better opportunity for an out-of-the-classroom activity without being absent in my other subjects.	4.44	4.59	4.61	4.67	4.56	4.60	4.58	THE
11. There is better camaraderie between the teacher and the students.	4.59	4.59	4.82	4.86	4.69	4.73	4.71	THE
12. There is stronger bonding among the students.	4.56	4.47	4.79	4.86	4.63	4.87	4.69	THE
13. It's more cost-effective since I go to school only on specified days.	4.72	4.59	4.79	4.81	4.56	4.80	4.71	THE
14. I can enroll only in one subject and make full use of the time because the schedule is short.	4.59	4.44	4.61	4.52	4.56	4.33	4.51	THE
15. It is less stressful.	4.38	4.50	4.70	4.52	4.63	4.40	4.52	THE
WM	**4.53**	**4.54**	**4.68**	**4.69**	**4.61**	**4.60**	**4.61**	**THE**

Legend: THE – to the highest extent; HE – to a high extent; ME – to a moderate extent; LE – to a low extent; NA – not applicable

It can be gleaned from Table 1 that for six school years, the PhD students liked their modular schedule to the highest extent (THE) as attested by the average weighted mean (AWM) of 4.61 (with A WM of 4.53

for SY2012-2013, 4.54 for SY2013-2014, 4.68 for SY2014-2015, 4.69 for SY2015-2016, 4.61 for SY2016-2017, and 4.60 for SY2017-2018). The highest AWM of 4.74 was noted for item # 6, *I can concentrate more in the lesson*. As part of the written comments of the respondents, they stated that the current PhD modular schedule is PhD student friendly because it helps the students focus on one module at a time, hence they can concentrate more in their lessons. They also stated that this modular schedule is very effective in terms of student learning.

Looking at the individual items, the highest weighted mean (WM) of 4.90 was recorded in SY2015-2016 for item # 5, *I understand the subject matter better*. This implies that the condensed schedule gave the students greater opportunity to digest the lessons being presented by the professors, hence resulting to a better understanding of the course of study, which may also result to higher grades and improved academic performance. This may be related to the findings of Daniel (2000) and Spurling (2001) that students in the condensed format have significantly higher pass rates than students in the traditional semester format. Likewise, Austin & Gustafson (2006) found that intensive courses do result in higher grades for the students.

The second highest WM of 4.87 was recorded in SY2017-2018 for item #12, *There is stronger bonding among the students*. This implies that students value the friendship and connection established with their classmates during the duration of the course. This probably helps them more in their studies because this closeness can provide a support system for these students who are also busy with their work. This can be related to the increased interaction that Daniel (2000) mentioned in her study. This item also garnered the third highest WM of 4.86 in SY2015-2016.

Getting the same WM of 4.86 as recorded in SY2015-2016 was item # 11, *There is better camaraderie between the teacher and the students*. Just like the strong bonding that the students developed among their classmates, it is also important that they develop a good camaraderie with their professors. This camaraderie can pave the way for a better teaching-learning process, which may result to a more active participation of the students in the classroom activities. Better camaraderie between the students and the teacher will also help the students to approach their professors easily to ask for help in case there are lessons that need further explanation. Similarly, Daniel (2000) stated that faculty preferred condensed courses due to increased student motivation and classroom interactions.

However, in spite of the high ratings given to almost all the items for the six school years, item # 3, *I have adequate time to complete my research and other requirements*, got the lowest WM of 4.07 (described as to a high extent only). This item also received the lowest AWM of 4.39. This means that time is still a problem with the PhD students in terms of the completion of their course requirements. As one student commented, although the schedule is convenient and cost effective, the time allotted for research is not enough. This is similar with the results of the researches conducted by Cervillon et al. (2011) and Pareja & Lee (2011) where they found out that time management and combining workload and graduate school requirements were reasons for the non-completion of graduate degrees.

Regarding the rating given by the PhD students on the efficiency and effectiveness of the current schedule, Table 2 shows the details.

Table 2. Rating of the Students on the current PhD modular schedule

ITEMS	**WM**						**AWM**	**VI**
How will I rate the current PhD modular program in terms of:	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**	**2017-2018**		
1. Efficiency (time, cost, convenience)	4.53	4.52	4.36	4.86	4.63	4.67	4.59	O
2. Effectiveness (impact to my learning)	4.47	4.48	4.45	4.86	4.69	4.67	4.60	O
WM	**4.50**	**4.50**	**4.41**	**4.86**	**4.66**	**4.67**	**4.60**	**O**

Legend: O – outstanding; VG – very good; G – good; F – fair; NI – needs improvement

Table 2 shows that the students rated the PhD modular schedule as outstanding with an AWM of 4.60 (with a WM of 4.50 for SY2012-2013, 4.50 for SY2013-2014, 4.41 for SY2014-2015, 4.86 for SY2015-2016, 4.66 for SY2016-2017, and 4.67 for SY2017-2018). The high AWM implies the students' appreciation of the benefits they are getting from the modular schedule.

In terms of efficiency, which pertains to time, cost and convenience, the students rated it as outstanding with a computed AWM of 4.59. It was affirmed by the students as they verbally commented that the modular schedule is well-planned, very advantageous on the part of both the students and the professor, so helpful, very convenient, and practical. They further stated that the schedule is just right for the working professionals and suited to any office work schedule. It is a good set up and is more appropriate for PhD students since conflicts are being avoided.

In terms of effectiveness or the impact of the schedule to their learning, the students also rated it as outstanding with a computed AWM of 4.60. The students commented that it is carefully planned, organized, and is centered on the students' utmost development and enhancement. They can focus on one module at a time, hence, they can concentrate more in their subjects. They confirmed that it is very effective in terms of their learning.

These data reveal that in general, the PhD students found the modular schedule as both efficient and effective. The students suggested to continue the modular schedule because it works for them. Hence, this schedule should be retained due to the positive feedback given by the students who have first-hand experience on such a schedule.

Conclusions and Recommendations:

This study revealed the favorable assessment of the PhD students on their modular schedule across six school years. The students considered the modular schedule as effective because of its impact on their learning. They understood their lessons more because of better learning opportunities and the greater concentration that they can give to their individual subjects. This implies an increase in the degree of their professionalism and better work performance. They also considered the modular schedule as convenient and time and cost efficient because they do not have to go to school for the whole semester if they enrolled only in one or two classes. Conflict is also minimized because they do not have to be absent in some of their classes if they have out-of-the-classroom activities for one subject. The overall evaluation of the students indicated their acceptability of and gratefulness to the decision of the COEdGS administrators in introducing the modular schedule to the PhD students.

The findings of the study may prompt the COEdGS administrators in expanding the implementation of the modular schedule to the master's programs. This will prove whether this schedule will really be effective and efficient among various groups of students. However, care must be taken in this move to ensure the schedule's effectiveness and efficiency. The COEdGS faculty teaching in the master's programs must be oriented well on the nature of the schedule and the changes it brings in the teaching-learning process. Proper orientation must be done on how they should restructure their lessons, how these should be delivered and how learning should be assessed. In this way, the COEdGS administrators can ensure the effective implementation of the modular schedule.

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The Schoolbook as an Alternative Mode of Lesson Delivery

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ABSTRACT

De La Salle University- Dasmariñas (DLSU-D) started offering the senior high school program in SY2016-2017. As part of its innovative ways of educating its students, it introduced the use of the schoolbook as an alternative mode of delivering the lessons. For the subjects that are taught for four hours a week, three hours are spent on face-to-face meeting in the classroom while the remaining one hour is alotted for online class through the schoolbook, which aims to enrich the learning experience and strengthen the student-teacher and student-student exchanges beyond the classroom.

This study was conducted to evaluate the schoolbook as an alternative mode of lesson delivery in SHS through an online survey conducted among 2,795 students. Findings show that the schoolbook has not been maximized by the teachers during their once-a-week online classes. Most of the students revealed that their teachers only used the schoolbook for giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news. However, data showed that the SB was used by the teachers in their assessments like online quiz, dropbox, team, and offline assessments. Debate was hardly used as an assessment tool. In spite of these, the students still evaluated their use of schoolbook as very good in terms of its usefulness, their satisfaction, and enjoyment. It is recommended that the schoolbook be continuously used in the SHS. However, further training on its features is needed so that the teachers can fully utilize its use and maximize their once-a-week online class.

Keywords

Schoolbook, Online class, Alternative mode of lesson delivery

Introduction:

To cushion the impact of the full implementation of the Kto12 curriculum where tertiary institutions will have no freshman and sophomore students for SY2016-2017 to SY2017-2018 and affecting the higher year level enrollment until SY2020-2021, De La Salle University- Dasmariñas (DLSU-D) offered senior high school (SHS) in SY2016-2017. To prepare the SHS students for college life, DLSU-D introduced the use of the schoolbook, commonly called SB, as an alternative mode of delivering the lessons. SB is part of DLSU-D's innovative ways of educating its students.

SB, powered by EDU2.0, is the University's virtual learning environment tool that enriches learning experience and strengthens student-teacher and student-student exchanges beyond the classroom. It functions as a course management system where faculty create electronic classes to share learning materials and design online learning activities. Students can access their lessons, receive assignment reminders, and communicate with teachers and classmates through messaging, discussion forums and chatrooms. Through the SB, the University intends to build and nurture an online community of lifelong learners (www.dlsud.edu.ph).

The use of online learning management system is not new. It has come about because technology has pervaded the educational system. According to Bilbao et al. (2012), technology serves as a link to new knowledge, resources and higher order thinking skills. It provides support to teaching in the resolution of meaningful problems, acts as a scaffolding to learning, and promotes independent learning. Generally, it has altered the types of learning available in the classroom.

Likewise, Bilbao et al. (2014) added that technological changes in education will make its impact on the delivery of a more effective, efficient, and humanizing teaching-learning process. Educational technology in itself has upgraded the quality of teaching and learning in school, as well as broadened the use of technology to boost educational paradigm shifts that give importance to student-centered and holistic learning. Similarly, Dasha (2017) revealed that technology has definitely made students more independent, allowing them to search for information and even produce educational materials themselves.

Technology use in the classroom is commonly termed as e-learning, which simply means learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom (http://www.elearningnc.gov/about_elearning/what_is_elearning/). To Liu et al. (2010, in Rocina 2017), e-learning is understood as technology-enhanced teaching and learning within an educational institution. It is also defined as learning facilitated and supported through the use of information and communication technology to deliver content (learning, knowledge and skills) on a one-way (asynchronous) or multi-way (synchronous) basis. Williams (2017) described e-learning as the delivery of training or education through digital or electronic methods. Learners can acquire qualifications or develop new skills using electronic devices such as a laptop, mobile device or tablet.

learning offers the ability to share material in all kinds of formats such as videos, slideshows, word documents and PDFs. Conducting webinars (live online classes) and communicating with professors via chat and message forums is also an option available to users. It is an affordable (and often free) solution which provides the learners with the ability to fit learning around their lifestyles, effectively allowing even the busiest person to further a career and gain new qualifications (https://www.talentlms.com/elearning/what-is-elearning).

There are several benefits of e-learning. It is cost and time effective and allows 24/7 learning anywhere (https://www.virtual-college.co.uk/help/what-is-e-learning). It is also easy to report, consistent, and wide-reaching (http://www.growthengineering.co.uk/what-is-elearning/). It is accessible, provides more effective learning experience, allows self-paced learning, and offers free resources (Williams, 2017).

Because of the benefits derived from e-learning, several studies were made on the use of technology in education. Suthiwartnarueput and Ratanakul (2018) found out that LINE, being recognized as one of the top best mobile applications in Thailand, has produced a greater improvement of the students' writing ability after a month of English writing practice on LINE. The respondents believed that LINE was an effective language learning tool.

Rocina (2017) found out that most of his respondents agreed that using the school book, DLSU- D's LMS, makes answering activities a lot easier as they have all the resources at their fingertips, although there is a limitation in finding learning materials. This shows that the students have a positive attitude towards the e-class as reflected in their mean scores. Hence, it can be concluded that the e-class is an important and vital tool of learning which can be applied nowadays.

Tanchaisak & Wattanapanit (2016) mentioned in their paper that there were researchers who reported that online learning is more effective than classroom learning (Qualman, 2015) and there were researchers who found positive relationship between e-learning and student satisfaction (Bloom & Hough, 2003; Choi, 2003; Magg, 2004).

Since two years has passed after the introduction of SB to the SHS students, the researchers deemed it necessary to evaluate its use as an alternative mode of learning delivery by the teachers. As part of the school policy, the subjects that are taught for four hours a week have three hours of face-to-face meeting in the classroom while the remaining one hour is alotted for online class through the schoolbook. Through this research, it can be determined if the one hour allotted for online class is maximized by the teachers.

Specifically, the following questions were raised in this study:

1. How did the teachers use the schoolbook in their lesson delivery?
2. What kinds of assessment were given by the teachers through the schoolbook?
3. How did the students evaluate their use of the schoolbook?

Methodology:

This study made use of the descriptive method of research in evaluating the schoolbook as an alternative mode of lesson delivery in SHS in DLSU-D during the first and second semesters of SY2017-2018.

The data were collected from 2,795 SHS students through an online survey done by the director of the Center for Innovative Learning Programs (CILP), the unit in the University in charge of monitoring SB use. The respondents were asked to rate the items using this Likert scale: 1 – poor, 2 – fair, 3 – good, 4 – very good, and 5 – outstanding. The responses of the students were tallied through frequency count and mean. Through the online monitoring of the CILP, data on the type of assessment used by the teachers through the schoolbook were also determined.

For the items where the means were computed, the following scale was used: (a) 1.00-1.80 poor (P), 1.81-2.60 fair (F), 2.61-3.40 good (G), 3.41-4.20 very good (VG), and 4.21-5.00 outstanding (O).

Results and Discussion:

Regarding the answers of the students on how their teachers use the schoolbook, Table 1 shows the data.

Table 1. Teachers' use of the schoolbook according to the students

Uses of Schoolbook	f
1. Posting of announcements/news only	23
2. Uploading of lesson materials (PDF, ppt, Word, Excel, etc.) only	159
3. Uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news	61
4. Distribution of the curriculum guide only	30
5. Distribution of the curriculum guide and posting of announcements/news	9
6. Distribution of the curriculum guide and uploading of lesson materials (PDF, ppt, Word, Excel, etc.)	48
7. Distribution of the curriculum guide, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news	32
8. Distribution of the curriculum guide and giving of assignments	23
9. Distribution of the curriculum guide, giving of assignments and posting of announcements/news	15

10. Distribution of the curriculum guide, giving of assignments and uploading of lesson materials (PDF, ppt, Word, Excel, etc.)	140
11. Distribution of the curriculum guide, giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news	589
12. Giving of assignments only	134
13. Giving of assignments and posting of announcements/news	57
14. Giving of assignments and uploading of lesson materials (PDF, ppt, Word, Excel, etc.)	359
15. Giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news	1,063
16. Giving of assessments	12

Out of the 2,795 students who participated in the survey, only 2, 754 answered how their teachers used the schoolbook. There were 41 who did not have any reply on this question.

As can be gleaned from Table 1, teachers can use the schoolbook in (1) posting of announcements, (2) uploading of lesson materials, (3) distribution of the curriculum guide, (4) giving of assignments, and (5) giving of assessments. The highest number of the students (1,063) revealed that their teachers used the SB in giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news, 589 students said that their teachers used the schoolbook in the distribution of the curriculum guide, giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news, while 359 students said that their teachers gave assignments and uploaded lesson materials (PDF, ppt, Word, Excel, etc.) through the schoolbook. These data show that the teachers only make a maximum combination of four uses of the schoolbook. Nobody among the teachers, based on the answers given by the students, used the SB in five different ways. Combining the responses gathered from these students, SB is used by the teachers primarily to post announcements, upload lessons and give announcements. These data show that the teachers have not maximized the use of the schoolbook. The teachers used the SB in various ways but there was no one among them who fully utilized the SB in five different ways.

The data also point to the fact that only 12 students mentioned that their teachers used the SB in assessing them. This information is somehow contradictory to the data gathered by the CILP director regarding the different kinds of assessments given by the teachers through the SB.

As to the kinds of assessments given by the teachers through the schoolbook, Table 2 shows the data.

Table 2. Assessment types used by the teachers through the schoolbook

	Aug to Dec 2017 (1st Sem)				Jan to April 2018 (2nd Sem)			
Uses	STEM	HUMSS/ ABM	TVL	Total	STEM	HUMSS/ ABM	TVL	Total
1. Quiz	592	137	163	892	251	143	188	582
2. Essay	51	79	58	188	11	112	15	138
3. Offline	257	105	54	416	287	135	24	446
4. Dropbox	69	26	518	613	72	53	139	264
5. Survey	67	7	0	74	16	7	2	25
6. Discussion	2	29	1	32	0	53	20	73
7. Debate	0	4	0	4	0	0	0	0

8. Team	3	18	12	33	8	198	302	508
TOTAL	1,041	405	806	2,252	645	701	690	2,036

As mentioned, CILP regularly monitors the teachers' use of the SB. Although there were only 12 students who said that their teachers used the SB in their assessments, Table 2 contains the number of times the teachers used the SB in assessing their students' learning as reported by the CILP. It can be seen from the table that the teachers can use eight different types of assessments:
(1) quiz, (2) essay, (3) offline assessment, (4) dropbox assessment, (5) survey, (6) discussion, (7) debate, and (8) team assessment.

The most commonly used form of online assessment given by the teachers was the quiz (used 892 times during the first semester and 582 times during the second semester). The online quiz pertains to the objective type of test given by the teachers like true or false, matching type or multiple choice. Probably because of the ease by which this can be checked online, the teachers preferred to use this in assessing their students' learning.

The second type preferred by the teachers is the dropbox assessment (used 613 times during the first semester). Dropbox assessment pertains to the online submission of assignments like video, ppt, and the like. It is not really an assessment of a material learned but more of checking whether the students are diligent in doing their assigned tasks.

The third type preferred by the teachers is the team assessment (used 508 times during the second semester). In this type of assessment, the teacher creates groups or teams who are given specific tasks. After the creation of the team, the students will work according to the task assigned to the group. This measures how the students cooperate with one another in finishing their task.

The fourth type preferred by the teachers is the offline assessment (used 416 during the first semester and 446 times during the second semester). This pertains to the encoding of grades on quizzes, projects or any assessment done offline.

From the table, it can be seen that the least used are debate (used only 4 times during the first semester and not used at all during the second semester), discussion (used only 32 times during the first semester and 73 times during the first semester), and survey (used only 74 times during the first semester and 25 times during the second semester).

As to the evaluation of the students on their use of the schoolbook, Table 3 shows the data.

Table 3. Evaluation of the students on their schoolbook

Items	WM	VI
1. How useful have your Schoolbook classes been?	3.78	VG
2. How satisfied are you with your overall Schoolbook experience?	3.70	VG
3. How enjoyable have your Schoolbook classes been?	3.55	VG
AWM	3.68	VG

Legend: 1.00-1.80 poor (P), 1.81-2.60 fair (F), 2.61-3.40 good (G), 3.41-4.20 very good (VG), and 4.21-5.00 outstanding (O)

Overall, the students rated their use of the schoolbook as very good, with an AWM of 3.68. This means that the SHS students like the use of the SB as an alternative mode of lesson delivery. When they were asked about the usefulness of the SB, they rated it as 3.78, verbally described as very good. It means that the one hour allotted for the online class was used wisely both by the teachers and the students as implied by the answers of the students. As to their satisfaction of their SB experience, the students also rated it as very good, with a WM of 3.70. This shows that they are satisfied with their SB. And when they were asked about their enjoyment of their SB classes, they also rated it as very good, with a WM of 3.55. These data show that the SHS students found their SB classes as useful, satisfying and enjoyable.

Conclusions and Recommendations:

This study was conducted to evaluate the schoolbook as an alternative mode of lesson delivery in SHS during the first and second semesters of SY2017-2018. Through an online survey conducted by the CILP, 2,795 students participated in the study.

Findings show that the SB has not been maximized by the teachers during their once-a-week online classes. Most of the students revealed that their teachers only used the SB for giving of assignments, uploading of lesson materials (PDF, ppt, Word, Excel, etc.) and posting of announcements/news. There was a very small number of students who said that their teachers used the SB for assessment. However, data from the CILP showed that the SB was used by the teachers in their assessments like online quiz, dropbox, team, and offline assessments. Debate was hardly used as an assessment tool. In spite of these, the students still evaluated their use of SB as very good in terms of its usefulness, their satisfaction, and enjoyment.

It is therefore recommended that the SB be continuously used in the SHS as confirmed by the positive responses of the students. The findings imply that if the use of the SB as an alternative mode of lesson delivery will be maximized, the students will have a more enjoyable and fruitful learning experiences. This can be one of the best practices that the SHS can boast of which can serve as a good marketing collateral for the school. It is, however, recommended that the teachers should be further trained on the features of the SB so that they can fully utilize its use and maximize their once-a-week online class.

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USAL : A Counseling Innovation for Teenage Depression

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ABSTRACT

This study aimed to determine the effectiveness of USAL which stands for U – *Unawa* (Case Conceptualization), S – *Salita ng Diyos* (Word of God), A - *AralingTakda* (Homework) and L - L.U.H.A. (Life Lessons using Heart and Hand Activities) as an innovative counseling approach in the treatment of teenage depression. It involved a multiple case study of six female adolescent clients with varying levels of depression and levels of SQ (spiritual quotient). The clients were administered the Reynolds Adolescent Depression Scale (RADS) and Spiritual Quotient Questionnaire (SQQ) before the application of treatment. The same test questionnaires were answered by the clients after immersing themselves in the process of USAL. Responses of clients were also transcribed, coded and categorized into themes. Findings showed that all six female adolescent clients showed significant improvements on the level of depression and SQ. It was also found out that the highest score among the cases was Negative Self Evaluation followed by Dysphoric Mood while on the level of SQ the lowest was Purpose in Life followed by Tolerance. All clients experienced improvement in all the levels of depression while their SQ was strengthened. The study concludes that USAL is applicable in the treatment of varying levels of depression and in increasing the level of SQ.

Keywords

Counselling, depression, adolescent, USAL, spiritual quotient Introduction

Introduction

Depression is one of the most common but most misunderstood term being used by people when they feel sad or blue. "I am depressed" is an expression one would commonly hear from people suffering from loneliness or emptiness. Mateo (2017) reported that "more than 3.29 million people in the Philippines are living with depression and an almost equal number of individuals are suffering from anxiety." This reality enables the Department of Health and World Health Organization – Philippines (WHO-Philippines) to call on the public, private, and civil society sectors to use multi-media platforms to engage people in a serious discussion to understand what really is depression and other mental health problems affecting Filipinos.

Senate Committee on Health (2013) reported that many people in the Philippines have a different view about depression. Most Filipinos think that depression is not a sickness and is something that one eventually overcome as time goes by resulting to people not reporting depressive episodes because of embarrassment to look for help (Poe, 2013). Further, the report of the Senate Committee on Health and Demography (2013), states that depression has been the number one cause of suicide, accounting for about 90 percent of the total cases. Other cases included alcoholism, substance abuse and untreated mental illnesses including bipolar disorder, schizophrenia and others. Clinical depression is genetic or hereditary and can occur without a stressor in vulnerable individuals.

Depression is a serious matter and can affect all ages (Valeros 2011; Cash 2004; Marcus et al, 2012; Castillo 2017). In 2011, UNICEF reported that around 20 percent of the world's adolescents have a mental health problem or behavioural problem. Depression is said to be the single largest contributor to the global burden of disease among people aged 15 to 19 years Costelo (2006). Adolescents who are affected with depression early in life, often suffer from depression throughout their lives and in many cases, early onset of depression predicts severe depression later during adulthood (Raheed, 2014). In a study conducted by the World Health Organization (WHO) on Filipino adolescents (2012), depression, anxiety and mood disorders were the common mental health issues among students. Suicide rate among Filipinos has gone up in the last 21 years with the majority of cases involving young people aged 24 years old and below, according to studies.

Teenagers also have a different way of handling depression. Most often teenagers do not communicate their true feelings because they feel they can eventually deal with it. Delinquency, boredom, and deviancy can be a defense used by teenagers to cover up depression and loneliness (Triche et al., 2002). Castillo (2017) expresses that the condition is difficult to notice with teenagers because unlike depressed adults marked by deep sadness, in older children and teenagers, depression often manifests as chronic anger, irritability and often isolating oneself, which parents of teenagers tend to dismiss as part of the teenager's life.

The present study was conducted to help alleviate the causes of teenage depression by using USAL as a counseling approach, rooted on the Filipinos' deep sense of spirituality and belief in God. "USAL" can be defined as a brief prayer or utterance used by Filipinos in times of trouble, emergency or in deep gratitude for God's everyday blessings. During emergency usal can be heard as "Diyos ko! Hwag nyo kaming pabayaan" (My God! Don't forsake us). In times of trouble "Iligtas nyo po kami Panginoon." (Save us Oh Lord!). In everyday lives "Salamat Panginoon sa mga biyaya mo," (Thank you Lord for all Your blessings) are common utterances or "usal" coming from the Filipino faith.

The study of Batara (2015) revealed that Filipino adolescents are highly spiritual and they value being "maka-Diyos" as they try to understand themselves and their role in their families and communities. Filipinos value the being "maka-Diyos" and rely on God's provision during difficult and hard times. The high sense of spirituality of Filipinos can be a tool in alleviating stress and prevent mental illness if done regularly like praying and reading the Word of God (Batara, 2015). The study of Casino (2010) referred to this dependence on God as the "bahalana" attitude of Filipinos when facing hardships in life.

This study also wanted to determine if strengthening one's spiritual intelligence can help in addressing teenage depression. Using USAL can help strengthen the teenager's spiritual intelligence so that they will be able to face life challenges in a positive and effective way and not succumbing to depression. It also sought to investigate the causes of depression and to find out if alleviating the cause can help to expedite the recovery of the teenager suffering from depression.

Statement of the Problem

The study determined the effect of USAL in helping teenage clients who were experiencing varying levels of depression and low level on one of the areas of Spiritual Quotient (SQ). Specifically this study attempted to answer the following questions:

1. What is the level of depression before and after applying USAL among the cases?
2. What is the level of spiritual quotient before and after the intervention?

3. What processes in USAL facilitated the alleviation of the levels of depression in the cases in the study?

Conceptual Framework

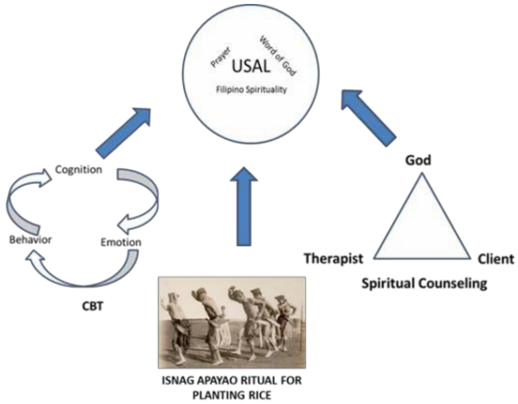

Figure 1.Framework of Usal.Cognitive Behavior Therapy, ISNAG Apayao and Spiritual Counseling as the three inspirations behind USAL.

The three frameworks wherein "USAL" was conceptualized, are cognitive behavior therapy, ISNAG Apayao ritual and spiritual counseling. USAL's innovative features are the spirituality of Filipinos that combines prayers and Word of God as key concepts of the approach..

Methodology

Research Design

The study utilized multiple case study research design to uncover causes, ethology, and the effect of USAL to treat teen depression. Inasmuch as the case study design is an empirical inquiry that investigates a contemporary phenomenon within real-life context especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2009) it is the best method to use in the nature of the study.

Population and Sampling

Purposive sampling was utilized in the study since participants were chosen based on the set criteria for the study. Participants were teenagers ranging from 16-21 years old and experiencing varying levels of depression.

Participants of the Study

The study is a multiple case study of six female adolescents who were experiencing depression in varying levels and achieved low scores in one of the areas of spiritual quotient, whose ages ranged from 16-21 years old. Participants came from referrals of the Guidance and Counseling Office in a higher educational institution in Cavite. The participants had undergone the intake procedure which included interview with the participant and their guardian, test administration of Reynolds Adolescent Depression Scale 2nd edition (RADS 2) and Spiritual Quotient Questionnaire. Participation was voluntary and anonymity was maintained.

Research Instruments

The researcher utilized two standardized tests to gather relevant data for the study. The RADS 2 (Reynolds Adolescent Depression Scale 2nd Edition was purchased in the United States while Spiritual Quotient Questionnaire was purchased via online system.

Reynolds Adolescent Depression Scale 2nd Edition (RADS 2)

The RADS 2 was developed by William Reynolds to measure teenage depression. RADS 2 subscales were Dysphoric Mood (DM), Negative Self-Evaluation (NS), Somatic Complaints (SC) and Anhedonia/Negative Affect (AN).

Table 1: Descriptions of Clinical Severity Levels of Depression Associated with RADS -2 Depression Total T Scores

T Score Range	%tile rank range	Raw score range	Clinical Description/Interpretation
<61	1-84	30-75	Normal range
61-64	86-92	76-81	Mild clinical depression range
65-69	93-97	82-88	Moderate clinical depression range
≥70	97+	89-120	Severe clinical depression range

Use of the RADS-2 Cutoff Score

A primary use of the RADS-2 is the clinical evaluation of depressive symptoms in adolescents. Although not a diagnostic measure, the RADS-2 provides valuable clinical information on depressionin adolescents. Similar to the original RADS Professional Manual, a cutoff score on the RADS-2 may be used to judge the clinical severity of depressive symptoms endorsements by clients. (RADS-2 Manual)

Spiritual Quotient Questionnaire (SQQ)

The SQQ was conceptualized by the extensive study of Mary Smith (2012. This test measures the individual's spiritual quotient in terms of beliefs and religious practices, worship place attendance, observance of religious rituals, tolerance of others' faith, purpose in life and prayer.

Data Gathering Procedure

In utilizing the multiple case study design, the researcher used several sources of data. Interviews, diaries, reflections every activity, drawing analysis and observations were directly gathered from the participants.

A letter of permission was solicited from the school director which allowed the researcher to conduct sessions with the students. A letter of consent from the parents was given since the participants were adolescents and belonging to the age range of 16-21 years old. An assent form was provided to inform the participants on the extent of their participation in the study. The participants were oriented on the whole process of the counseling journey and participated voluntarily on the whole duration of the counseling sessions. Ethical considerations were followed to be able to protect the rights of the participants of the study.

Assessment using USAL was utilized. The researcher evaluated the client's *"unawa"* (thought content); *"sintoma"* (Symptoms); *"asal"* (Behaviour); *"luha"* (Emotions). During the therapy sessions USAL was used to help alleviate the depression levels of the client. *Unawa* (Case Conceptualization); *"Salita ng Diyos"* (Word of God); *"Araling Takda"* (Homework) and L.U.H.A. (Life Lessons using Heart and Hand Activities) are the interventions that were applied to better help the client.Sessions included prayer, meditation, quiet time, drawing and literary analysis. The activities not only aimed to alleviate the levels of depression but also to strengthen one's spiritual intelligence.

Results and Discussion

The results and discussion present the scores of the six clients on Reynold's Adolescent Depression Scale (RADS 2) and Spiritual Quotient Questionnaire (SQQ) before and after applying USAL as an innovative counselling approach.

Level of Depression

Table 2: RADS 2 T-Scores and Verbal Interpretation of Client 1, Client 2 and Client 3 Before and After USAL

RADS 2 Subscales	Client 1				Client 2				Client 3			
	Before USAL		After USAL		Before USAL		After USAL		Before USAL		After USAL	
	T-score	INT	T-score	INT	T-score	INT	T-score	INT	T-score	INT	T-score	INT
Dysphoric Mood (DM)	61	Mild	37	Normal	74	severe	43	Normal	74	Severe	59	Normal
Anhedonia/Negative affect (AN	48	Normal	44	Normal	61	Mild	42	Normal	67	Moderate	57	Normal
Negative Self - evaluation (NS)	70	Severe	40	Normal	79	Severe	29	Normal	81	Severe	72	Severe
Somatic Complaints (SC)	54	Normal	40	Normal	65	Moderate	33	Normal	67	Moderate	49	Normal
Depression Levels	61	Mild	41	Normal	76	Severe	35	Normal	80	Severe	62	Mild
Critical Items					Loneliness, Social withdrawal, Self injurious, self - deprecation, self-reproach		Critical items already addressed.		Loneliness, Social withdrawal, Self injurious, self - deprecation, self-reproach		All critical items achieved normal level except self-reproach	

Table 3: RADS 2 T Scores and Verbal Interpretation of Client 4, Client 5 and Client 6 Before and After USAL

RADS 2 Subscales	Client 4				Client 5				Client 6			
	Before USAL		After USAL		Before USAL		After USAL		Before USAL		After USAL	
	T-score	INT	T-score	INT	T-score	INT	T-score	INT	T-score	INT	T-score	INT
Dysphoric Mood (DM)	67	Moderate	55	Normal	72	Severe	41	Normal	71	Severe	65	Moderate
Anhedonia/Negative affect (AN	61	Mild	50	Normal	57	Normal	48	Normal	59	Normal	55	Normal
Negative Self - evaluation (NS)	68	Moderate	48	Normal	58	Normal	44	Normal	73	Severe	51	Normal
Somatic Complaints (SC)	60	Normal	54	Normal	60	Normal	40	Normal	70	Severe	56	Normal
Depression Levels	63	Moderate	52	Normal	66	Moderate	41	Normal	74	Severe	60	Normal
Critical Items	Loneliness, Social withdrawal, Self injurious, self - deprecation, self-reproach		Critical items already addressed		Loneliness		Critical item already addressed		Loneliness, Social Withdrawal, Self reproach		Critical items already addressed	

Table 2 and Table 3 revealed that the six clients experienced depression from mild to severe levels based on the results of the Reynold's Adolescent Depression Scale (RADS). Client 4 and Client 5 experienced moderate levels of depression. Client 2, Client 3 and Client 6 experienced severe depression while Client 1 experienced mild depression level. After USAL, all clients experienced normal levels of depression except for Client 3 who achieved mild level.

It was observed that clients with severe level of depression tended to have more critical items that needed to be addressed. Common items included loneliness, social withdrawal, and self-reproach. Among the subscales Negative Self Evaluation scored highest among clients. This subscale evaluates negative feelings about oneself which includes low self-worth, self-denigration and thoughts of self-harm. After USAL most of the critical items were gone and the clients were able to live a normal life after managing their depression

Six sessions were determined as effective as the levels of depression decreased to a manageable degree. Client 2 with severe level of depression needed to undergo eight sessions before the severe level decreased to normal level. Client 3 also with severe level of depression, underwent six session of USAL reached mild level while Client 6 only had six sessions of USAL but was able to acquire normal depression level.

The six clients experienced Negative Self Evaluation and expressed negative views about themselves. Three of them had thoughts of self-harm. Most adolescents rarely seek help and often do not disclose their feelings and thoughts even to their parents (Rabie, M., Abd-El-Aziz, M., Abdou, T., El-Rasheed, A., & Sabry, W. 2010). This leads to suppressed emotions that can lead to self-harm and suicide thoughts (RADS2).

Level of Spiritual Quotient

Table 4: SQQ Scores and Verbal Interpretation of Client 1, Client 2 and Client 3 Before and After USAL

Areas in SQ	Client 1				Client 2				Client 3			
	Before USAL		After USAL		Before USAL		After USAL		Before USAL		After USAL	
	%	INT	%	INT	%	INT	%	INT	%	INT	%	INT
Worship Place	80	High	80	High	30	Low	80	High	20	Low	40	Average
Centrality	80	High	60	Average	80	High	90	High	40	Average	30	Low
Practices	80	High	80	High	40	Average	30	Low	30	Low	50	Average
Coping	60	Average	60	High	70	High	90	High	70	High	90	High
Prayer	50	Average	50	Average	60	Average	90	High	50	Average	50	Average
Living Out	50	Average	60	Average	30	Low	60	Average	20	Low	20	Low
Religious Concepts	40	Average	40	Average	90	High	90	High	40	Average	70	High
Experiences	40	Average	50	High	80	High	70	High	30	Low	30	Low
Purpose	20	Low	40	Average	10	Low	70	High	10	Low	20	Low
Tolerance	10	Low	50	Average	30	Low	30	Low	30	Low	80	High
SQ	60	Average	70	High	50	Average	90	High	20	Low	40	Average

Table 5: SQQ Scores and Verbal Interpretation of Client 4, Client 5 and Client 6 Before and After USAL

Areas in SQ	Client 4				Client 5				Client 6			
	Before USAL		After USAL		Before USAL		After USAL		Before USAL		After USAL	
	%	INT	%	INT	%	INT	%	INT	%	INT	%	INT
Worship Place	30	Low	80	High	80	High	80	HIgh	20	Low	40	Average
Centrality	10	Low	50	Avergae	80	High	80	High	10	Low	40	Average
Practices	30	Low	60	Average	60	High	60	High	10	Low	30	Low
Coping	40	Average	50	Average	90	High	90	High	10	Low	40	Average
Prayer	60	Average	60	Average	80	High	90	High	10	Low	50	Average
Living Out	10	Low	40	Average	90	High	70	HIgh	20	Low	10	Low
Religious Concepts	30	Low	40	Average	90	High	90	High	10	Low	40	Average
Experiences	10	Low	40	Average	60	Average	70	High	10	Low	70	High
Purpose	10	Low	30	Low	20	Low	70	High	10	Low	10	Low
Tolerance	30	Low	10	Low	10	Low	10	Low	60	Average	80	High
SQ	10	Low	50	Average	70	High	80	High	10	Low	40	Average

Table 4 and Table 5 showed that Client 1, Client 2, Client 3, Client 4 and Client 6 experienced increased level of SQ (spiritual quotient) after USAL while Client 5 maintained the level of her SQ (spiritual quotient). Client 3, Client 4 and Client 5 had low level of SQ before USAL but achieved average level of SQ after the intervention. Client 1 and Client 2 had average level of SQ before USAL but achieved high level after USAL. Client 5 on the other hand, had high level of SQ but scored low on Purpose in Life and Tolerance before USAL. Client 5 maintained the said level and already obtained high score on Purpose in Life after undergoing the process of USAL.

The lowest score among the ten scales was the purpose in life wherein all respondents scored low. This result means that all clients had no clear life goals and did not find life meaningful and purposeful. The second lowest score is tolerance. Five clients obtained low scores which means that most clients were not open minded towards people and with those of other faiths.

After USAL, Client 1, Client 2 and Client 5 had improved scores on this area and were able to realize what they wanted to do in life. They saw their worth as an individual and became aware on the things they need to overcome to achieve their purpose in life. Client 3, Client 4, and Client 6 on the other hand, although scored low in this area, continue to explore their options to determine their goals and dreams in life.

Process of USAL

The processes of USAL which helped alleviate the levels of depression and increase the level of SQ were the "Ako at ang Aking Universe," (Me and My Universe) as the initial activity and form part of the assessment, application of Christian Music, "Araling Takda" (Homework), Life Lessons using Heart and Hand Activities (LUHA), and applying spiritual truths using "Salita ng Diyos" (Word of God).

"Ako at angAking Universe" (Me and My Universe) as an initial activity was helpful in building rapport with the client and in assessing their four important areas. All clients did the activity and responded very well during the discussion on their universe.

The application of Christian music elicited a positive response from the clients. Client 6 expressed that she never had a spiritual experience throughout her life and it was the first time she realized that songs can be meaningful and can elicit positive thoughts and feelings.

Utilization of the Word of God during counselling sessions aid the client in self-understanding and in combatting the effects of depression. The Word of God also helped in allowing the clients to have an experience with God and how He can help them in time of need. Bible stories include the story of Elijah (story on depression), A Little Man with a Big Problem (story of Zaccheus), story of Peter, Joseph the Dreamer, Woman with an Alabaster Box and Woman with an Issue of Blood.

"Araling Takda" (Homework) allowed the clients to respond on the sessions conducted and reflect on their lives. Five of the clients did their homework diligently while one client skipped homework because of pressures at home. Araling Takda includes reflections, monitoring TV shows and client's feelings, "dagdag bawas concept," on monitoring client's behaviour and thought content, quiet time schedule,

Life Lessons using Heart and Hand Activities (LUHA) were positively participated by the six clients. They found the activities important in the alleviation of the levels of depression. Five of the clients expressed longing to have L.U.H.A. time with their loved ones while one client admitted that having this time with her family would never happen. L.U.H.A. activities include, the Rocks of our Lives, relaxation techniques, My Replica (clay activity), Spiritual journey, My Dream World (paper tearing and cutting), guessing game, visual imagery, creative work.

Conclusions

After careful analysis of the findings of this study, it is concluded that USAL is applicable to treat Filipino female teenage clients with varying levels of depression. The findings from the six clients revealed significant changes in the levels of depression and levels of spiritual quotient. The number of sessions depends on the severity of the levels of depression and on individual differences.

USAL as a counseling approach was effective in strengthening spiritual quotient (SQ) of the six female adolescent clients. Purpose and life and tolerance were scored low by the six clients. After intervention, the scores on these two scales significantly improved. The six clients also improved on worship place, practices, experiences and religious concepts. Some of the clients also improved on coping and prayer although these two scales already received high scores before the intervention.

Recommendations

Based on the findings the following recommendations are offered:

1. USAL as a spiritual counselling approach can be used by counsellors in schools and universities in the Philippines to help students who are experiencing depression. It can also be adopted by professional counsellors especially those who are inclined to use spiritual approach in their practice.

2. The number of sessions may be increased from 7-10 sessions depending on the severity of the depression to give ample time for self discovery and processing of the activities.

3. Other activities using the hand coupled with valuable lessons in life can be integrated during the counselling sessions. Utilization of Bible Stories during counselling is highly encouraged.

4. It is also recommended that further studies be conducted not only on depression but other psychological problems that can be addressed by USAL. This approach can be applied for loneliness, mood swings, low self-esteem, negative self-evaluation, self-injurious tendencies and suicidal ideation.

5. A study on the male population can be done so as with other faiths to determine the applicability of USAL as an approach.

6. It is also recommended for parents, families, and schools to be more vigilant to identifying adolescents suffering from depression. Quality time in the family is needed since five clients experienced difficulty inside the home. Schools should also be vigilant in addressing bullying incidents, information campaign that classmates should not play with the emotions of another which may lead to depression.

7. Before employing USAL in the counselling technique or any other technique, training and caution must be done by counsellors. Workshops and seminars can be conducted for this purpose.

8. It is also recommended that USAL be adopted by clergies, pastors, spiritual ministers as they conduct spiritual counselling sessions with clients and members of the church. Some of the clients feel that they are not part of the church community and they seldom go to spiritual leaders in making important decisions. Proper training and workshops can be done so that they can fully utilize the approach.

9. Counselors should also be involved in the process by allowing themselves to join in the activities using L.U.H.A. (Life Lessons using Heart and Hand Activities). Since Filipino adolescent clients tend to be more self-conscious, joining them in activities allowed them to open up and express their feelings which they cannot do in formal conversations.

10. Relapse prevention program may be done to be able to monitor the progress of clients. Follow up is needed especially for clients who still had critical items and mild level of depression. Clients who achieved normal level of depression should also be monitored to note on their

progress. The length of the sessions can be prolonged especially for clients with severe levels of depression and those who have low or lacking in their spirituality.

11. Further studies can be conducted among males as to why they are not inclined to participate in activities which are spiritual in nature.

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The Perception of Teachers towards Students' Needs to Enhance the 21st Century Learning Skills

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Abstract

This study investigated teachers' perception of students' needs to prepare them for the 21st century learning skills. It was carried out with 54 teachers in Faculty of Education, Kasetsart University using questionnaire and in-depth interview with 8 teachers. The findings indicated that most teachers perceived the students' needs at the high level, especially in terms of content and pedagogical knowledge ($\bar{x}$ = 4.56), classroom management and supervision ($\bar{x}$ = 4.46). Notably, the female teachers had a better perception of teaching preparation related to the curriculum ($\bar{x}$ female = 4.38, $\bar{x}$ male = 3.94), content and pedagogical knowledge ($\bar{x}$ female = 4.67, $\bar{x}$ male = 4.45), compared to the male teachers. Teachers in different generations, however, did not perceive the students' needs differently. Both the teachers and students had to adapt themselves for the new era, whilst most teachers were not properly trained in support of their teaching for the 21st century lerning skills.

Keywords

Needs, Perception, Learning management, Human in 21st century

Introduction

Teachers play an important role in teaching and learning process (Chareonwongsak, 2016). The development of information technology and modern communication cause changes throughout the world. The interaction between students and teachers cannot be monotonous any more. Poovarawan (2014) described the learner as a person in the 21st century who must have a world-class personality and skills adaptable to changes. Modern technology affects the lives of people in society, for instances it makes people live longer, and it can produce new updated products than it used to. Emerging technologies have greater impact on people's lives. People in the 21st century have to adjust themselves to the ever-changing world. Schools need to improve their teaching methods. Teachers must think and act under the pressure of the future with the new technology. Technology related to modern life and new learning approaches in which modern tools are used to facilitate learning more effectively and inspire students to seek and learn by themselves. Technology can also make them learn very quickly. On the one hand, teachers must change their role as classroom manager to facilitate learning, developing the students' learning skills, creating suitable learning atmosphere and environment to bring about creativity and useful knowledge. On the other hand, the teachers need to encourage them to develop their knowledge, equipped with skills ready to learn new things and knowledge management in modern technology. Meanwhile, Kasetsart University is in the midst of changes that will have to adapt itself to the changing world as well; most practice of teaching is still conventional. Because of this, awareness of students' needs is important for teachers who will have to adapt their teaching in response to their needs and the dynamic world.

Objectives

1. To study the perception of needs for teaching and learning in the learner's perspective.
2. To study the perception of needs for teaching and learning in the learner's perspective, clarified by genders and generations.

Literature review

The importance of perception in needs

Perception refers to feelings to the surroundings that are transmitted through the nerves to one's brain. The information that drives the senses to the brain such as seeing and hearing is the process of perception (Tengtrirat, Oungphra, and Noppakate, 2011). Schiffman & Kanuk (2004) described that perception refers to the process by which each individual chooses. The interpretation is significant that a person can understand the meaning of things correctly. Likewise, Saritwat (2006) explained that perception is a meaningful touch based on the interpretation of exposure. To interpret the meaning of touch, it requires the past experience or knowledge. According to the dictionary of Thai Royal Academy, 2011 (Royal Academy, 2011), identified that "Need" means craving, and when such feeling occurs, individuals will try to fulfill their need. Once it is responded, it will return to equilibrium again, and the new need is replaced. So, the perception of needs means a feeling aroused by stimuli that drive a person's desire.

Learning management in the 21st Century

Skinner (1979) defined learning is a behavioral change that results from a response to stimuli in the fast changing world. Poovarawan (2015) pointed out that for learning management in the modern world, learners should possess the qualities to live their lives in the 21st century. In addition to having good civic skills, they need to be equipped with professional and leadership skills. In society, people need to work together, and they must have leadership skills to convince their ideas and listen to different opinions and communication with other people. This will form a social network. Apart from these, learners need the following skills:

1. Knowledge of digital literacy
2. Communication skills, including speaking, listening, writing and using modern communication technology
3. Emotional Intelligence means life skills for living a happy life, living with others, interaction, mutual assistance and awareness of living for happy life together.
4. Entrepreneurial skills, ability to apply creativity and innovation usefully
5. Global citizenship skills in which learners realize the world impact for one related activity, creating a future society where people are living in harmony, learning to exchange cultural opinions ideas through technology
6. Problem solving skills and analytical thinking skills
7. Teamwork skills and collaborative skills for future job which will become more complex

Poovarawan (2016) described the changing world in the present situation that there are a lot of new technologies and knowledge. It creates innovation with emerging technologies, making people live longer. New technologies make products more modern. There is a lot of information online that make people live together in a new media environment with a global connect. Thus, people in the world have a global citizen status. Today's learning management needs to be rethought and prepared for the future (Brunei, 2013). When considering genders and generations towards the use of technology for learning in the 21st century, it was found that females had lower confidence and less experience in the use of computer in teaching. They tended to learn how to use technology from others (Zhou and Xu, 2007) whereas the findings of Yau & Cheng (2012) indicated that male students have more confidence in using technology for learning than do female students because gender imbalances in computing are socially constructed and not related to a learner's innate ability. Moreover, Shepherd (2017) conducted her dissertation entitled "A Causal-Comparative Study of Generational Differences in Learning Styles Preferences among Adult Learners in the United States" and revealed the finding that Generation Y's preference for active and visual learning was higher than the other generations.

Conceptual Framework

Based on the literature review, gender and generation of teachers were independent variables that might be affected to perception of students' needs for learning management in the 21st century. The conceptual framework of this research can be drawn as figure 1 below:

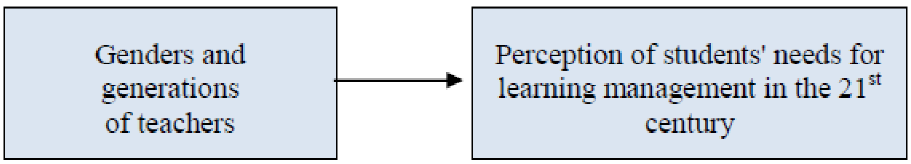

Figure 1: Conceptual Framework

Methodology

The researcher explored the perception of teachers towards the needs of their learners to prepare them for the 21st century learning skills and citizen. There were 54 teachers in Faculty of Education, Kasetsart University, Bangkhen Campus, determining the sample size of 50 percent (Kannasut, 2543). The simple random sampling was used in the method for drawing a list of teachers. The questionnaire from 46 respondents (85.2%) was returned. Content validity was reviewed by 3 experts. The reliability of the questionnaire was distributed to 30 other teachers as a try out to account for Cronbach Alpha Coefficient which equals .96.

Statistics used in data analysis were Frequency and Percentage, Mean and standard Deviation, Independent t-test and One-way analysis of variance, while content analysis was applied to the qualitative data.

Findings

1. The teachers in Faculty of Education were males and females in equal proportions. The majority of them were in Generation X (born between 1965 and 1979) (69.65%) and Baby Boomers (born in 1946 - 1964) and Generation Y (born between 1980 and 1997) were only 19.6 percent and 10.9 percent, respectively.
2. For teachers, the perception of students' needs for 21st century included teacher's knowledge and teaching methods followed by management and supervision, facilities, learning resources and learning support systems, understanding the students, learning atmosphere, course content and the quality of teachers.

Table 1: Teachers' perception of the students' needs
(n = 46)

Students' Needs	$\bar{x}$	S.D.	Level	Rank
1. Course content	4.16	.533	High	5
2. Classroom management and supervision	4.46	.463	High	2

3. Knowledge and teaching methods	4.56	.374	Highest	1
4. Understanding the students and learning atmosphere	4.28	.590	High	4
5. Quality of teachers	3.74	1.144	High	6
6. Facilities, learning resources and learning support system	4.29	.542	High	3

3. Male and female teachers percieived in the students' needs differently with statistical significance at .05 level in terms of course content, knowledge and teaching methods, understanding the students and learning atmosphere. Female teachers had higher average scores for the course content in which $\bar{x}$ for the female teachers was at 4.38, while $\bar{x}$ for the male teachers was found at 3.94. In terms of the knowledge and teaching methods, $\bar{x}$ for the female teachers was at 4.67 and 4.45 for the male teachers. In relation to understanding of the students and learning atmosphere, $\bar{x}$ for the female teachers was at 4.49 and 4.07 for the male teachers.

In other aspects, it was found that the male teachers and female teachers had no differrence in percieving students' needs such as classroom management and supervision, quality of teachers including facilities, learning resources and learning support system. In general, however, female teachers perceived learners need in course content, knowledge and teaching methods, and understanding the students and learning atmosphere than those of male teachers.

Table 2: Comparison of perceived needs of students for the male and female teachers with Independent t-test (n = 46)

Perception of learner's needs in teaching and learning	Male (n=23)		Female (n=23)		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
1. Course content	3.94	.573	4.38	.386	-3.077	.004*
2. Classroom management and supervision	4.45	.467	4.48	.469	-.210	.835
3. Knowledge and teaching methods	4.45	.402	4.67	.317	-2.037	.048*
4. Understanding the students and learning atmosphere	4.07	.649	4.49	.446	-2.542	.015*
5. Quality of teachers	3.83	.984	3.65	1.301	.511	.612
6. Facilities, learning resources and learning support system	4.28	.513	4.29	.582	-.067	.947

*$p \leq .05$

4. The teachers in Babay Boomers, Generation X and Generation Y did not perceive the students' needs differently in all aspects.

Table 3: One-way analysis of variance for perception of students' needs identified for each generation (n = 46)

Perception of learner's needs in teaching and learning	Source of variance	SS	df	MS	F	Sig.
1. Course content	Between groups	.107	2	.054	.182	.834
	Within groups Total	12.663	43	.294		
		12.770	45			

2. Management and Supervision of Classes	Between groups	.054	2	.027	.120	.887
	Within groups	9.608	43	.223		
	Total	9.662	45			
3. Knowledge and teaching methods	Between groups	.112	2	.056	.390	.680
	Within groups Total	6.192	43	.144		
		6.304	45			
4. Understanding the learner and learning atmosphere	Between groups	.130	2		.179	.836
	Within groups	15.517	43	.361		
	Total	15.646	45			
5. Quality of teachers	Between groups	1.370	2	.685	.512	.603
	Within groups	57.500	43	1.337		
	Total	58.870	45			
6. Facilities, Learning resources and learning support system	Between groups	.768	2	.384	1.324	.277
	Within groups Total	12.478	43	.290		
		13.246	45			

Findings from the interviews

Students in teachers' perspective

Teachers agreed that adaptation must be on both sides "teachers and students". Most importantly, the students must be "motivated learners" first that self-learning will be successful. However, the teachers viewed that "the students did not have such quality". In fact, they were weak in terms of knowledge of their major courses and general knowledge around themselves. The teachers always acted as knowledge feeder. Though it was reluntant for the teachers, they had to do it; "they did not have basic knowledge nor did they know how to apply a critical thinking skill". The teaching and learning process did not lead to the creation of new knowledge. It also affected the teaching process which was not as effective as expected. This was a problem about their earlier preparation "in the secondary school and it was quite late when they entered the higher education".

Teachers look at themselves

Most teachers in the faculty were not trained for teaching and learning development. Even if they were trained, their ability to apply it to their teaching and learning was still inefficient enough. They were stick to their conventional style of teaching. Knowledge of teaching techniques was strongly recommended for them. The teachers suggested that there should be a unit in the faculty that helps them analyse their teaching contents, and suggestions for new teaching methods so that they can apply them more appropriately.

Practice of work

The teachers thought that they still continued to mingle with the old style of work. Faculty tasks became routine and were done in the same pattern, for example, the management of all projects required many forms to be filled out which was a burden and waste a lot of time. The teachers suggested that information technology should be fully replaced in managing all kinds of trainings and routine activities.

Discussion

It was found that the students' needs necessary for 21st century learning skills were about knowledge and teaching methods, followed by classroom management and supervision, facilities, learning resources and learning supports system, understanding the students and learning atmosphere, course content and quality of teachers. The findings revealed that both students and teachers shared their needs in the same direction. However, they had different opinions about learning effort and motivation. The teachers thought that the students had not yet tried their best, nor did they focus on their lessons as much as they could, whereas the students thought the opposite. According to the related study by Rumpagaporn, Sutthinarakorn, and Jeerapattanatorn (2015), it indicated that they questioned about teaching quality, content duplication and teaching management which was not in response to the students' needs.

The current teachers are those of Generation X, while the older generation (Baby Boomers) is retiring, replaced by Generation Y. The new generation is more familiar with technology than the older one. However, teachers in all generation have no difference on perception of students' needs. This might be because the teachers in all generations were incubated 'being teachers' during university education and during being in-service teachers at schools. (Sungraksa, 2554)
In relation to genders, it was found that gender influenced perception of the students' needs. This was possible to explain that female teacher perceived the students' delicate needs better than male teachers, including the management of course content related to the curriculum, knowledge and teaching methods and understanding of the students and learning atmosphere. This conforms to a study by Basow and Silberg (1987) revealed that students perceived female instructors to be more sensitive and considerate of student ideas whereas male instructors were believed to be more knowledgeable. If students are, even in part, picking up on real differences, understanding the effect of gender on teaching styles is important.

Recommendations

Findings from the study should be discussed in a public hearing consisted of teachers, students, and educational experts. In the public hearing, students could be able to confirm their needs, participants will find instructional development guidelines for the 21st century learning skills based on desirable relationship between teachers and students. Moreover, improvement of learning contents, delivery techniques, learning materials and supports, and learning outcome evaluation should also be discussed.

The further research is needed to conduct an experiment for creating changes by using action research process to bring about better learning based on teachers and students' participation.

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Twitter as a Medium for Personal Learning Network

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ABSTRACT

Twitter is a social interactive website that allows the first person user to see broad images of the second person user or multiperson users' posts, tweets, status updates or important information. It allows the user to simply manage a task by reposting or sharing countless information based on the standards of an optional "follow" or "unfollow" command. Twitter as a personal learning network for study might be uncommon because of its social interactive nature that permits people to post about their random thoughts but it can also be used to post and acquire necessary and reliable information that can be of use for the study of college students. This study aims to determine the use of Twitter as a medium for students' personal learning network. This study further established the students' use of Twitter as a personal learning network, its advantages and how it is used as an educational tool. In this study, the descriptive method was used. The researchers studied how Twitter can be used as a medium for students' personal learning network. The students were given questionnaires, after which these were retrieved, analyzed, and interpreted. Towards its end, it was found out that Twitter was not beneficial as a personal learning tool. Though, the social media platform can provide the most trending and viral, a tool for communication or socialization and good as form of entertainment.

Keywords

Twitter, Learning Network, Social media

Introduction

The use of technology nowadays is widespread and one of its products is the social networking sites or SNS that includes Facebook, Twitter, Instagram, Tumblr, Friendster and etc. Twitter is a social interactive website that allows the user to see broad images of the second person user or multiperson users' posts, tweets, status updates or important information. It allows the user to simply manage a task by reposting or sharing countless information based on the standards of an optional "follow" or "unfollow" command. Due to the status updates, it gives instant recalls or reviews of the previous posts to all users. As an informative tool, it quickly decimates the information to students and passes them to one another through the use of direct and indirect a message that is easily seen by the person they intend to send their message to. In addition, twitter posts can be easily found by searching the terms in the search box. Twitter also makes use of a list of trending topics using hashtags that are most talked about at the moment, which makes it easier for the user to be updated with the latest information and for easier filtration of the information they want to acquire. In Twitter, the users can share information by tweeting messages composed of 140 characters, attach a photo on their tweet or share a link of websites and videos that they want their followers to see. There are also verified accounts on Twitter that are given to users or companies who are well known by the public to assure people that the public figures that they are following are the exact people. This assures the people that what they are getting from the verified accounts are valid and came from reliable sources. Twitter as a personal learning network for study might be uncommon because of its social interactive nature that permits people to post about their random thoughts but it can also be used to post and acquire necessary and reliable information that can be of use for the study of students, specifically pharmacy.

Statement of the Problem

This study aims to determine the use of Twitter as a medium for students' personal learning network. This study sought answers to the following questions:

1. What is the students' use of Twitter as a learning network?
2. How beneficial is Twitter as a learning network?
3. In what other ways is Twitter used?

Conceptual Framework

At least few studies up to this time were focused on Twitter as a social media service application. This study thus determined the use of Twitter as a platform for learning. This study therefore ascertained Twitter as a learning tool, as a strategy, and its uses. Figure 1 shows the framework of the study

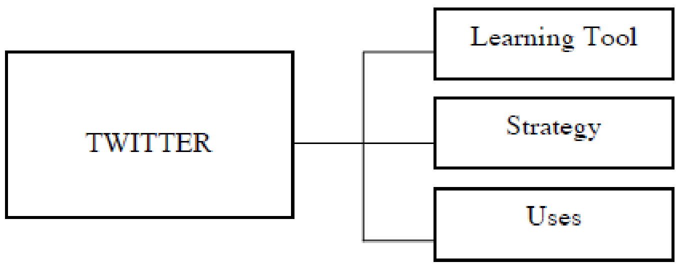

Figure 1. The Study's Paradigm

Twitter as a Social Networking Service

Twitter is a tool that can use to send and receive short, 140-character messages from friends, organizations one cares about, businesses one frequents, publications read or complete strangers who share (or not) one's interests. As a user of Twitter, one can choose whose updates one wants to receive-which people want to follow. In turn, other users can elect to follow updates. One can send messages publicly for the entire Twitter community, semi- publicly to users whom one approves to receive messages, or privately from one user to another. One can view these messages called *tweets* (sometimes called updates)-on the Internet or on their cellphone. Twitter in the classroom or analyses properties of the network and conversations without a focus on learning. Twitter is a tool that is frequently accessed for a short time span, with a short amount of time spent writing updates and a bit longer but still limited time spent reading the classmates' updates. Twitter could be categorized as a daily chatter, conversations, sharing resources/URLs, and reporting news (Java et al., 2007).

Twitter community members post their contributions via the Twitter website, mobile phones, email, and instant messaging- making Twitter a powerful, convenient, community-controlled microsharing environment (Drapeau, 2009). Twitter has also been used in public relations (Sweetser, 2008; in Godwyn and Gittell, 2011), project management (Keefer, 2008; in Godwyn and Gittell, 2011), medical education (van den Brock, 2009), language and learning (Ullrich et al., 2008), and information systems (Sendall, Ceocucci, & Peslak, 2008) courses, to name a few. According to Patrut 2013, this offers interesting parallels to the concept of networked teacher and networked learner (Godwyn and Gittell, 2011).

That is explicitly seeing Twitter as a meaningful and purposeful for academic work-both from the perspective of being a learner and a teacher. Being a networked teacher is referred to as focusing on Twitter for teaching and learning possibilities, whether this be for sharing and gaining knowledge to share in the learning environment or actually using Twitter in the delivery of teaching and learning-learning with Twitter. These terms are broadly referred to in a bigger picture of personal learning networks (PLNs) and the personal learning environment (PLEs)- connections with both electronic resources and people (Steeples, Jones, & Goodyear, 2002) are seen as necessary for efficient and effective learning (Collins & Berge, 1996; in Patrut and Patrut, 2013).

They demonstrate how social media content can be used to predict real-world outcomes. They further demonstrate how sentiments extract from twitter can be further utilized to improve the forecasting power of social media (Asur et al., 2012; in Patrut & Patrut, 2013). In the same source, social media is seen to be at the center of students' lives creating circuits and networks that level the communicative playing field. Seluyn (2012) acknowledges that "tensions remain between those who believe that social media can be used to strengthen and improve the higher education institution in its current form and those who believe that social media exist to disrupt (and ultimately replace) the university altogether. Technology can make the mundane more interesting, but it can also make the more interesting mundane. Today's mobile networks and the technology supporting them can speed delivery of content duplicate and revise it- and in the blink of an eye content can be share again with millions of people in internet perpetuity. Technology does not act alone to guarantee student and retention and one should be careful not to mandate that it could or even should. Some educators may fear the introduction of new media into the classroom. They may suspect that lesson development will become overly complex or the implementation too time consuming and if done incorrectly, that is possible. However, immersing students in new experiences using trans media allows them to engage in meaningful modes of higher-order classroom learning through story which can support engagement.

In a recent survey, higher education academics use Twitter to update themselves of the current news/trends and also networking with colleagues. The same survey also experiments with different ways to use Twitter in the classroom. This way, Twitter is used as a meaningful and purposeful for academic work – in both perspectives of the teacher and the learner. This is where the concept of the networked teacher and the networked learner started. Being a networked teacher and learner happens when one focused on Twitter for teaching and learning possibilities, whether this is for sharing and gaining knowledge to share in the learning environment or actually using Twitter in the delivery of teaching and learning – learning with Twitter.

Research Methodology

In this study, the descriptive method was used. It represents the most valid approach to the solution of the problems both practical and theoretical. The researcher studied how Twitter can be used as a medium for students' personal learning network and their view towards Twitter. The researcher used the survey method to conduct this study. This was done by handing out questionnaires to students of the University of San Agustin.

In this study, the researcher has chosen random students at the University of San Agustin in determining whether Twitter is a medium for students' personal learning network. In this study, the researcher first identified the problem and gathered the information about the study and prepared the materials needed to collect the data. Then, the researcher handed out questionnaires. Finally, the results were analyzed and interpreted.

The results of the accomplished evaluation sheet were collected and detailed. The mean was determined and given its corresponding descriptive rating. To determine whether Twitter is a personal learning platform, frequency and percentage were used.

Results

Twitter as a Tool for Learning

Results in Figure 2 show that Twitter was not a beneficial tool for learning as perceived by the students. Students who said "Yes" was only 17%. Fifty eight (58%) said that it was not beneficial. In fact, 25% was uncertain.

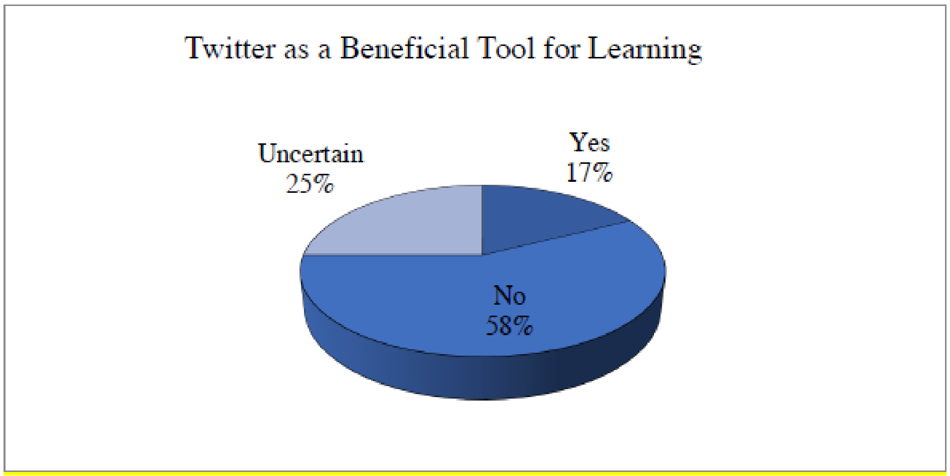

Figure 2. Twitter as a Beneficial Tool for Learning

It is a bit surprising to note that Twitter is not quite popular among students. Unlike studies conducted in the US for instance that have established the relevance of Twitter as a learning platform. A survey of 755 teachers in the US asked how and why teachers are using Twitter. It found teachers valued Twitter's personalized, immediate nature and the positive professional collaborations it can encourage. Teachers reported Twitter can be used to combat teaching isolation – a problem for many teachers that can result in burnout and/or teachers leaving the profession. But as regards students use of it as a learning mode, the results were in the negative.

In what ways is Twitter used

Results in Figure 3 show the uses of Twitter as perceived by the students. Majority of the students indicated that 50% used Twitter for updates. Twenty five (25%) used it for communication and socialization. Seventeen percent (17%) used it for entertainment. Only 8% stated that they used it as a learning tool.

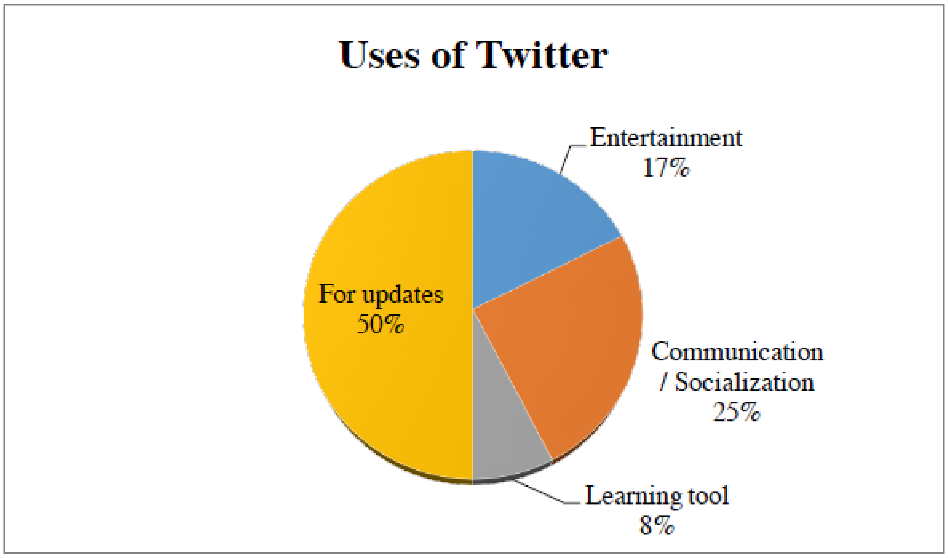

Figure 3. Uses of Twitter

Figure 3 shows the percentage values of Twitter usages of students. It also shows that most students use Twitter for updates and at least a number of students use Twitter as a learning tool.

Unlike in the results by another study. Some 324 teachers from 22 countries were surveyed via Twitter to determine their use of, access to, and perceptions of Twitter. It found teachers think Twitter can help build relationships with other teachers and help them self-direct their professional development by selecting resources for themselves based on their needs. Teachers described greater access to multiple conferences and online learning posts or discussions where they don't have to be physically present.

In fact, in the context of teachers, Twitter has found its niche. Twitter has made teachers' life easier as they are learning about the latest and best teaching practices, lesson plans, web resources, and innovative ideas for the classroom. Some even receive invitations to present at conferences or are given lucrative grants. Also, significant relationships have even been found between teachers' professional use of Twitter and improved technology abilities.

Use of Twitter as an Educational Tool in Relation to their course

Figure 4 shows that most students found Twitter as a very unhelpful educational tool and a least number of students found Twitter as a very helpful educational tool. The highest percentage of students (29 percent) found Twitter "Very Unhelpful." Although, at least 23 percent found it "Helpful," 16 percent found it to be "Moderately Helpful," and 16 percent found it unhelpful.

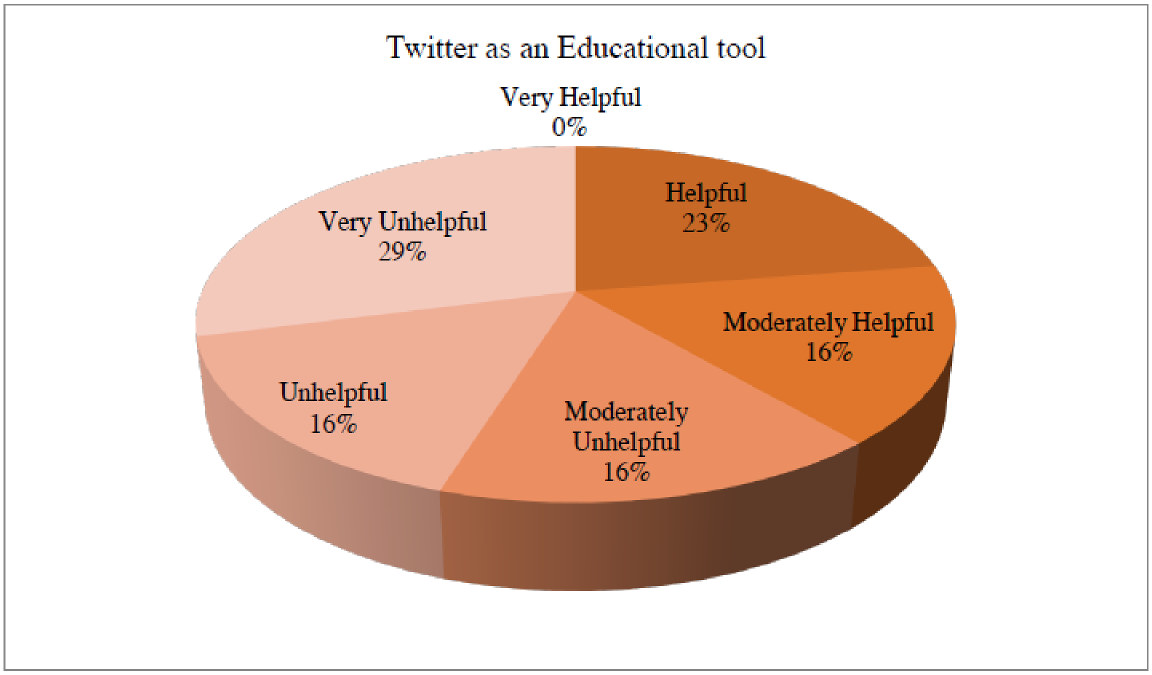

Figure 4. Twitter as an Educational Tool in the Course

Though the results may be in the negative, the researcher believes that for this group of students, Twitter might not gain its significance. The study can still have certain implications. Twitter provides a modern platform for students to collaborate if this cannot be used as a learning platform. For teachers, Twitter can provide teachers channel to share, network, gain emotional support, build professional learning communities and make a contribution to the teaching profession.

Findings, Conclusions, and Recommendations

The findings of the study include:

1. Majority of the students do not find Twitter as a beneficial tool for their learning, some of them are uncertain of Twitter as a beneficial tool for their learning and a least number of students find Twitter as a beneficial tool for their learning.
2. Twitter is used by the majority of students for updates so they can be informed what becomes trending and viral, it is then used by some as a tool for communication or socialization, for entertainment and as a learning tool.
3. Majority of students found Twitter as very unhelpful tool for their learning, most find Twitter as helpful, and some find Twitter as moderately helpful, moderately unhelpful and unhelpful. None of the students find Twitter as very helpful in their learning as of the present.

Conclusion

1. Twitter as of now is not beneficial to the students in their coursework. Other social media service platforms may be an alternative for students to study.
2. Twitter is a collaborative network which may be appropriate for teachers.
3. Its function is limited and its full potential as a learning tool is not established in this paper.

It is recommended that:

- Students should explore other social networking sites or applications that may be more useful in their learning than Twitter.
- Facebook and other sites or applications are highly recommended for teachers and students alike for sharing of information and group communication.
- Some social interactive sites may also be proven to help students in their learning and the students should explore the web more to search for tools that may be of great help in their coursework.

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Problems and Needs in the Use of Distance Learning Materials by Undergraduate Students of Sukhothai Thammathirat Open University of Thailand

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ABSTRACT

The purpose of this research is to study on the problems and needs in the use of distance learning materials by undergraduate students of Sukhothai Thammathirat Open University of Thailand. The sample size was 500 undergraduate students of Sukhothai Thammathirat open university of Thailand by the sample random sampling. The instrument was a questionnaire designed by re- searcher, with .97 reliability, which was used for collecting data. The data were analyzed for frequencies, percentages, arithmetic means, and standard deviations, and were also analyzed with content analysis technique. As for the research findings, in term of modernity, the students need the printed materials most, followed by e-learning materials. In term of web recognition, Me- dia.stou.ac.th and STOU Channel YouTube are most viewed media because they are convenient. In addition, the modern media that are least used are Radio-broadcasting media because they are least easy to use, and the percentage of viewing is the least.

Keywords

Distance Learning, Educational Media, Educational Technology

Introduction

Distance learning system is an educational innovation that responds to the needs in the current educational systems in the era of information and the learning society. In addition, this innovation can fill the gap and offer educational opportunities.

Distance learning is a learning and teaching system that does not need any physical classroom but mainly relies on mixed media such as postal media, TV and radio broadcast and supplementary classes, as well as an educational service center. The emphasis is to enable learners to learn by themselves at homes without the need to attend a class.

Furthermore. Distance learning also means the teaching and learning systems whereby the learnings and teachers are far apart from one another but can have learning and teaching activities together by relying on mixed media as teaching materials at an educational service center, as necessary. Most of True learning is caused from the mixed media that students use bu themselves anytime and anywhere that is convenient for each students.

Sukhothai Thammathirat Open University, as the one offering distance learning service, has the commitment to promote life-long learning , to improve people's life quality, to improve knowledge of people with related careers and to expand educational opportunities for everyone, in order to respond to the needs of individuals and the society with the organization of distance learning that uses learning materials such as mails, radio-broadcasting, online media and other materials that allow learners to study by themselves without attending the classes, in order to promote quality life-long learning. Sukhothai ThammathiratOpen University (STOU) is an open university with sufficient educational resources and lecturers in the field of education.

The problems of Sukhothai Thammathirat Open University, which students have complained to the University, are that the classroom materials delivered to them are delayed and they sometimes do not receive needed answers when contacting the University because the documents, which are the main materials, are being processed or improved. Therefore, there is the delay. Such problems of the operations of the University affect students' learning, which is the distance learning that uses documents as the main materials. The effect is that students do not have class materials to read. The plan is that each student has to learn 1 module per week. However, students receive documents around 1 month or less than 8 weeks before the examination. According to the curriculum, students must have time to study on and review the lessons. Most class materials have around 15 modules. If students have to study on one module each week in accordance with the direction in the document, they will need 15 weeks, which means they will not be able to finish their study before the examination. Also, they have to study on other subjects as well.

The University solves such problems by using electronic medium as a communication channel that allows students to download documents from online network of STOU. The organization of distance learning system that can assist students to study will enable the University to retain the number of students. With convenient distance learning and speed of communication between learners and teachers who are far away from one another, there is no obstacle for communication. Learning can take place anywhere and anytime. However, to create the learning environs, the organizers of distance learning media and materials must apply media and methods that are modern and effective in solving problems concerning the learning whereby learners and teachers are far apart from one another. After media and channels can dissolve the learning obstacles, there must be the development of proper methods for each medium in order to convey the contents of subjects or build desirable qualities in students, The learning in the undergraduate level is complicated and aims at encouraging students to have analytical thinking, solve problems and build skills of making decisions rationally, not just to memorize the lessons (Brunner, 1993).

The use of online social media for supporting learning and for creating learning environs (OLEs) consists of 4 elements. The first element is the admission to learning, which means the media must be appropriate and providing guidelines that are related to learning, using two-way communication, such as to communicate using Facebook or Line. The second element is the hub of resources using YouTube for congregating all learning materials and media that support distance learning. The third element is the tools that are used for supporting the learning. The last element is scaffolding which means to support students who encounter learning problems using Messenger, Fan page or Twitter, which is essential for students in distance learning system lest they feel left alone. All of the four elements can support and facilitate students in distance learning system.

From all the aforementioned issues, the researcher want to study on problems and needs that are related to learning materials and media that are used for organizing distance learning of students of STOU, which has been developed since 2000 as STOU Plan 2000. The findings from the study are expected to solve problems in accordance with students' needs and to provide guidelines for further operations of the Uni- versity.

Research Objective

The objective of this research project is to study on the problems and needs in the use of distance learning materials by undergraduate students of Sukhothai Thammathirat Open University of Thailand.

Methodology

This research is a research project with mixed methodology. The details are as follows.

Populations and Samples

The populations of this research project are year 1 students of the academic year of 2017, the total number of which is 20,000. As for the samples, the researcher have randomly selected the samples from the populations using the instant table of Krejcie and Morgan (Krejcie and Morgan,1970: 608-610). The attained sample size is 377 samples selected with Simple Random Sampling Technique. However, in this research project, the total number of the used samples is 500.

Research Tool

The tool used in this research project is a questionnaire designed by the researcher. The questionnaire consists of both close-ended and open-ended questions. The Likert scale rating technique is also used. The questionnaire is divided into 3 parts as follows.

Part 1: This part consists of questions that are in the checklist related to respondents' particulars such as genders, ages, locations of the study and educational levels used for enrollment to the University.

Part 2: This part measures the awareness towards learning materials used by undergraduate students of Sukhothai Thammathirat Open University, using the 5 scale rating technique, with the interpretation on the awareness as follows:

5	Means	the Highest Level of Awareness;
4	Means	the High Level of Awareness;
3	Means	the Moderate Level of Awareness;
2	Means	the Low Level of Awareness; and
1	Means	the Lowest Level of Awareness.

Part 3: This part consists of open-ended questions on problems and needs related to learning materials and media of undergraduate students of STOU.

Verification of Quality of Research Tool

The verification consists of the examination on the content validity, the determination of the appropriateness and clarity of the language used, and the determination of Index of Item Objective Congruence or Index of Concordance (IOC), evaluated by 3 experts. The attained IOCs rank between 0.67 and 1.00, which means all the questions can be used.

The questionnaire, passing the validity test and attaining the preferable IOCs, is tested with 30 people selected from the research populations, who are no samples, in order to determine Cronbach's alpha coefficients. The Cronbach's alpha coefficient for the entire exercise is 0.97.

Data Collection and Analysis

The researcher collect data from students who receive services from STOU in different provinces. The data from all the sets of the questionnaire that are given back are analyzed as follows:

1. Analysis for frequencies and percentages on data of respondents' particulars;

2. Analysis for means ( ) and standard deviations (S.D.) on data related to respondents' awareness of dis- tance learning material and media; and
3. Content analysis for respondents' problems and needs relates to distance learning media.

Conclusion and Discussion

From the analysis on respondents' particulars, the findings are as follows. 1) Concerning the respondents' ages, most of the respondents are female (258 samples or 51.60 percent of all the samples (respondents)) and the rest are the male (224 samples or 44.80 percent). 2) Concerning the respondents' agrees, the ages of most respondents fall in the rank of 26 - 35 years (45.60 percent), followed by the groups of respondents whose ages are 36 - 45 years (23.20 percent), 15 - 25 years (22.80 percent) and others, respectively. 3) Concerning the locations of the learning, most respondents are learning in the central region of Thailand (43.40 percent), followed by groups of respondents in the northern region (20.80 percent), the southern region (20.20 percent) and others. 4) Concerning the educational backgrounds of respondents for the enrollment to the courses, most respondents have higher vocational education (36.80 percent), followed by groups of respondents with bachelor's degrees (31.20 percent), high school level (22.00 percent) and other levels. The data are shown in Table 1.

Table 1: Demographic Data of the Samples (N = 500)

Demographic Category		*f*	%	Demographic Category		*f*	%
Gender	Male	224	44.80	Region	North	104	20.80
	Female	258	51.20		Central	217	43.40
Age	15-25	114	22.80		South	101	20.20
	26-35	228	45.60		Northeast	74	14.80
	36-45	116	23.20		No Answer	4	00.80
	46-55	24	4.80	Education Background at the Enrollment to Courses	Vocational Diploma	20	4.00
	56-65	5	1.00		Higher Vocational Diploma	184	36.80
	No Answer	13	2.60		Junior High School	12	2.40
					High School	110	22.00
					Bachelor's Degree	156	31.20
					Post Graduate	15	3.00

From the analysis on the awareness of learning materials and media of graduate students, the awareness of each of all the categories, from the one with the highest awareness level downward, is as follows: Ease and Convenience for the Use (3.76), Modernity (3.74), Need for the Use of Distance Media (3.59), Per- ception (3.43) and Utilization, Viewing and Listening (2.99), as shown in Table 2.

Table 2: Results from Analysis on Data Related to Distance Learning Materials and Media of Undergraduate Students of Sukhothai Thammathirat Open University

Awareness of Distance Learning Media	Mean	S.D.	Interpretation
Recognition	3.43	0.04	Moderate
Modernity	3.74	0.05	High
Ease and Convenience for the Use	3.76	0.06	High

Utilization, Viewing and Listening	2.99	0.05	Moderate
Need for the Use of Distance Media	3.59	0.04	High

From the content analysis on data related to respondents' problems and needs related to distance learning media of undergraduate students of STOU, it is discovered that the distance learning materials and media that STOU has for undergraduate students are as follows. 1) The most prominent problem of <http://media.stou.ac.th/> website is the default that hinders the opening of files; and the need is for complete and updated contents. 2) The problem related to Facebook Live STOU Channel is the perception to this medium; and the need is for public relations and promotions for this medium. 3) The problem of Line medium is that the Line ID of the University is unknown; and the need is for updated data. 4) The problems of e-learning are the coverage of contents and the accessibility of the medium, and the need is for complete contents of all subjects. 5) The problem of STOU Channel is that the contents are not covering all the lessons and not updated; and the need is for the coverage of contents. 6) The problems related to multimedia CDs are the contents that are not covering the lessons and not up-to-dated, and the CDs are broken; and the need is that the contents should cover all the lessons and be updated. 7) The problems of sound CDs are that the contents do not cover all the lessons and are not updated; and the need is that the contents should be updated and include motion pictures. 8) The problems of video CDs are that the CDs are broken and the contents are not updated; and the need is that the contents should be updated and available for free download. 9) The problems of the distance teaching through satellite are that many stu- dents never use it and it is inconvenient for students to see the programs in accordance with the schedule; and the need is for rerun programs. 10) The problem of the educational TV Programs is that it is incon- venient for students to see the programs in accordance with the schedule; and the need is for more broad- casting channels. 11) The problem of the radio-broadcasting is that the students think that the radio pro- gram should be cancelled; and the need is for free downloaded clips or free listening from the website. 12) The problem of the subject documents is the delayed delivery of documents through postal service; and the need is the faster delivery of documents. The data are shown in Table 3.

Table 3: Results from the Content Analysis on Problems and Needs Related to Distance Learning Media and Materials of Undergraduate Students of Sukhothai Thammathirat Open University

Medium/ Material	Problem	Number	Need	Number
1) http://media.stou.ac.th/	- The contents is difficult to access such as the files cannot be opened.	9	- The contents should cover all subjects and always be updated.	6
	- The content does not covering all subjects.	2	- Media should be easy to use such as to show the most sought for information on the first page.	5
	- The medium is unknown.	2	- The medium should be promoted.	2
	- The content is too difficult.	2	- Subjects should be divided into multiple sections.	2
	- The information on date, time, and subjects to for the broadcast are not updated.	1	- The programs should be broadcast on YouTube.	1

Medium/ Material	Problem	Number	Need	Number
2) Facebook Live STOU Channel	- The medium is unknown.	3	- The medium should be promoted.	7
	- The broadcast time is unknown.	2	- Date, time and subjects for the broadcasting must be updated.	6
	- The contents do not cover the subjects.	2	- The contents should cover all subjects.	2
	- Audiences do not know which pages are official ones of the University.	1	- There should be complementary classes through Facebook Live.	2
			- Images and sound should be improved.	1
			- Accessibility and stability of the medium should be improved (the medium is always down).	1
3) Official Line Account	- Line ID of the University is not known.	4	- Information should be updated.	5
	- The contents do not cover the subjects.	2	- The medium should be promoted through media such as barcode or Line application, so that it is known to students.	4
	- The information is not updated and the response is delayed.	2	- There should be official Line to cover all subjects.	1
	- The medium is difficult to access.	2	- There should be more contents.	1
	- The medium is unknown.	1	- There should be complementary classes on Line.	1
4) e-Learning	- The contents do not cover the subjects.	2	- There should be complete contents of all subjects.	7
	- The medium is difficult to access. The system is problematic.	2	- Directions for the use must be clear and de- tailed.	2
	- There is no update for new subjects.	1	- There should be update of new subjects	1
	- The contents are not concurrent to the books.	1	- Contacting channels should be improved to be easier.	1
	- The medium is unknown.	1	- Learning through internet and score accumulation is needed.	1
	- Some versions of the website browsers cannot be opened.	1	- There should be difficult contents.	1

Medium/ Material	Problem	Number	Need	Number
4) e-Learning	- There is no room for new members.	1	- This medium should be promoted.	1
	- There are too many channels, which is confusing.	1	- It should be opened in different versions.	1
5) Programs on STOU Channel	- The contents do not cover the subjects and are not updated.	4	- The contents should cover all subjects.	4
	- The broadcasting time is not appropriate.	2	- This medium should be promoted.	3
			- Date, time and subjects for the broadcasting must be updated.	3
			- The contents should be in YouTube instead.	1
			- The medium should be improved to be easy to access with a short and comprehensible URL.	1
			- There should be rerun programs.	1
6) Multimedia CDs	- The contents do not cover the subjects and are not updated.	3	- The contents should cover all subjects.	6
	- The CDs are broken.	3	- The presentation should be in the modern style.	6
	- The contents are difficult to understand and are not detailed, students have to read the books again.	2	- Free download should be allowed.	5
	- The disks are not received.	1	- Narrator's voice should be more interesting.	1
	- The content of each chapter is insufficient.	1	- CDs should be out in shockproof containers.	1
	- There is no device to play the CDs.	1	- CDs should be no more manufactured.	1
			- There should be more order channels.	1
7) Sound CDs	- The contents do not cover the subjects and are not updated.	5	- The contents should be modernized, such as to have motion pictures.	6
	- The medium is difficult to access. The CDs cannot be played with new devices that do not read old-fashioned CDs.	3	- Free download should be allowed.	4
	- CDs are broken.	1	- The contents should cover all subjects.	3

Medium/ Material	Problem	Number	Need	Number
7) Sound CDs			- Narrator's voice should be more interesting. - The contents should be concise and should be in the modules as in the books. - CDs should be out in shockproof containers.	2 2 1
8) Video CDs.	- CDs are broken. - The contents are out-of-dated.	2 1	- The contents should be updated. - Free download should be allowed. - The contents should cover all subjects. - CDs should be out in shockproof containers. - CDs should be no more manufactured. - The contents should be categorized so that they can be sought easily.	4 4 2 1 1 1
9) Teaching Program through Satellite	- Students never use this medium. - It is inconvenient for students to see the programs in accordance with the schedule. - The signal cannot be received.	2 2 1	- Programs should be re-run. - The content presentation should be modernized, such as to show on YouTube or e-learning. - The contents must be easy to understand. - More examples and exercises are needed. - This medium should be promoted. - Broadcasting signal should be fine tuned.	3 2 2 2 1 1
10) Educational TV Program	- It is inconvenient for students to see the programs in accordance with the schedule.	2	- There should be more broadcasting channels. - the contents should be easy to understand. - There should be additional contents about general issues such as to enroll to a course and to register the graduation.	4 1 1

Medium/ Material	Problem	Number	Need	Number
11) Radio Broadcasting Program	- The radio program should be cancelled.	1	- Students should be allowed to download the contents for free or to listen to the contents from the website. - The direction to listen to the program should be promoted.	1 1
12) Subject Documents (Materials)	- The delivery of documents through postal service is time-consuming. - Contents of some subjects are incomprehensible. There are some errors and typos. - Colour of printing ink fades and the texts cannot be read.	6 5 1	- Document delivery should be faster. - Contents should be updated. - There should be ways to track document delivery. - Contents should be deducted and be summarized. - Size and weight of book should be deducted. - Paper colour should be brighter.	9 4 2 2 1 1

Conclusion and Recommendations

The study on problems and needs related to distance learning media and materials of students of STOU leads to the discovery that, based on the analysis on the students' awareness of the organization of dis- tance learning, sorted by categories, the category that is most aware of is the ease and convenience of the use, followed by the categories of modernity, need for distance learning, recognition, and utilization/ viewing/ and listening, respectively. This reveals that rudeness use distance learning media to fulfill their needs for self-learning in the learning method of students of STOU that concurs with the ideas of Wichit Sisa-an (2529 :7) who has suggested that distance learning is a system whereby students and teachers are far away from one another but can have learning activities together through multimedia, and can meet with one another age certain meeting spots. Students can learn subjects by themselves from multimedia anytime and anywhere that is convenient to them. Also, distance education emerged in response to the need of providing access to those who would otherwise not be able to participate in face-to-face courses. It encompasses those programs that allow the learner and instructor to be physically apart during the learning process and maintain communication in a variety of ways (Keegan, 1986).

From the content analysis on problems and needs for distance learning media and materials of undergrad- uate students of Sukhothai Thammathirat Open University, most problems that are discovered are related to the development of media that can be accessed easily because some students are still not aware of the media. The media should cover all the subjects and should be up-to-dated and convenient to use. This means students have encountered problems concerning the use of media of all types and want the Univer- sity to improve media because students have to learn by themselves. Such findings concur with the find- ings by United Nations Educational and Scientific Organization (1979), which has stated that educational management is organized by means of mail, radio, television, newspapers, etc., by students and teachers, and sent to individual or group learners, who send them back to the instructor for review and suggestion that will be sent to the students again.

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Barriers of Spoken English Among Speech Communication Students in a Private University

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ABSTRACT

With the development of society, spoken English teaching and learning has been the top in English teaching and learning among speech communication students in the University of San Agustin. This paper reports a survey conducted among the ninety-four (94) currently enrolled in Speech Communication on the barriers for learners of spoken English learning in a private university. Questionnaires with both close-ended and open-ended questions were distributed to the students. By means of quantitative and qualitative research methods, this paper analyzes the difficulties the surveyed students have in spoken English learning, examines obstacles that hinder their spoken English learning and explores effective approach to spoken English teaching and learning in conclusion.

Keywords

Spoken English teaching, Barriers of spoken English learning, Oral language competence, College Students, Private university

Introduction

Any speech communication teacher in the Philippines has a story to tell as regards speech communication teaching. Many researchers put forward spoken English learning theories through their own teaching and research experiences in order to improve the oral English teaching and learning. Doron (2015) in, “Breaking Through the Barriers to Speaking English Fluenty,” stressed that children need a context in which to speak a language. That is, the environment must be conducive and provide a sense of support and structure in which language learning can develop. In other words, many children who are bilingual won’t speak back to their English-speaking mother or father, they will use their mother-tongue, Doron adds. This is why, language needs to be learned within a social and linguistic context and is best learned in its natural form like discussions, conversations, and stories.

Meanwhile, in speech communication classes, teachers create a context for language. Several activities are designed for students to accomplish. Through these activities, students can have the opportunity to interact with each other as well as accomplish the tasks required by the teacher at the same time.

Rebecca Hughes (2005) introduced the methods of teaching, learning and evaluating in order in the questionnaire in case of giving the subjective answers. Biographic details including their major, class, gender, and age were asked for. Data Collection for oral language learning, meanwhile was also provided as well some research methods in oral language field. Michael McCarthy (2006) has discussed the oral language teaching and learning or the inner structure of language from the perspective of applied linguistics. However, the study above mainly focused on language itself ignoring the learners, differences of thinking and teaching environment. In the Philippine context, these factors must be taken into consideration to improve the spoken English teaching and learning, because learners must overcome the negative influence of them. Therefore, teachers of English need to motivate students, help them bridge the gap between Philippine English vis-à-vis western English and utilize the modern teaching technology in spoken English teaching so as to improve students' oral ability.

Literature on Problems Encountered in Spoken English Learning

Speaking is the active use of language to convey meaning. In the university, it is the medium used in the teaching of speech communication. English teachers have observed that there are students of speech communication who sometimes experience difficulty in learning the language. Many studies have indicated that spoken language development has largely been neglected in the classroom, and most of the time, spoken language in the classroom is used more by teachers than by students. However, spoken language, even as used by the teacher, hardly ever functions as a means for students to gain knowledge and explore ideas. To develop the knowledge to deal with spoken communication problems in an EFL context, researchers first need to know the real nature of those problems and the circumstances in which 'problems' are constructed.

In a study, "Problems in teaching English Speaking Skill: A Study of Higher Secondary Students in Srinagar, India" by Rijaz & Mullick (2016), it was stressed that speaking is fundamental to human communication. That is, English language learners, no matter how much they know about the English language, still face many speaking difficulties. Many studies have indicated that spoken language development has largely been neglected in the classroom. Nunan (1991) wrote 'success is measured in terms of the ability to carry out a conversation in the (target) language'. Therefore, if students do not learn how to speak or do not get opportunity to speak in the language classroom they may soon get de- motivated and lose interest in learning. Given this backdrop the present paper attempts to explore the significant difference in the results of speaking skill with the help of t-test. The sample for this study was taken from various higher secondary institutes of Srinagar city. The sample comprised of a total number of 160 respondents. A questionnaire was prepared for the elicitation of linguistic data which was designed to test the student's knowledge of speaking skill. The test took around 20-30 minutes in the form of an interview. The responses of the students were recorded using a tape recorder. The scores of speaking skill were graded on a scale of 0 to 5. The quantitative data was captured in a software program called Statistical Package for the Social Sciences (SPSS) version 14.0 for its final analysis and tabulation purposes. The present study also included classroom observation in order to find out the speaking difficulties that are encountered by higher secondary students.

In another study, "Difficulties of Speaking that are Encountered by English Language Students," by Dalem (2017), students' difficulties in speaking were also ascertained. This study explored the speaking difficulties encountered by English language students and to discover the causes of such difficulties. Speaking English has been a vital importance in international communication. This study also found out that speaking fluent English is a common problem among non-native speakers. The second language learners have gone through a variety of cases to learn how to speak not only correct grammar and using the right vocabulary but the correct accent and pronunciation. It was found out that many of such obstacles have been known as the predictors of problem among language learners. In this paper, the researcher highlights the speaking difficulties encountered by English language students which are urgent for every teacher. These are fear of mistakes, shyness, anxiety, lack of confidence and lack of motivation. This paper can be useful to teachers to consider their language learners' speaking needs in English language teaching and learning context.

The English language is also important in global communication, hence both oral and written English skills are essential around the world. However, to many, speaking English seems to be a very challenging task. Since the aim of English education is not only to develop knowledge of grammar and written skills but also to teach oral English skills, this problem needs to be studied in order to remedy the situation. In another study of Paaki (2013), a study was conducted to discover if adult learners of English experience problems in speaking English, and if so, what types of problems and why. In this study, these problems were analyzed according to second language acquisition theory, and the factors affecting them were categorized.

The studies discussed above bear relevance to this inquiry as the researchers delved into the barriers encountered in the teaching of English as a second if not the third or foreign language among the students learning the language.

The Problem

This study determined the barriers of spoken English among speech communication students in the University of San Agustin. Specifically, this addressed the following questions: 1) What are the obstacles in spoken English learning among students enrolled in speech communication; 2) What elements affect the spoken English learning in the university? (3) What are effective approaches to spoken English teaching in the university?

Research Methodology

The present study was conducted at the University of San Agustin, Iloilo City, Philippines to 94 students enrolled in English 3, Speech Communication during the second semester 2017-2018. There were three classes. Approximately 70% of the students were female and 30% were male, and their age ranged from 18 to 27. There were originally 120 students but only 94 responded to the questionnaire.

In this study, the questionnaire was the only investigating tool, but in order to obtain both quantitative and qualitative data, this questionnaire includes two parts, questions with best choices and open-ended questions. Questionnaire on spoken English learning was distributed to the 94 students. There were 25 items, which were incorporated into five options ranging from: A=strongly agree, B=agree, C=undecided, D=disagree, to E=strongly disagree and one open-ended question related to what the supposed teaching environment is for spoken English learning.

The questionnaires were distributed to 94 students during the class time without telling them ahead of time. Before they answer the questions, the teacher told the students that the purpose of the study is to help them improve the spoken English learning in class and out of class. When the students answered the questionnaire, they were told the choice they made had nothing to do with their final marks of this course and they should give the objective answers. After they finished them, they turned them in. Instructions were given in in order to ensure that students could understand the requirements.

Quantitative data from the questionnaire were entered into Microsoft Excel and examined the students' choices in answering the 25 questions of each option to tell what the most influential factor is in oral English learning in the University. There are tables showing the results of each dimension and they can tell the reader what specific barriers are in spoken English learning. The qualitative data from the open- ended questions of the questionnaire were collected to investigate the problems/obstacles the students encountered in spoken English learning environment. The qualitative data also provided some useful insights into how to improve the oral English teaching and learning environment in class and out of class in the University.

To be able to determine their difficulties, mean and rank were used. To find out the extent of their difficulties, the following scale with their interpretations were used as follows: 1.00-1.80 (Very Low Extent), 1.81-2.60 (Low Extent), 2.61-3.40 (Moderate Extent), 3.41-4.20 (High Extent), 4.21-5.00 (Very High Extent). The item that got the lowest means become obstacles to spoken English language learning. Frequency and percentage were used to identify the strategies used in the university in terms of speech communication teaching.

Result and Analysis

Obstacles in Spoken English among Students Enrolled in Speech Communication

Based on the results generated from the questionnaires, Table 1 shows the obstacles in Spoken English among students enrolled in Speech Communication. “I cannot choose the proper words in expressing meaning in spoken English,” got the lowest mean with (3.7, Rank 1). “My mother tongue always interferes with spoken language learning with a mean of 3.8 (Rank 2). “I think the most influential barrier is lack of good spoken English teaching environment,” and “Choosing proper words in spoken English learning is difficult,” with means of 3.9 each, Rank 3.5.

Table 1. Obstacles in Oral English among Students in Speech Communication

Obstacle	m	rank
Item 9. I cannot choose the proper words in expressing meaning in spoken English.	3.7	1
Item 8. My mother language always interferes with spoken language learning	3.8	2
Item 19. I think the most influential barrier is lack of good spoken English teaching environment.	3.9	3.5
Item 4. Choosing proper words in spoken English learning is difficult	3.9	3.5

Legend: 1.00-1.80 (Very Low Extent), 1.81-2.60 (Low Extent), 2.61-3.40 (Moderate Extent), 3.41-4.20 (High Extent), 4.21-5.00 (Very High Extent)

Elements that Affect the Spoken English Learning in the University

Based on the results generated from the questionnaires, Table 2 shows the elements that affect Spoken English among students enrolled in Speech Communication. “The communication between teachers and students is very important in spoken English learning,” got the highest mean of (5.0, Rank 1.5). “I want to learn English very much with a mean of 5. (Rank 1.5). “Spoken English is very important,” with a mean of 4.72, in Rank 3. “The thinking differences influence spoken English learning largely,” and “I am very interested in spoken English learning” with means of 4.4, in Rank 4.5.

Table 2. Elements that affect Spoken English Learning

Element	m	rank
Item 23. The communication between teachers and students is very important in spoken English learning.	5.0	1.5
Item 6. I want to learn English very much.	5.0	1.5
Item 1. Spoken English is very important.	4.72	3
Item 3. The thinking differences influence spoken English learning largely	4.4	4.5
Item 2. I am very interested in spoken English learning	4.4	4.5

Legend: 1.00-1.80 (Very Low Extent), 1.81-2.60 (Low Extent), 2.61-3.40 (Moderate Extent), 3.41-4.20 (High Extent), 4.21-5.00 (Very High Extent)

It can be seen from the data that among all the elements mentioned in the questionnaire, teaching environment in the form of teacher-student interaction got the highest mean together with the motivation to learn English. Positive attitude towards spoken English learning were the elements that affect spoken English learning in the University.

Effective Approaches to Spoken English Teaching in the University

Students' answers to the open-ended questions revealed a variety of teaching strategies that teachers employ in the teaching of speech communication. These strategies ranged from individual to group strategies such as news casting, speech laboratory activities like the speech drills, verse choir, panel discussion, oration, debate, public speaking, round table discussion, culminating activities in speech communication, dialogues, informal conversations, job interview simulations, declamation, program hosting among others. Table 3 shows these spoken English strategies.

Table 3. Effective Approaches to Spoken English Teaching in the University

Strategy	f	%
Speech laboratory activities like speech drills	24	26
Newscasting	20	21
Individual speeches	18	19
Culminating Activities	17	18
Others	15	16

Several studies have pointed out to the fact that language is best learned when the learners' attention is focused on understanding, saying and doing something with language and not when their attention is focused explicitly on linguistic features. In doing speech laboratory activities, students are exposed to a variety of activities where they experience many forms of learning the language. Other strategies secondarily improved their spoken English learning

Conclusion and Recommendations

According to the results from the survey, there are some barriers in spoken English learning in the university. Among them, choosing proper words in English, negative transfer of mother language, and choosing the proper words hinder speech communication students' spoken English learning. On the other hand, the attitudes to spoken English learning are not the barriers in the learning process. Instead, they promote the motivation in the spoken English learning. Majority of the students noted the difficulty of learning English as due to transfer from their mother tongue. Most of them rather are proud of their positive attitudes and motivation to learn spoken English learning.

In order to overcome the barriers, spoken English teaching should take the students as the center in teaching process. Students highlight the teaching environment as the most effective element in their oral English learning in their speech communications process. The teachers should sustain helping learners train their English thinking, promote their motivation, resolve the problems that the mother language leads to, speak English flexibly according to certain situation, and make good use of teaching resources and environment.

Students should also avoid the passive attitude and barriers to spoken English learning, so teachers should motivate the student more correctly and make them interested in it neglecting the worries. In spoken English teaching, teachers should provide adequate sources for students to imitate so as to resolve the motivational problems.

There are some shortcomings in the current survey and the results of the current study suggest a number of questions for further research:

1. The current survey only covered the small number of students, which may affect the reliability of the result; the development of a larger scale survey investigating spoken English learning problems may be needed.
2. This is only a survey on the barriers of spoken English learning and did not include teaching
3. experiment to overcome the barriers found in the study.
4. Spoken English learning in the university largely includes four parts which are listening, speaking, reading, and writing. Since this study only covers the speaking component, more researches are needed to be done. Researchers can focus on what are specific barriers in other parts of English learning in other universities.

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The Motivation of Teachers to Enhance the 21st Century Learning Skills: A Study in Kasetsart University, Thailand

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ABSTRACT

Higher education is facing important challenges to prepare the learners for the 21st century skills. This study was carried out during first semester AY 2017 with 46 teachers in Faculty of Education, Kasetsart University to investigate their teaching motivation for learners in the new era. This study used questionnaire for acquiring needed information. Descriptive statistics were used for data analysis. Most respondents were highly motivated on knowledge acquisition, student inspiration and lessons preparation. However, ICT literacy was rated at the low level. The male teachers were more prepared in learning management, whilst the female teachers were more focused on student inspiration. Most importantly, Generation Y teachers were more motivated to change their learning management than those of the generation X. This implied the need for teachers to apply more ICT in their teaching, wherein the regular professional development programs were also suggested.

Keywords

Teachers' motivation, Learning management, People in the 21st century

Introduction

Teachers play an important role in the mission of higher education. Apart from teaching task, the teachers are required to do research to develop new knowledge, which will be beneficial for teaching and learning. The main task of university is teaching and Research (Srisa-ard, 1975). It is a must for teachers in higher education to undertake research for new knowledge and teaching development. In addition, the change of information technology and modern communication has a greater impact which causes changes in every part of the world. Poovarawan (2014) described the learner as a person in the 21st century who must have a world-class personality and skills adaptable to changes. Modern technology affects the lives of people in society. It makes people live longer and produces new products very quickly and effectively. People in the 21st century need self adaptation skills to the fast changing world. Teacher must change their role and become a classroom facilitator to encourage their learners and promote self-learning atmosphere. Poovarawan (2015) introduced teaching and learning for the 21st century teachers must focus on developing learners' learning skills, creating a motivation learning atmosphere, ecouraging them to share information and knowledge using modern technology.

In the past, however, there was the number of limitations in classroom teaching and learning management. Rumpagaporn, Sutthinarakorn and Jeerapattanatorn (2015) indicated that learners were calling for changes in in the teaching and learning process. Therefore, this research was carried out in response to the learners' needs to investigate the teachers' motivation to promote the 21st century learning skills.

Objectives

The objectives of this study were to study the motivation for teaching and learning in the teachers' perspective to promote the 21st century learning skills and to study the motivation for teaching and learning in the teachers' perspective to promote the 21st century learning skills, identified by genders and ages.

Literature Review

Motivation and Characteristics of 21st Century Learners

Motivation is a process that persuades a person to try to meet certain needs (Lovell, 1980). Cordova and Lepper (1996) described that motivation is a state of a person's for his or her increased behavior to intentionally do some activities to achieve the desired goal. Motivation allows individuals to choose behaviors to respond to the most appropriate stimuli in different situations. Maw and Maw (1964-1965) explained that there are two kinds of motivation: 1) Intrinsic motives are intrinsic motivations, such as attitudes, thoughts, attitudes, intentions, perceptions, values, attitudes, and behaviors that influence behavior; 2) Extrinsic motives are extrinsic motives that motivate behavior. In returns, one wil gain honor, reputation, or praise. This kind of motivation is not permanent as a person will only be motivated to gain something or reward in returns.

Technological advances affect learners in the new era who need to have an adaptation skill because the current change in the world becomes more complicated than it uded to be. Learners in the 21st century should possess the qualities to live their lives happily. In addition to having good civic skills, they need to be equipped with professional and leadership skills. In society, people need to work together, and they must have leadership skills to convince their ideas and listen to different opinions and communication with other people. (Poovarawan, 2015). Poovarawan (2016) described the changing world in the present situation that there are a lot of new technologies and knowledge. It creates innovation with emerging technologies, making people live longer. New technologies make products more modern. There is a lot of information online that makes people live together in a new media environment with a global connect. Thus, people in the world have a global citizen status. Today's learning management needs to be rethought and prepared for the future (Brunei, 2013). The learning management to enhance the 21st century learning skills should include knowledge of digital literacy, communication skills, emotional Intelligence that enables the learners to live a happy life, entrepreneurial skills, global citizenship skills, problem solving skills, analytical thinking skills and teamwork skills (Poovarawan, 2016).

Generation Differences

People in different generations perceive things, think and act differently with different belief and lifestyle. Each generation will have characteristics as follows:

1. People in the Baby Boomers, born between 1946 and 1964, are a big group of people who enter their elderly age. They are hard working the rest of their life and save money for raising their children. This group of people has big savings, and they have purchasing power. They are responsible, well disciplined and respect other people (Bell and Naze, 2007).

2. Generation X, born between 1965 and 1979, is a group of people that grew from parents in the Baby Boomers who raised self-reliance children. They have seen that their parents worked hard. They are the balanced group in life of all generations, but not working as hard as the first group (Glass, 2007).

3. Generation Y, born between 1980 and 1997, is a new generation who loves online media and communication. They have a low tolerance and care for people in society who they may not know very well. This group is considered a large group, entering into a new age which is quite comfortable. They are brought up with convenience as their parents are wealthy. This group of people will change jobs very often and they do not stay in one workplace for a long time. They have a high self confidence, get bored easily and like to challenge their life. However, they have a clear goal for their life and love to do many things at the same time (Howe and Strauss, 2000).

The differences between the three groups, which have different ways of thinking and behaviors, affect their interactive behavior as group members and learning, especially when most teachers are baby boomers or the teachers in Generation X and the learners in Generation Y. They need to adapt themselves to each other so that classroom activities will become meaningful and can be responded to different needs of learners (Dechawaattanapaisan, 2009).

Conceptual framework

Based on the literature review, the conceptual framework of the present research can be drawn as figure 1 below:

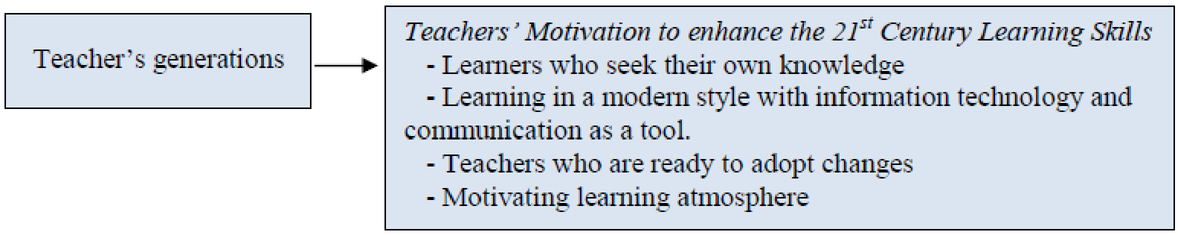

Figure 1: Conceptual Framework

Methodology

The population of the study were 108 faculty members in Faculty of Education, Kasetsart University. The simple random sampling was used in the method for drawing a list of faculty members. According to Kannasut (2000), the sample size was determided at 54 people (50%). Questionnaires were employed to explore the teachers' motivation of teaching and learning management to prepare the learners for the 21st century learning skills. Later, the questionnaire from 46 respondents (85.2%) was returned, and content validity was reviewed by 3 experts. The reliability of the questionnaire was distributed to 30 other faculty members as a try out to account for Cronbach Alpha Coefficient which equals 0.94. Statistics used in data analysis were Frequency and Percentage, Mean and standard Deviation, Independent t-test and One-way analysis of variance.

Findings

The faculty members in Faculty of Education were males and females in equal proportions. The majority of them were in Generation X, born between 1965 and 1979 (69.65%) and Baby Boomers (born in 1946 - 1964) and Generation Y (born in 1980 - 1997) were only 19.6 percent and 10.9 percent, respectively as shown in table 1 below.

Table 1: Profile of the Respondents
(n = 46)

Profile of the Respondents	n	%
Gender		
Male	23	50.0
Female	23	50.0
Generation		
Baby Boomer (born in 1946-1964)	9	19.5
Generation X (born in 1965-1979)	32	69.6
Generation Y (born in 1980-1997)	5	10.9

1. It was found that the teachers were motivated to manage their lessons to support their learners for the 21st century skills at the high level. This included 11 aspects in terms of preparedness, self- adaptation, inspiring the learners, managing motivating learning environment, promoting a self- learning atmosphere, classroom supervision ability, roles changing ability, knowledge, technical and teaching methods, knowledge, modern tools and application, ICT knowledge and organizing ICT- based learning and ICT application as shown in table 2 below.

Table 2: Teachers' motivation to prepare the 21st century learners
(n = 46)

Motivation of learning management	$\bar{x}$	S.D.	Level	Rank
1. Preparedness	4.10	.574	High	3
2. Self-adaptation	3.90	.509	High	10
3. Inspiring the learners	4.21	.646	High	2
4. Managing motivating learning environment	4.02	.506	High	4
5. Promoting a self-learning atmosphere	3.95	.452	High	6
6. Classroom supervision ability	3.98	.596	High	5
7. Roles changing ability	3.93	.772	High	7
8. Knowledge	4.27	.431	High	1
9. Technical and teaching methods knowledge, modern tools and application	3.91	.505	High	9
10. ICT knowledge	3.92	.577	High	8
11. Organizing ICT-based learning and ICT application	3.74	.648	High	11

2. When identified by genders, the male teachers had different motivations with those of the female teachers in terms of preparedness and inspiring the learners, which were found at statistical significance at .05 level. In relation to preparedness, $\bar{x}$ for the male teachers was at 4.33 which washigher than the female teachers' ($\bar{x}$=3.87). For inspiring the learners, $\bar{x}$ for the female teachers was at 4.46 which was higher than the male teachers' ($\bar{x}$=3.96). In other aspects, there was no difference interms of self-adaptation, managing motivating learning environment, promoting a self-learning atmosphere, classroom supervision ability, roles changing ability and etc.

Table 3: Comparison of motivation to prepare the learners for the 21st century with Independent t-test
(n = 46)

Learning motivation	Male (n=23)		Female (n=23)		t	Sig.
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
1. Preparedness	4.33	.576	3.87	.482	2.915	.006*
2. Self-adaptation	3.93	.560	3.87	.464	.430	.669
3. Inspiring the learners	3.96	.656	4.46	.542	-2.819	.007*
4. Managing motivating learning environment	4.01	.511	4.04	.512	-.192	.849
5. Promoting a self-learning atmosphere	3.90	.480	4.00	.427	-.730	.469
6. Classroom supervision ability	3.91	.596	4.04	.601	-.739	.464
7. Roles changing ability	3.78	.850	4.09	.668	-1.349	.184
8. Knowledge	4.24	.423	4.30	.446	-.509	.613
9. Technical and teaching methods knowledge, modern tools and application	3.84	.542	3.98	.467	-.923	.361
10. ICT knowledge	4.00	.622	3.85	.532	.892	.377
11. Organizing ICT-based learning and ICT application	3.74	.664	3.66	.531	.490	.626
12. Learning outcomes	4.00	.426	3.70	.635	1.908	.064

*$p \leq .05$

3. When classified according to age, it was found at statistical significance at 0.5 level that the teachers who were born in different generations had different roles as shown in table 4 below. On the other hand, it was found that teachers in different generations had no different motivation of their learning management in terms of self-adaptation, inspiring the learners, managing motivating learning environment, promoting a self-learning atmosphere, classroom supervision ability, knowledge, technical and teaching methods knowledge, modern tools and application, ICT knowledge, organizing ICT-based learning and ICTapplication and learning outcomes.

Table 4: One-way analysis of variance for motivation to prepare the learners for the 21st century identified for each generation
(n = 46)

Learning motivation	Source of variance	SS	df	MS	F	Sig.
1. Preparedness	Between groups Within groups Total	1.437 13.373 14.810	2 43 45	.719 .311	2.310	.111
2. Self-adaptation	Between groups Within groups Total	.002 11.682 11.685	2 43 45	.001 .272	.004	.996
3. Inspiring the learners	Between groups Within groups Total	.649 18.139 18.788	2 43 45	.324 .422	.769	.470
4. Managing motivating learning environment	Between groups Within groups Total	.948 10.585 11.534	2 43 45	.474 .246	1.926	.158
5. Promoting a self-learning atmosphere	Between groups Within groups Total	.159 9.046 9.206	2 43 45	.080 .210	.378	.687

6. Classroom supervision ability	Between groups Within groups Total	1.661 14.317 15.978	2 43 45	.831 .333	2.494	.094
7. Roles changing ability	Between groups Within groups Total	4.049 22.756 26.804	2 43 45	2.024 .529	3.825	.030*
8. Knowledge	Between groups Within groups Total	.385 7.969 8.353	2 43 45	.192 .185	1.037	.363
9. Technical and teaching methods knowledge, modern tools and application	Between groups Within groups Total	.611 10.873 11.484	2 43 45	.305 .253	1.208	.309
10. ICT knowledge	Between groups Within groups Total	1.284 13.700 14.984	2 43 45	.642 .319	2.015	.146
11. Organizing ICT-based learning and ICT application	Between groups Within groups Total	.587 15.406 15.993	2 43 45	.293 .358	.819	.448
12. Learning outcomes	Between groups Within groups Total	.777 13.158 13.935	2 43 45	.389 .306	1.270	.291

*p ≤ .05

According to the findings, it indicated that the teachers in Generation Y had higher motivation in terms of self-adaptation (�.85) than those in Generation X.

Table 5: Results of difference analysis on self-adaptation of the teachers in 3 generations

Difference of $\bar{x}$	Baby Boomers (Born 1946-1964)	Generation X (Born 1965-1979)	Generation Y (Born 1980-1997)
Baby Boomer s (Born 1946-1964)	-	-	-
Generation X (Born 1965-1979)	-	-	-
Generation Y (Born 1980-1997)	-	0.85*	-

Discussion

1. It was found that the important motivation to prepare the learners for the 21st century was knowledge. The teachers had to be able to inspire their learners. At the same time, preparedness of the teachers was also important, including managing motivating learning environment, classroom supervision ability, promoting a self-learning atmosphere, ICT knowledge, Organizing ICT-based learning and ICT application and roles changing ability. The findings were related to guidelines of preparing the learners for the 21st century introduced by Poovarawan (2014). The learners must be equipped with the proper knowledge and skills which enable them to get ready for their future career, including leadership skills and ability to work with other. Jevons and Turner (1972) pointed out that students in the hidher education need academic ability, life skills that characterize their own and have the ability to live together with others in the status of being a leader, followerss and colleagues in which they can show their intellectual leadership in all their roles.
2. The current teachers are those of Generation X, while the older generation (Baby

Boomers) is dying out, replaced by Generation Y. The new generation is more familiar with technology than the older one. They loves online media and communication which conform to learning in today's digital society. This made Generation Y teachers were more self-adapted than those in Generation X. (Howe and Strauss, 2000).

3. It was noted that ICT-based learning and application, there was a weakness of the teachers.
4. They could not apply ICT to support their leassons or classrooms activities such as using online learning and e-Learning which were found at the average level. This reflected that most teachers were in Geneartion Y, but the ICT application is not as much as possible.
5. In terms of promoting a self-learning atmosphere, the teachers needed to focus on entrepreneurial concept (2.93). This indicated that the learners in the new generation would like to be self-employed which entrepreneurship skill is also important for them. The learners, however, questioned about teaching quality, content duplication and teaching management which was not in response to the learners' needs (Rumpagaporn et al, 2015).

Recommendations

1. The teachers should use the learning process to listen to the learner's reflection to improve their classroom management to meet the learners' needs. Meanwhile, the teachers also play a role in reflecting the learning outcomes which encourage mutual help and cooperation. This will be carried out in a form of classroom research as well.
2. Teachers should be provided with knowledge of online teaching or learning technology focusing on the female teachers and the teachers born in Generation X and the Baby Boomers. It might take time for them, but this will lead to a preparation for a better classroom management for the 21 century learning skiils.
3. Teachers should enhance entrepreneurial knowledge of the students in order that they can apply it in the future when entering their career, including intregated work-based learning experience.
4. The management of Faculty of Education should support their teachers in terms of resources which enable them to link their lessons to outside classroom activities in order to manage a variety of learning activities related to changes, real life and world environment.

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The Effects of Community-Based Learning Management Using Project Based Learning on The Invention of Local Materials for Mattayom Suksa Four Students of Wiangtanphittayakom School

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ABSTRACT

The purposes of this research were 1) Design and find the efficiency of instructional plans of community-based learning management using project based learning. 2) Compare students pretest and posttest learning achievement in accordance with the instructional plans 3) Develop students' learning achievement studying concerning 75 percent standard criterion and had learning achievement statistically higher than 80 percent 4) Study students'satisfaction in accordance with the instructional plans. The sample used in this study consisted of 23 the Mattayom Suksa Four Students, Wiangtanphittayakom School. The research instruments for this study included the instructional plans, a learning achievement test, and a questionnaire form for the students'satisfaciton. The data were statistically analyzed by using mean, percentage, standard deviation and t-test. The results of the research were as follows: 1) The construction and efficiency finding of instructional plans of community-based learning management using project based learning on the invention of local materials had index of congruence (IOC) between 0.60 – 1.00 and the efficiency findings in accordance with 23 students was overall 87.73/89.00 which was higher than the expected 80/80. 2) Posttest of the learning achievement of instructional plans of community-based learning management using project based learning on the invention of local materials was higher than pretest at .01 level of significance. 3) The learning achievement of students who were taught by community-based learning management using project based learning on the invention of local materials had made a mean score of 34.13, accounting for 85.33% which was higher than the expected 75 percent standardize criterion statistically at the 0.05 level of significance and there were 20 students who were passed the criterion accounted for 86.95 percent that was higher than the expected. 4) The students'satisfaction who were taught by Community-Based Learning Management had made a mean satisfaction regarding score which was the most level of 4.60 ($\bar{x}$)

Keywords

Community-Based, Learning Management, Project Based Learning

Introduction

Presently, the learning activity is the pedagogical approach that seeks to provide the learner's cognitive development, directing from the instructors into the learners who are in charge of gaining the knowledge from instructors. In terms of the knowledge creation for the learners, it should be the fixed media. That is to say, the learners will learn from the variable that is determined by the instructor. Broadly speaking, the learners are not encouraged to share their opinions by illustrating and implementing in the steps and lack of the understanding in the background or the rationale of the content. Similarly, the learners are not involved in constructing concerning the learning. Project Based Learning is to enable the learners to select what they want to study or do by themselves that is designed to address real-world problems and issues. As a result, it can be allowed the learners to develop deep content knowledge that is related to the new knowledge, being meaningful, consistent, coherent and skillful in the context of the operation in accordance with their needs and interests. In addition, the learners are able to develop their responsibilities, self-discipline as well as prudence in the context of the workplace. (The Office of the Basic Education Commission, 1998).

According to project based learning, it is referred to the pedagogical approach which involves the learners to participate in the learning activity. In the content of project based learning, the learners are able to study and conduct the research concerning the actual work in accordance with their abilities , aptitudes and interests through the scientific methodologies or other processes in order to investigate and analyze the correct answers by assisting from the instructors who encourage and consult for the learners. Furthermore, it is also an independent and self-improvement activity for the learners that can apply their knowledge, skill and experience into the fundamental knowledge for designing the productive in accordance with their interests and aptitudes. In other words, the students are able to work systematically on the process with other peers in individual and group effectively by analyzing and evaluating their tasks regarding the recommendation in order to find the solutions, develop and improve their performances. Interestingly project based learning is extremely essential particularly the instructors at all levels, developing the learning activity and students' abilities by searching the information through the project. It is important to note that the instructor should comprehend regarding the teaching strategy that is emphasized the learners and the instructors are able to apply in the learning and teaching. On accounting of teaching approach, it is able to develop the learners who live in particular the diversity of the modern information that is capable of selecting the appropriate information for their level and age including demonstrate their knowledge and skills by applying in their real lives. Likewise, the project activity can reform the new generation in Thai society in order to create the culture of sustainable self-learning that is a so- called "Life-long education". (Silanoi, L. and Tungkasamit, A, (2010).

Based on what we have been discussed, the importance of community-based learning management using project based learning is the process that is allowed the learners to do the activity by themselves and learning from the various resources , reviewing the content of integrated learning management into the authentic operation. Apart from this reason, the researcher applies the principle of project based learning into the learning activity in particular the invention of local materials in order to develop the learner to have the thinking process , practice with their competence , have the method to develop the teaching approach and achieve in accordance with the objective effectively as well as follow the guidelines for the reform learning. The project base learning was the way of "National Education Act" based on government policy in the year 2010 and government reform policy that focuses on PBL. To develop the student to learn by themselves.

Objective of the Study

The purpose of this study is to design and find the efficiency of instructional plans of community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School.

Secondly, this research investigates to compare students pretest and posttest learning achievement with the instructional plans on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School.

Thirdly, this research examines to develop students' learning achievement studying in accordance with instructional plans of community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School concerning 75 percent standard criterion and had learning achievement statistically higher than 80 percent.

Lastly, this research aims to study students'satisfaction in accordance with the instructional plans of community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School.

Hypothesis

The following four hypotheses have been formulated:

1. The instructional plans of community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School have a statistically significant higher efficiency than by 80/80 criterion.
2. The learning achievement of Mattayom Suksa Four Students of Wiangtanphittayakom School taught by instructional plans of community-based learning management using project based learning on the invention of local materials have a statistically significant higher than after learning.
3. The students in Mattayom Suksa Four of Wiangtanphittayakom School who were taught by instructional plans of community-based learning management using project based learning on the invention of local materials have a statistically significant learning achievement of 75 percent standardize criterion higher than 80 criterion.
4. The students in Mattayom Suksa Four of Wiangtanphittayakom School have a statistically significant the satisfaction in accordance with instructional plans of community-based learning management using project based learning on the invention of local materials at the most level.

Methodology

Participants

The participants under study included twenty-three students in Mattayom Suksa Four Student of Wiangtanphittayakom School during the school year 2016. The purposive sample technique was recruited and this research was carried out in the normal classroom setting where the researcher was presented in this study. The reasons of 23 experiment students were : 1) Sampling by purposive sampling 2) Used only the students in secondary school level 4 3) There were the practical parts of occupation learning in small community.

Variables

The independent variable was project based learning and the dependent variable can be divided as follows:

- The learning achievement
- Students'satisfaciton in accordance with the community-based learning management using project based learning.

The scope of time duration

The time duration lasted in 15 weeks. (October 26, 2016 – March 7, 2017).

Data Procedure

The instruments used collect data in this study were as follows:

- The instructional plans of community-based learning management using project based learning on the invention of local materials
- The learning achievement test
- The questionnaire form for the students'satisfaciton in accordance with community-based

learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School.

The assessment of instrument

In this study, the validity of the instrument was checked by five peers who has experienced in learning area of occupations and technology that can be divided as follows: two experts who are specialize in teaching concerning learning area of occupations and technology based on the basic education core curriculum of 2008, another peer who is proficient in project-based learning, two experts who specialize in the assessment and evaluation.

Data Collection

In this study, data collection has the procedures as follows:

- To present the principal in developing and testing concerning the instructional plans of community-based learning management using project based learning on the invention of local materials.

- To investigate in accordance with the sample group is as follows: 1) To held the orientation for the participants in order to clarify the objectives and details concerning the learning activity. 2) The researcher took the pretest of learning achievement test concerning the instructional plans of community-based learning management using project based learning on the invention of local materials in order to be the score before learning. 3) The researcher conducted the research in accordance with the instructional plans of community-based learning management using project based learning on the invention of local materials that was lasted in 15 weeks. 4) After being tried out with the sample group, the posttest was done concerning the instructional plans of community-based learning management using project based learning on the invention of local materials. 5) In terms of the scoring of pre-test and posttest, the students'answer sheet were checked by the researcher. The respondents get one point when they indicate the right answer. In contrast, zero points or answer other options were done by the respondents when they indicate the wrong answer. 6) The score of pre-test and posttest was checked by the researcher in order to calculate mean, standard deviation, and the difference score between pre-test and posttest by individual. 7) The mean of the score between before and after learning was compared by t-test Dependent. 8) In order to develop the higher learning achievement, the posttest's scores were analyzed by comparing in accordance with the learning achievement of 75 percent standardize criterion higher than 80 criterion. 9) After being conducted in this research, the students'satisfaction concerning the instructional plans of community-based learning management using project based learning on the invention of local materials was calculated into the questionnaire that was a 5-scale rating scale for 23 questionnaires. 10) The students'satisfaction concerning the instructional plans of community-based learning management using project based learning on the invention of local material was counted in this study.

Data Analysis

In this study, the data were statistically analyzed by using mean, percentage, standard deviation and the different score between pretest and posttest of the student. The pretest and posttest of the learning achievement was measured by t-test Dependent.

FINDINGS

In the present study, it can be concluded as follows:

1. The construction and the analysis finding of instructional plans of community-based learning management using project based learning on the invention of local materials was revealed that the index of congruence (IOC) was between 0.60 – 1.00 and the efficiency findings in accordance with 23 students was overall 87.73/89.00 which was higher than the expected 80/80.
2. The students who were taught by the instructional plans of community-based learning management using project based learning on the invention of local materials was found that posttest of the learning
3. achievement was higher than pretest at .01 level of significance.
4. The learning achievement that was taught by the instructional plans of community-based learning management using project based learning on the invention of local materials had made a mean score of 34.13, accounting for 85.33%. which was higher than the expected 75 percent standardize criterion statistically at the 0.05 level of significance and there were 20 students who were passed the criterion accounted for 86.95 percent that was higher than the expected.
5. The students' satisfaction who were taught by community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School had overall made a mean satisfaction regarding score which was the most level of 4.60 ($\bar{x}$).

DISCUSSION

In this section, the researcher summarizes the discussion of the study in relation to other studies. With respect to the first objective posed, the construction and the analysis finding of instructional plans of community-based learning management using project based learning on the invention of local materials was overall 87.73/89.00 which was higher than the expected 80/80. The result of the study is also supported by Ministry of Education. (2008) the principle of perspective of occupations and technology contributes to development of learners in acquiring knowledge and understanding basic skills essential to their lives. Additionally, learners will thus be alert to changes and able to apply knowledge about living, occupations and technology to their work with creativity and competitiveness in Thai society and the world community. Learners will be able to see prospects for their future careers, love working and have a favorable attitude towards work, as well as lead a happy life in society, based on the principles of sufficiency. On account of the learning area of occupations and technology, it is indicated that the learners' holistic development with a view to enabling them to acquire knowledge, capacity and essential skills required for work.

In terms of the second objective the discussion of the present study mentions that the students who were taught by the instructional plans of community-based learning management using project based learning in particular the posttest of the learning achievement was higher than pretest at .01 level of significance. The result of this study is to support the findings of Silanoi, L. and Tungkasamit, A. (2010) illustrated that project based learning is a prominent teaching process for the instructors that can be allowed learners to develop their abilities by investigating the knowledge via completing and practicing on projects involving in learning activities based on their aptitudes, abilities and attentions.

With regard to the third objective, it was revealed that the learning achievement that was taught by the instructional plans of community-based learning management had made a mean score of 34.13, accounting for 85.33%. which was higher than the expected 75 percent standardize criterion statistically at the 0.05 level of significance and there were 20 students who were passed the criterion accounted for 86.95 percent that was higher than the expected. The results are in agreement with Art- in, S. and Netthanomsak, T (2011) suggested that the students' learning achievement concerning project based learning in curriculum developed course for five-year bachelor's degree students accounted for 82.405 which were higher than the expected 80 percent standardize criterion. Regardless of the reason for project based teaching, Suthirath (2012) reported that the students are able to have the systematic and well-planned procedure in their tasks. Interestingly, the learners are trained regarding gaining the systematic knowledge, creative development and applying the advantage of project based teaching.

Regarding the fourth objective, the current result support the claim that the students'satisfaction who were taught by community-based learning management using project based learning on the invention of local materials for Mattayom Suksa Four Students of Wiangtanphittayakom School had overall made a mean satisfaction regarding score which was the most level of 4.60 $(\bar{x})$.It is consistent with Art-in, S. and Netthanomsak, T (2011) states that the students' satisfaction had overall a mean satisfaction in the most level concerning project based learning in curriculum developed course for five-year bachelor's degree students. For instructors can apply the teaching method: Integrated in project base learning in secondary school, Develop the community academic service and work with student and team teaching. The result of research impacted to the student to learn in life and career skill by them self. Searched the product. For the community, the community wisdom has been inherited and developed their product designs; and community has evaluated the products and collaborated student activities and their institutions as well.

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Small Spaces: Design Solutions to School Planners

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ABSTRACT

Small spaces are very challenging for designers to plan for. They have to consider every corner of the room at the same time stick with the standards in materials and furniture pieces. Small office spaces can function well if the workspace is designed to maximize function. This study can be a good addition to educational researches as this offers design solutions for educators and school planners to consider. This descriptive research study therefore sought to maximize small spaces of interiors – a good solution to structures. This study aimed to provide solutions to small spaces. Moreover, it sought answers to the following questions: 1) What are the solutions in maximizing small spaces in terms of aesthetics? 2) What are the solutions in maximizing small spaces in terms of balance? 3) What are the solutions in maximizing small spaces in terms of comfort? This study mainly maximized a small office space in the university. The primary goal of the design is focused in making design strategies and design solutions that utilized the space, incorporate the principles of aesthetics, color psychology, lighting design, ergonomics, anthropometrics, balance, and comfort. This includes space planning, integration of design elements and principles, concept board, color schemes, material specifications, design layout, and perspective drawings.

Keywords

Small spaces, Design solution, School planners

Introduction

In the current climate of rapidly rising higher education costs and increasing concern about the need to support stronger retention and graduation rates, focus has turned to emerging pedagogies and the development of new templates for learning spaces. In response, planners, architects, designers, and institutions are seeking to establish a body of knowledge that will guide the design, remodel, and use of new and existing learning spaces. Parallel to this is an increasingly urgent need to evaluate these learning spaces by developing research to determine whether and how they fulfill their purposes (Painter et al., 2013).

Along with this, learning specialists, academic researchers, architects, and designers have launched a broad range of investigations to address the questions being raised by the new research on learning space design. Learning spaces, as well office spaces, in institutions have raised concern these days and many researches have focused on more anecdotal descriptions of experiments and projects undertaken to test specific classroom configurations. In addition, there are a number of articles that review the existing literature and provide more philosophical approaches for how teaching and learning activities can be effectively housed and deployed.

Thus, few things need to be considered. The more time people spend at desk, the more important it is that they have an efficient, compact work space. In an era of work-at-offices and co-workers, small space can sometimes foil one's plans for cubicle clarity. They have to think about the physical work environment. Rather than focusing on the limitations of the smaller private office, cubicle or shared space, they need to adopt the philosophy that a person's office is the entire facility. Small spaces are very challenging for designers to plan for; people have to consider every corner of the room at the same time stick with the standards in materials and furniture pieces. Small office spaces can function well if the workspace is designed to maximized function. Storing archival and low use items out of easy reach and remembering to find ways to multipurpose desks, rooms and equipment will maximize the office footprint and efficiency. There are solutions now that will keep utilize every square inch of space efficiently. Maximizing storage space, creating hotel workstations, creating multipurpose rooms and opting for multifunction business equipment can save valuable office space and improve efficiency.

Statement of the Problem

This study aimed to provide solutions to a small space, specifically at the University of San Agustin. To do so, this paper sought answers to the following questions: 1) What are the solutions in maximizing small spaces done in terms of aesthetics? 2) What are the solutions in maximizing small spaces done in terms of balance?, and 3) What are the solutions in maximizing small spaces done in terms of comfort?

Framework of the Study

The descriptive research study sought to maximize interior small spaces. The framework is illustrated in a circular shape named *phenakistoscope* from a Greek root meaning – optical deceiver or to cheat and the Vitruvian man. This contains the principles of design in the study as shown below:

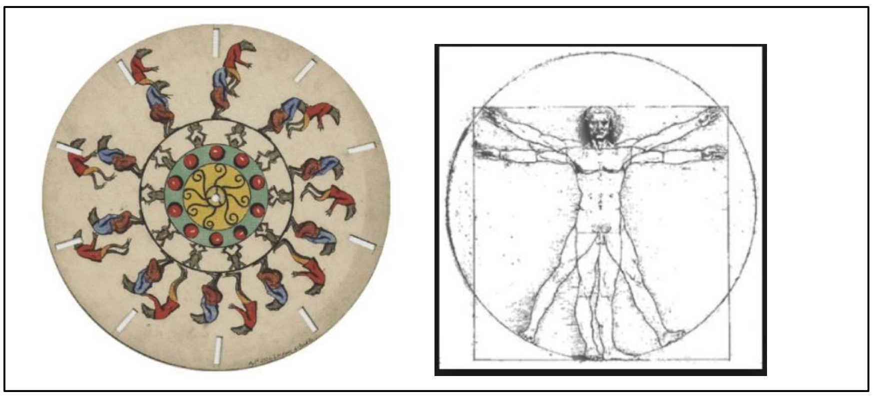

Figure 1: Invented in 1832 by Joseph Plateau, the *phenakistoscope* was an early animation device that used the persistence of vision principle to create an illusion of motion.

In the framework, the principle gives simplified corresponding meanings representing actions. In comfort, Vitruvian man and a scale is illustrated, basically the anthropometrics and ergonomics. This shows about human and space dimension that gives comfort to the user. In balance, weighing scale and color swatch were introduced. This action means the importance of color and its effects to humans and the environment. Also, it gives importance to light in a space, harmony and unity to give balance in the space. These are important design elements of an interior. In aesthetic, an eye was introduced to give the action of look and beauty of the area. This is to determine whether the space is in harmonious manner with unity and balance.

Scope and Delimitation

The extent of the study mainly in maximizing a small office space located in University of San Agustin, the UCRP Office. The primary goal of the design is focused in making design strategies and design solutions that utilize the space, incorporate the principles of aesthetic, color psychology, lighting design, ergonomics, anthropometrics, balance and comfort. This includes space planning, integration of design elements and principles, concept board, color schemes, material specifications, design layout and perspective drawings.

Designing Small Spaces

When designing a room, it must be considered as a collection of smaller spaces. The nooks and niches, the intimate arrangements of furniture are considered to make well-designed rooms special, regardless of their proportions. People explore tiny rooms where designers have applied practical and stylish decorating tricks. Small spaces also make it possible to be a little extravagant without breaking the budget (Turner, 2014). In many respects, it is easier to design an office in a commercial building than in residences as there are fewer competing needs and the basic infrastructure is more likely to be appropriate. Offices are designed to meet the demands of budget and corporate organizational style.

Interior designers often develop the floor plan for office spaces and allocate offices. The private office has long been a status symbol. It continues to be good solution for knowledge- based workers with a great deal of autonomy, limited interaction with co-workers, and concentrated study. Private offices may be required to meet corporate standards, or may express the individual taste of an executive. In interior design, hoteling is a term for space designed to need accommodate multiple functions such as meetings, focused work, and equipment- centered task. Employees circulate to the work environment appropriate to the task at hand, rather than occupying a private on exclusive space. Hoteling requires the non territorial sharing of space with an overlap of usage over time. In like manner, team spaces can also be integrated into groups of workstations, each with their own storage, mobile furniture, seating and screens. Team members can customize and place items personally for electronic and in person communications, one-to-one space for mentoring, and brainstorming areas.

Comfortable meeting spaces for relaxed informal meetings. These social spaces promote spontaneous communication and information sharing and can double for presentations. In-between areas offer corners and alcoves for interacting and information exchange, with mobile furnishings for small, in formal group meetings. Easily cleaned and durable finishes are essential. Open and closed storage and waste containers are also needed. Floors in open offices do not affect the overall sound absorption very much. However, cushioned floors do greatly reduce the noise of chair movement and footfalls. For this reason, all floors in open office areas should be carpented, but pile depth makes only a minimal differences. Using a polyurethane pad rather than jute produces the same positive differences as a thicker pile (Binggeli, 2007).

The need to make any office comfortable and attractive to its workers as well as to visitors involves appropriate plan layout, suitable lighting and sound choices of materials, finishes, and colors, so that the completed projects expresses the nature of the user organization in a way that builds efficiency and staff loyalty (Pile, 2003). The popular modern color practice of using white for walls, a neutral tone for floors, and accents of intense, saturated, primary or near-primary colors is regarded as unacceptable by many researchers who find the white surfaces to be sources of excessive brightness, contrast and glare. Studies indicate that user-occupants are frequently dissatisfied with such color schemes, regarding them as harsh and cold. Black, white and sharp colors are thus best used in lobbies, corridors, and other spaces that are not occupied for long periods of time. Floor colors are supposed to be not so dark as to introduce excessive brightness contrast between tasks or work surfaces and floors. Intense colors such as bright reds, yellows, purples or violets are best resulted to secondary spaces passed thought briefly, such as corridors or service areas. For the milder colors appropriate to work spaces, it is generally believed that cool colors encourage concentration whereas warmer colors best suite activity.

In the past, it was considered satisfactory to simply provide overall lighting adequate to deliver a desired standard desktop level. Tests showing that increased levels of lighting were intended to improve efficiency gradually led in the 1950's and 1960's to the acceptance of very high levels for office lighting, generally supplied by ceiling mounted fluorescent pictures in recent year it has been recognized that such standard office lighting is far from ideal. High levels of uniform lighting, often delivered from fixtures of poor design tend to create a glare from both fixtures and from reflections on task materials at desktop level. Such lighting is also wasteful of energy and therefore costly because areas that have no need or high light levels (such as seating, circulation, and storage spaces) are receiving the same levels as actual work surfaces. Recognition of such problems has led to the development of such alternative approaches as task ambient lighting, in which higher levels of light provide at desktop or task areas, while overall or ambient light is set at lower levels. This lighting approach is now available in many office-furniture systems, with task lighting set close to work surfaces and ambient lighting supplied indirectly from fixtures aimed upward to reflect off the ceiling or from ceiling fixtures that provide only the lower levels of lighting needed for a circulation and other non task areas (Pile, 2007).

The researcher has found out that open, small-scale environments increased the exchange of information, created a positive social environment that supported learning and job satisfaction, accommodated greater flexibility, and did not impede the ability to work productively. Cubicles or other similar enclosure do not always work. Using layout that reflects the organization’s structure can be preferred. The positioning of each employees matters. The placement of employees in confined area reflects the flow of directions of the organization. With this, organizing the workspace has been resorted to by most designers. People need to make decisions about what needs to be organized and there are five areas that they can look at, these are paper, general stuff such as office supplies, the space and furniture layout, electronic information and time management. Although, a large amount of research has been done about the impact of office chairs, desk height, keyboard trays and appropriate phone usage on employees’ comfort and health. Organizations should take advantage of the research and give thought to furniture design and how it fits the needs of employees and their work habits.

Research Methodology

This is a descriptive research design. Descriptive research involves gathering data that describes events and then organizes, tabulates depicts, and describes the data, it uses description as a tool to organize data into patterns that emerge during analysis. The principle aims in employing descriptive research and to describe the nature of a situation, as it exists at the time of the study and to explore the causes of particular phenomena.

The data gathering instruments were the site visit, observation, and evaluation. These were used by the researcher to collect data needed in the study. The office space was cautiously studied and the interior were carefully analyzed. Steel tape was used to measure the area. Camera for documentations and sketch book were used to determine the layout of areas according to their importance and specified use. Also some questions were asked to the facilitator of the office to provide related solutions to the study. The actual data were collected through different shots made by camera to see the aesthetics and functions of the area. Likewise, by using steel tape to measure the space were done to give strategies in defining the space under study. For additional data, the researcher also conducted researches in school libraries, archives and browse in the Internet to collect more of information as regards maximizing office spaces.

Research Data Analysis and Interpretation

Programming is known as pre-design or strategic planning involving detailed analysis of the client's needs requirements, goals and assets. It is defined as a process leading to the statement of an interior design problem and the requirements to be met by giving a solution. In this study, behavioral pattern was identified, elevation, flooring design, lighting lay-out, specifications, and perspectives. The behavioral patterns are those patterns that are most specifically concerned with communication between objects, spaces, school personnel, students, teachers, utility and visitors. The behavioral pattern shows the purpose of the space and its importance. The floor plan is the two-dimensional layout of rooms. Part of the working drawings and blueprints used to construct a space. Walls, doorways, and windows are often drawn in scale. Elevation is a flat, two-dimensional drawing of a straight-on (orthographic) view of object, an exterior facade, or an interior wall. Flooring design is the lower and supporting surface of a structure or a room in which anything with weight, size and volume lands on. It is an important part of a space in which purposefully serves as a way for traffic or walking. Flooring design enhances a space while flooring area may differ according to uses. Choices for flooring materials construction must be appropriate to function of each area it is built on.

Lighting layout involves getting the light from the lamps to the task with a minimum of loss on the way, and delivering the light by paths that avoid visual problems. The lamp itself determines the initial direction of light emission. Specifications connote the detailed written description construction, workmanship and materials of the work to be undertaken. Perspectives in the context of vision and visual perception, is the way in which objects appear to the eye based on their spatial attribute, or their dimension and the position of the eye to the objects. It is a three-dimensional sketch or rendering of an interior space drawn in perspective with vanishing points.

Results and Discussion

The section embodies the results of the study based on the site visit, interview from manager, and gathering information through research works. These contributions were summarized giving the relevant information that were the basis of the design process that was done. Moreover, discussion of the space planning includes the programming, behavioral pattern, and the working drawings.

Below were the Bubble Diagram bearing the behavioral pattern, matrix, furniture lay out, ceiling plan, smoke and sprinkler detector plan, and perspectives.

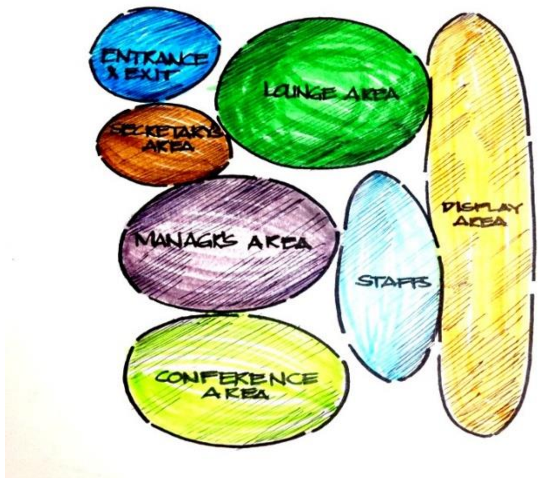

Figure 2: The Behavioral Pattern

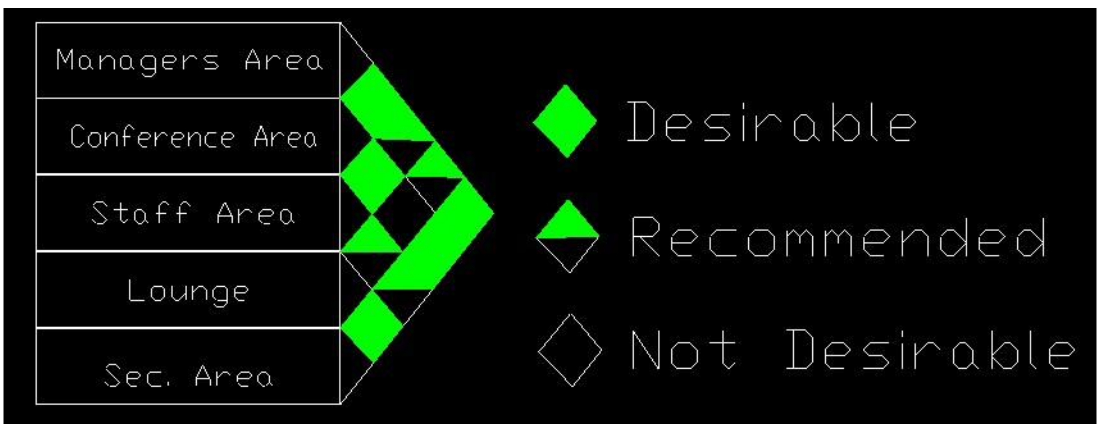

Figure 3: Matrix

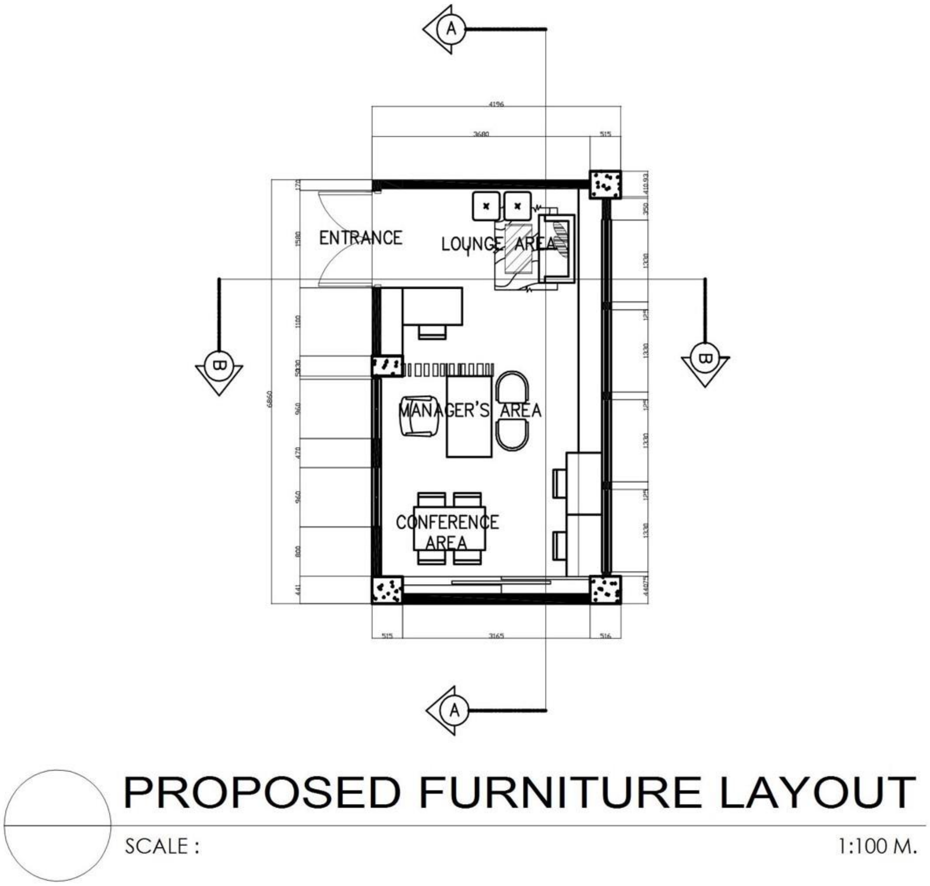

Figure 4: Furniture Layout

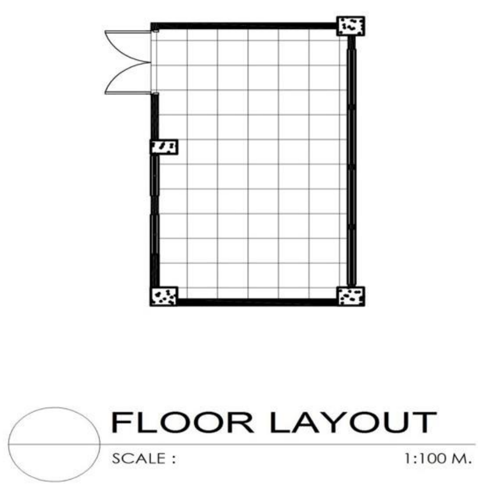

Figure 5: Floor Finish

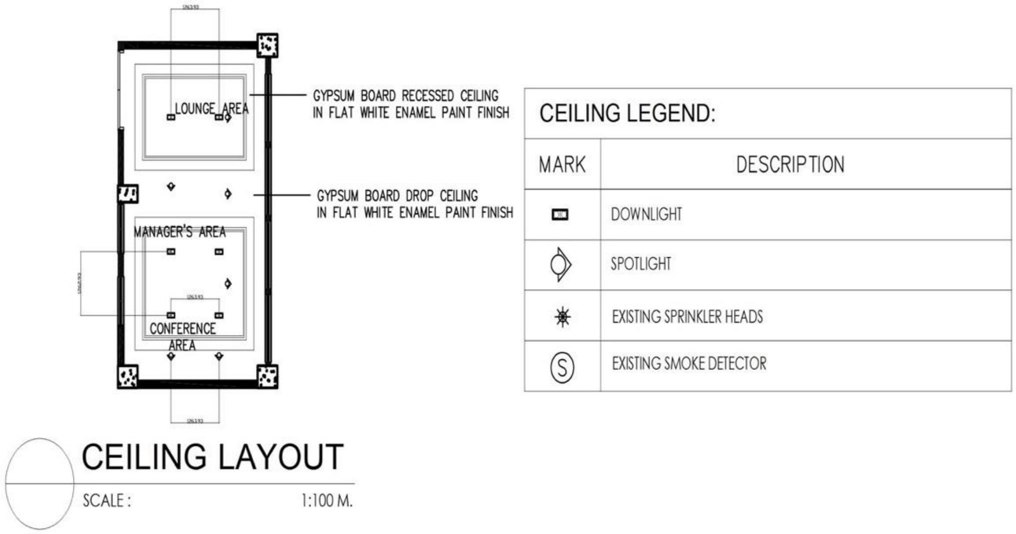

Figure 6: Ceiling Plan

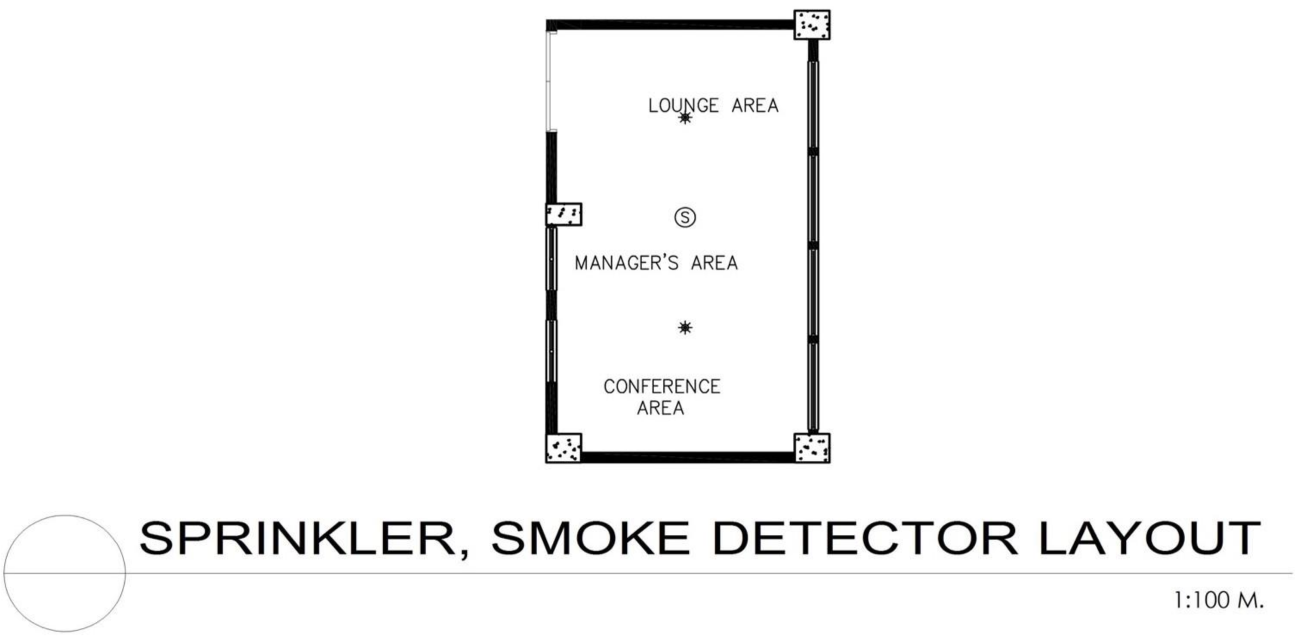

Figure 7: Smoke and Sprinkler Detector Plan Elevation

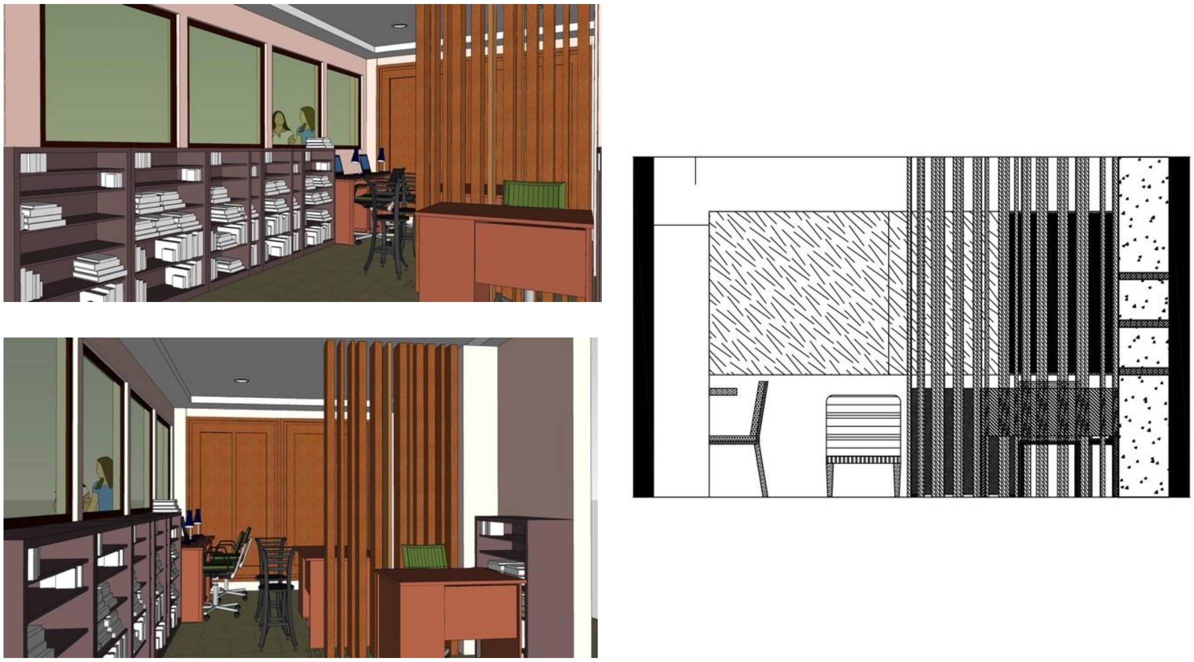

Figure 8: Perspectives

Discussion of Results

Designing for small spaces is not as easy. This task required the designer to critically analyze various principles and strategies to accommodate the needs of the users. The use of Powder Pink paint for walls created an illusion of extending the wall borders further from each other, making the room appear bigger than it really is. Flat white ceiling paint does the same technique of keeping the ceiling seem to appear higher than it is. Slatted wood partitions function as a divider of the adjacent spaces, as well as letting you see the entirety of the room. Furniture dimensions were kept to a standard minimum to avoid unnecessary usage of space without having cabinets were placed in an area wherein traffic is least likely expected to become congested by occupants and/or guests.

Findings

The study conveyed form and function in the interior design of the UCRP. Incorporated with the design principles such as aesthetics, balance, and comfort. Design analysis process and solutions were done successfully through research, study, site visit, and interpretation of the results. Design programming consist the presentation of the bubble diagram, matrix and behavioral patterns. Space planning and design considerations transform and modify the entire circulation of the office. The design translation presented on the working drawings including the furniture layout, floor finish, and elevation. Selection of applicable materials and furnishings were shown in material boards. Finally proposes design was depicted with rendered perspectives.

The interior space is designed with dilate design lines and symmetrical shapes to expand the environment. Likewise, the areas created a modern look that will provide comfort to the user. This design will not be just pleasant in the eyes of the client but also it will bring sophistication to the user as well as the visitors in the office.

Conclusions

The primary design principle implemented in the interior space of the office was based on aesthetics, balance and comfort. This was applied in the interior space of UCRP office

Color psychology was employed in the interior space of the office. In delving into what appropriate color scheme to apply to the varying areas, it is best to create interior areas suited to the attitude or moods of the users, may it be for the students, teachers, staffs and visitors. In the interior of the office, the application of high-key colors that gives an effect that relieves stress. These color schemes are most favored by the staff handling the office.

The succeeding principle applied to the study is acoustic and lighting designs that were applied in the interior space of the office. With the regards of interior design of the office, ideal acoustical furnishing materials were applied and used, giving great acoustical absorption. On the other hand, lighting design were also tackled and applied. The educational office is looking large and complex with lots of special areas such as secretary's area, manager's area, conference area, lounge area and display area. Both daylight and artificial lightings were applied in the interior design of the UCRP office. The primary objective of good lighting design for an office is to provide a well illuminated and safe working environment which provides occupants with a feeling of well-being and allows them to perform of their visual tasks. They key performance requirements refer to lighting over the activity areas, the application of the electric lighting design enhance the space that appeared attractive and interesting, construction of walls and ceilings were illuminated that contributed to theses impressions. While optimizing daylight were also considered as one of the most cost-effective options of the office design. The manager, students, staffs, teachers and visitors will take advantage of available daylight.

The succeeding principle applied to the study is comfort, basically anthropometrics and ergonomics, which were utilized in the interior space and furniture. Knowing the human relationships to the furniture that feels the environment of the space was vital. Human factors were observed such as posture, repetitive motion, fatigue and discomfort through furniture design and work space design affects the users. The "fit" of the furniture to the varying body size, the purpose and is of use were important elements in designing the office. Workspace and areas were designed to reduce risk of injury, multifunctional and movable furniture ensured is and comfort for every user. Achieving physical comfort through furniture design, reachability and appropriate accessibility to the facility of the office was given solution through ergonomics and anthropometrics.

Recommendations

Interior design is a social or interactional activity, bringing people together, it enables us to convey our ideas effectively and partake our creativity. The interior designer's task is to plan, design, and specify. Spaces are made functional, systematic and aesthetically enhanced. The recommendation of the study is to provide balance and comfort to increase the exchange of information and create a positive social environment. The research is recommended as a prototype of study that covered space programming and interior design of an educational institution that specializes with aesthetic, balance and comfort. The study established a clear manuscript consist of an ordered write-ups originating from different sources. It includes researches such as brief backgrounds, issues, topics and articles related to the study. It was analyzed and important ideas were selected and compiled. As an interior designer, giving solution to small spaces, making it look big will meet the desire of the potential client, students as well as teachers and staff.

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Assessment Subjects with CBTs and their Role in the Teaching-Learning Process among Marine Engineering Students of JBLMU-Molo for Global Competitiveness

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ABSTRACT

This study determined the assessment of subjects with CBT (Computer-Based-Training) application among marine engineering students of John B. Lacson Foundation Maritime University-Molo, Iloilo City. The participants in this study were the 133 randomly selected students who had taken subjects with CBTs. The present study employed quantitative-qualitative research design. Results reveal that: (1) Review with CBT or CBTR review is the most utilized subject because this is needed in the marine engineering licensure examinations; (2) Level of assessment of CBTs is excellent; (3) No significant differences were found in the assessment of CBTs among marine engineering students classified according to different variables as academic performance, student classification, type of students, and section. The views or ideas on CBTs in relation to teaching-learning process are discussed through qualitative inputs. Majority of the respondents agreed that using CBTs in the subject is an interactive teaching strategy stating that "they learned the importance of CBTs towards modernized strategy in teaching," "CBTs were stimulating and enjoyable," and "help the instructors to teach properly their subjects." The respondents also mentioned that CBTs improve their computer skills stating that, "This enhanced their computer skills in relation to the use of modern technology on board." Third, CBTs developed critical thinking skills. This idea is grounded on the insights given by the respondents when they shared that "CBTs allowed the students to develop their critical thinking and spontaneous interaction," and "CBTs gave them simulations about the real life situation on board."

Keywords

Computer Based Training, Interactive strategy, Assessment Introduction

Introduction

The information and communication systems have been generally used in many sectors, one is the academe or institution. This is widely used particularly by the instructors and students at universities, especially among highly developed countries (Kantabutra & Jariangprasert, 2013). In line with this study, the researchers determined the role of CBT in the different subjects of the marine engineering students of JBLFMU-Molo, Iloilo City, Philippines. This mode of determination was in the form of evaluation or assessment.

Assessment includes students' specific individual characteristics such as age, skills, and academic proficiency (Cawthon & Leppo, 2013). These variables have an effect on the assessment outcomes of the students. Assessment system is a part of the learning context, thus, flexible assessment system could relieve stress of students in the examination. Academic motivation is a robust predictor of learning outcomes and which assessment is part of the academic activity (Ariani, 2016). As mentioned by Brookhart (2004), assessment occurs at the intersection of the three teaching functions such as instruction, classroom management, and academic counseling. In the studies of Siritonghawon & Kairit (2006) and Ozlan, Koeler, & Baykal (2009), it was mentioned that the subject has influenced the measure of students' perception towards this particular computer-based teaching. This perception has affected the acceptance and success of the delivery of instruction of this particular subject, CBT (Computer Based- Teaching) subjects of marine engineering students.

Statement of the Problem

1. What is the subject that mostly utilized CBT (Computer-Based Teaching) among marine engineering students?
2. What is the level of assessment of CBT among marine engineering students as an entire group and when grouped according to the following: (a) academic performance, (b) students' classification, (c) type of students, and (d) section?
3. Are there significant differences in the subjects using CBT when categorized according to different categories such as (a) academic performance, (b) students' classification, (c) type of students, and (d) section?
4. What are the respondents' views or ideas about CBT in relation to the teaching-learning process?

Conceptual Framework

The conceptual framework of this study presents the assessment of CBT subjects among marine engineering students. This assessment is further determined in terms of the respondent-related factors such as academic performance, students' classification, type of scholarship, and section. To understand the inter-relationship of each variable clearly, the diagram is presented in Figure 1 below.

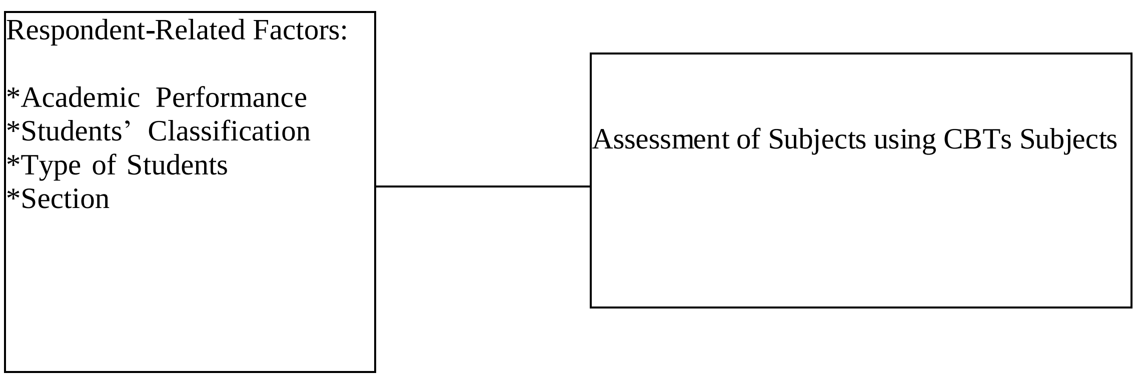

Figure 1: Assessment of the CBTs subjects

Method

The present study employed quantitative-qualitative research design by Creswell (2013). This research design is appropriate with different sample sizes, a general rule of thumb for qualitative research the samples for a single study involving individual interview usually lie at under 50. If much larger than 50 it becomes difficult to manage in terms of data collection and analysis that can be achieved. Some experts in qualitative research suggested to move further away from the traditional forms and practices (Ritchie, Lewis, Nichols, & Ormston, 2013). The respondents were distributed according to different groupings such as according to grade, students' classification, type of scholarships of the students, and section.

Furthermore, the respondents were requested to answer the Assessment Rating Scale instrument on CBT, which contained open-ended question such as "what are the ideas about latest CBT in relation to learning of the marine engineering students?." The answers of the respondents were gathered and analyzed according in order to answer the specific questions of the present study. The instrument was submitted to the experts and members of the Research Committee to determine the validity. Revision, refinement, and alignment of the items of the instrument were followed and done by the researchers. Comments and suggestions from the jurors and experts were followed in order to improve the intended instrument for this particular study. Pilot-testing was conducted only to thirty (30) students in order to gauge if the items were understood properly. Reactions from the students were gathered and revisions on the instrument were done prior to the final administration. Appropriate statistical tools used were frequency, percentage, rank, and mean.

Participants of the Study

The participants of this study were one hundred thirty-three (133) marine engineering students of the College of maritime Education of JBLFMU-Molo for this school year 2016-2017. The participants were using CBTs in their professional and allied subjects. The distribution of the participants is presented in Table 1.

Table 1: Distribution of the Participants

Category	f	%
A. Entire Group	133	100
B. Academic Performance		
80 and below	20	15.04
81-85	88	66.17
86 and above	25	18.79
C. Student's Classification		
Regular	108	81.20
Irregular	12	9.03
Special Program	14	9.77
D. Type of Students		
Company-Sponsored Students	17	12.78
Non-Company Sponsored Students	116	87.22
E. Section		
Argon	10	7.52
Barium	10	7.52
Cobalt	10	7.52
Dysium	10	7.52
Enstium	10	7.52
Flourine	10	7.52
Germanium	10	7.52
Helium	10	7.52
Iridium	10	7.52
Jetsam	10	7.52
Krypton	10	7.52
Lithium	10	7.52
Polaris	13	9.77

The utilization result indicates that subject that used CBT mostly is the CBTR (CBT review), which was ranked 1 compared to Auxiliary Machinery subject. This means that marine engineering students used the CBTR most of the time.

Table 2: Utilization of CBTs of the Subjects of Marine Engineering Students

Category	f	R	%
A. Subjects using CBT	133		100
CBTR	45	1	34
Auxiliary Machinery	37	2	28
Chemistry	30	3	22
Math	21	4	16

For the Level of Evaluation of CBT

To determine the level of evaluation of CBTs, the 5, 4, 3, 2, and 1 scale were used to determine the level of evaluation of CBT subjects among marine engineering students. For statistical analysis, the following descriptive levels and descriptions were employed:

Scale	Description
4.21 - 5.00	Excellent
3.41 - 4.20	Very Good
2.61 - 3.40	Good
1.80 - 2.60	Poor
1.00 – 1.79	Very Poor

The level of assessment of CBTs is excellent as shown in Table 3.

Table 3: Level of Assessment of CBT Subjects when Respondents were Classified according to Different Categories

Category	Mean	Description
A. Entire Group	4.24	Excellent
B. Academic Performance		
80 and below	4.23	Excellent
81-85	4.19	Very Good
86 and above	4.32	Excellent
C. Student's Classification		
Regular	4.23	Excellent
Irregular	4.48	Excellent
Special Program	4.08	Very Good
D. Type of Students		
Company-Sponsored Students	4.31	Excellent
Non-Company Sponsored Students	4.23	Excellent
E. Section		
Argon	4.47	Excellent
Barium	4.11	Very Good
Cobalt	4.37	Excellent
Dysium	4.27	Excellent
Enstium	4.59	Excellent
Flourine	4.44	Excellent
Germanium	4.39	Excellent

Helium	4.14	Very Good
Iridium	4.65	Excellent
Jetsam	3.99	Very Good
Krypton	3.90	Very Good
Lithium	3.80	Very Good
Polaris	4.06	Very Good

Scale Description

4.21 - 5.00	Excellent
3.41 - 4.20	Very Good
2.61 - 3.40	Good
1.80 - 2.60	Poor
1.00 – 1.79	Very Poor

Inferential Data-Analysis

This section of the research discusses the results pertaining to the differences of the assessment of CBTs among marine engineering students. The appropriate statistical tools used in order to determine the significant differences on CBTs are t-test and ANOVA (Analysis of Variance) when the respondents are grouped to two and three or more categories.

Differences in the Level of Assessment of CBT

Table 4 below shows the t-test results when the respondents were categorized according to the category type of students. The result shows that there were no significant differences in the assessment of CBTs among marine engineering students either the respondents were classified company-sponsored or non-company sponsored students. This simply means that the respondents' assessment on CBTs was not influenced by the type of scholarship.
The data are shown in Table 4.

Table 4: t-test Results in Assessment of CBTs according to Type of Students

Category	N	Mean	T	df	Sig.
Type of Students					
Company-Sponsored	17	4.3118	.501	131	.617
Non-Company Sponsored	116	4.2276			

$P<.05$

Analysis of Variance in Assessment (ANOVA) of CBTs among Marine Engineering Students

Analysis of Variance in Assessment (ANOVA) of CBTs when grouped according to average grade, type of student, and section. Table 5 shows that there are no significant differences on their assessment when the respondents were grouped according to three or more categories such as average grade, students' classification, and section with the results of .523, .152, and .111 at two-tailed level of significance. The data are shown in Table 5.

Table 5: ANOVA of the Assessment on CBTs when the respondents were categorized according to Academic Performance, Students' Classification, and Section

Variable	Degrees of Freedom			Sum of Squares			Mean Square s		F	Sig
	Between Groups	Within Groups	Total	Between Groups	Within Groups	Total	Between	Within Groups		
A. Academic Performance	2	128	130	13.345	31.467	44.81	.334	.342	.975	.523
B. Students' Classification	2	128	130	19.944	33.944	53.14	.480	.369	1.30	.152
C. Section	12	118	130	718.270	1207.29	1925.56	17.957	13.123	1.37	.111

P<.05

Qualitative Analysis

The views or ideas on CBTs in relation to teaching-learning process by the marine engineering students are discussed in this section. Majority of the respondents agreed that using CBTs in the subject is an inter- active teaching strategy. This is supported by sharing the following statements: "learn the importance of CBTs towards modernized strategy in teaching", "CBTs are stimulating and enjoyable", and "help the instructors to teach properly their subjects."

The respondents mentioned also that CBTs improve computer skills. This statement is supported by the remarks of the respondents "CBTs enhance the students' computer skills in relation to how to use the modern technology on board."

The third is CBTs develop critical thinking skills. This idea is grounded on the insights given by the respondents when they shared that "CBTs allow the students to develop their critical thinking and spontaneous inter-action", and "CBTs give them simulations about the real life situation on board."

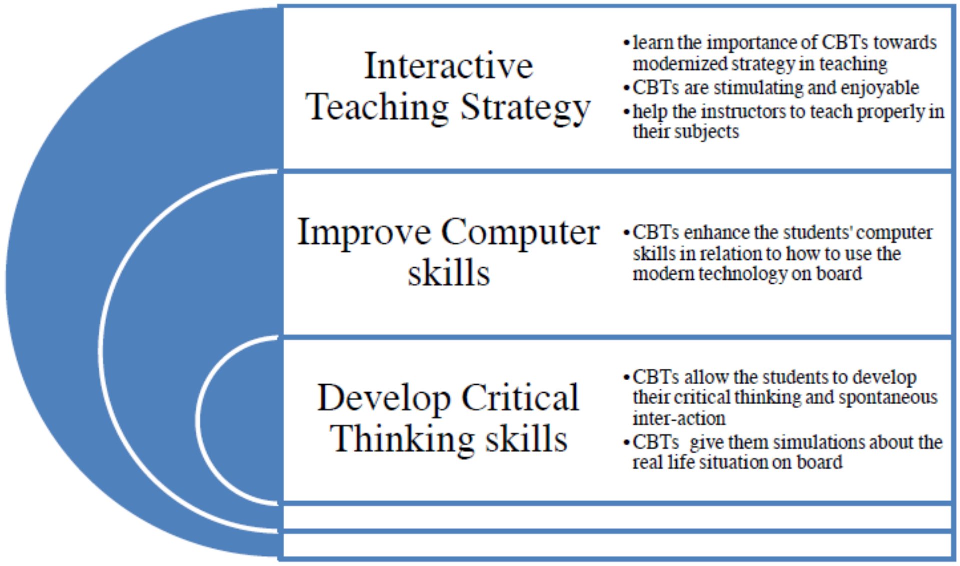

Figure 2: Views and ideas of the respondents on CBTs in relation to teaching-learning process

Conclusions

Based on the findings of the present study, the following conclusions were drawn:

1. The review with CBT or CBTR review is the mostly utilized subject because this is needed in the marine engineering licensure examinations. Most of the areas in the marine engineering exams are computer-based, therefore, this may help them to be familiar with the system of examinations given by MARINA.

2. The level of assessment of CBTs is excellent. This shows that the marine engineering students recognize the role of CBT in the delivery of instruction.

3. The no significant differences in the assessment of CBTs among marine engineering students as classified according to different variables imply that the differences in the assessment of CBT is not influenced by the academic performance, students' classification, type of students, and section. Maybe there are other factors that may influence the differences in the assessment of CBTs.

4. CBTs are considered as inter-active teaching strategies can improve computer skills of the students and can develop their critical thinking skills. The importance and significant role of CBTs in the maritime instruction are required by the STCW, which supported in the results of the present study.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were advanced:

1. The other subjects should also utilize the CBTs so that learning will be maximized.
2. The assessment and evaluation of subjects utilizing CBT should be done regularly in order

to gather feedback and enhance the learning outcomes.
3. The researchers need to suggest other variables that might influence the differences in the assessment of CBTs.
4. The role and importance of CBTS should be emphasized always in the different subjects in order to determine the extent of CBTs.
5. The researchers suggest parallel studies to determine other variables that may influence the level of assessment of CBTs and its implication in the teaching-learning process of the marine engineering students.

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English Proficiency of Teachers and Students: Basis for Developing an Intervention Program

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ABSTRACT

The study aims to determine the English proficiency level of teachers and students along the four domains: listening, reading, speaking, and writing. It aspires to determine also how significant are the differences among the four domains of English proficiency both of the teachers and students and how significant is the relationship between their English proficiency level. A validated questionnaire was designed and administered to selected teachers and students. Results and findings of the study entail that students' listening, reading, and speaking skills are below average, while writing is low. However, teachers' proficiency level along the four domains is average. Students got highest in reading and lowest in speaking, while teachers' listening and writing are higher than reading and speaking. But, between listening and writing, teachers are more proficient on writing. On the other hand, students' proficiency on the four domains is almost the same as revealed by the Scheffe's test. In addition, results revealed no significant relationship existed between teachers' and students English proficiency along listening, reading, and writing, while there is significant relationship in speaking. Based on findings, an action plan for both teachers and students is recommended to help improve their English proficiency level.

Keywords

English Proficiency, Listening, Reading, Speaking, and Writing

Introduction

English proficiency today is very important. It may sounds not being nationalistic, but we should be farsighted and not narrow-minded about this issue. We have to learn and sharpen our English competence because it is considered as the universal language; for which it is understood by almost all countries around the world (San Luis, 2010). This language is spoken by most people as their second language. First, it is a way of communication in business, negotiations and especially in academics. It plays a vital role in the basic education, specifically to speaking and writing (Kumar, 2013). English proficiency must be considered as an additional skill. In the real world, a country needs to build awareness, friendship and collaborate with other countries as well. It is the government's responsibility to provide good quality of education to be able to work and communicate in a wider and competitive world (Alave, 2012).

As English language proficiency is a key to success in whatever goals students may be in the future, therefore, it is essential for students as early as elementary to be proficient in oral and written English at any rate, it will be precondition for almost any kind of employment they want to be in, in the millennium (Romulo, 2010). Sebastian (2012) states that the study of English aspires to enlarge the competency of students in both oral and written communication that will help them meet the demand of the English language in different communicative circumstances.

Juon and Mirano, (2013) mentioned that students' scores on the annual international student performance tests in math and science are some of the lowest in the world. Some education policy specialists consider that the problem lies in the language being used for instruction: English. If students' math and science scores are poor, their performance in English is even worse

Teachers are responsible in improving students' English proficiency. The government is taking good actions in improving the quality of education. DepEd is conducting the Test of English Proficiency for Teachers (TEPT) which will specifically measure teachers' aptitude on the structure of the English language, reading comprehension, written expression and grammar. The result of the test will guide policy makers to execute viable programs. Improving English proficiency cannot be done overnight or just by a political leader. It calls participation among all sectors in the society.

However, many say that Philippines, as an English speaking country, has been deteriorating. The decline of our proficiency in English is something we should avoid. To cite one, it is true that in some classroom situation, many teachers corrected mispronunciation of their students, but many teachers also mispronounced words. Filipinos, despite the loss of enthusiasm in the acquisition and adaptation of a modern English language, strive hard to surpass or excel in all the subjects that have something to do with English communication since the target language is used as medium of instruction in the Philippines. English proficiency is very important for every teacher and in many ways especially when looking for good academic achievement in global environment or local setting.

This has inspired the researchers to conduct a study focusing on the English proficiency of teachers and students.

Statement of the Problem

This study aspired to determine the English proficiency of teachers and students at Paliparan National High School, City Division of Dasmariñas.

Specifically, it sought to answer the following questions:

1. What is the English proficiency level of teachers and students at Paliparan National High School, City Division of Dasmariñas in terms of:
   1.1. Listening
   1.2. Speaking
   1.3. Reading
   1.4. Writing
2. How significant are the differences among:
   2.1. Components of the English proficiency test of the teachers
3. Components of the English proficiency test of the students
4. How significant is the relationship between English proficiency of teachers and students?
5. What intervention program can be designed to improve the English proficiency of teachers and students?

Paradigm of the Study

Figure 1 shows the different variables in this study. The box on the upper left contains teachers' and pupils' English proficiency along listening, speaking, reading and writing skills. The box in the middle comprises the test of significant difference among the four domains of English proficiency of teachers and students and significant relationship between English proficiency of teachers and students. The box on the right holds intervention program to improve the English proficiency of teachers and students.

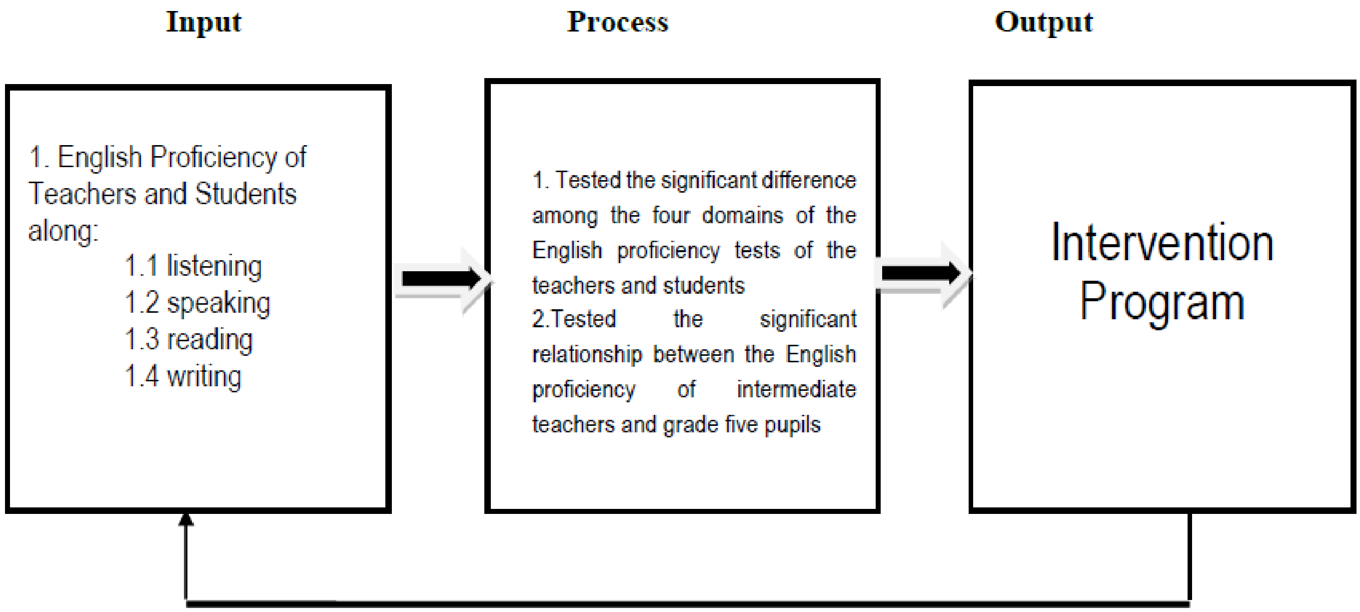

Figure 1 the different variables in this study

Methodology and Research Design

The descriptive - correlational method of research was used in this study. This method of research is a fact-finding study with adequate and accurate interpretation of the findings. It describes, "what is" and it also illustrates with emphasis on what actually existed such as current conditions, practices, situations or any phenomena. Since the present study or investigation is concerned mainly with the English proficiency of teachers and students and the significant relationship between the teachers' and students' English proficiency, the descriptive correlation of research is the most suitable method to be used.

Scope and Delimitation of the Study

This research work focused on the analysis of the results of the DepEd Standardized English Proficiency Tests administered to teachers and students in district I of Dasmariñas. The study attempted to determine the English proficiency level of the respondents along listening, speaking, reading and writing skills. There were 42 intermediate teachers and 200 grade five pupils who served as respondents. The teacher-respondents were limited to intermediate English teachers from sixth grade.

The researcher anticipated that though, she was allowed by the authorities to conduct the English Proficiency Test among the teachers, there were maybe some of the teacher-respondents who were not be able to do it because of some unavoidable circumstances. The researcher understood and gave respect.

The identities of the teacher-respondents will not be exposed even though the district supervisor and principals gave their consents to the researcher for asking their help. This is a favorable way of protecting the integrity of the teacher-respondents especially if the results will not be good enough. However, if the results suggest plan of actions to assist these teachers in improving their weaknesses, the school in general will surely design and implement appropriate interventions.

In administering the test for teachers and students in listening domain, the researcher read aloud the story and asked questions afterwards. On the other hand, the researcher should have had recorded her voice while reading the story and the questions. The recorded voice should be played so there will be no variations during the administration while conducting it one at a time in the twelve schools in the district I of Dasmariñas.
The use of standard scores instead of transmutation tables for two groups of different number of items is further suggested for more accurate result.

Significance of the Study

The possible outcomes of this study will be favorable to the following:

Researcher. The researcher will obtain sufficient data and clear analysis from the study about how the English proficiency of teachers and pupils may somewhat affect the academic achievement of pupils in English. This may lead her to plan for appropriate interventions to improve the English proficiency of both the teachers and the pupils so to strengthen their academic achievement. The result of the study will help the researcher to evaluate her own English proficiency level. This may also be of great motivation to the researcher to continuously learn and be proficient in the use of English so to inspire her peers and the pupils.

Students. If the educators are proficient in English, it is also important that the students are likewise capable of using the English language well. From this study, pupils will be able to realize how significant is being proficient with regards to their listening, speaking, reading and writing skills toward high academic achievement in English. They will be motivated also to improve their English language skills for them to be excellent in the subjects wherein English is the medium of instruction. This may lead also the pupils who are already proficient in English to mentor their peers.

Teachers. Responding to the growing need to foster communicative abilities in English, many Asian countries where English is taught as a foreign language has recently introduced English at the elementary school level. However, the majority of elementary school teachers in such countries might not be adequately prepared to teach English. This situation also happens in our country. The results of this study will help the teachers to evaluate their own English proficiency level and teaching skills in listening, reading, speaking, and writing. This will encourage them to help themselves in gaining higher English proficiency by all means so to become effective and efficient instruments in improving pupils' English proficiency. On the other hand, teachers with low English proficiency may push themselves to pursue their studies and attend to different seminars and trainings related to English proficiency. In that way, there will be no more hindrance on their ways to excellence.

Administrators. The results of this study will also be helpful to school administrators in planning, organizing, directing, and evaluating the teaching-learning processes which are very essential in achieving high English proficiency level of teachers and pupils. This may lead the administrators to conduct in-service trainings and workshops especially for those teachers who are not doing well in English language. The administrators will be able to design plan of actions to assist both the teachers and the pupils in improving English proficiency and achieving excellence in academic subjects particularly in English. This may be a guide also for the administrators in accepting applicants considering the level of English proficiency as very important factor in the learning aspect of the pupils.

Community. Quality education should equip children with better capabilities to cope with the demands of their future careers or the market place. Current efforts are focused on improving English proficiency because the jobs that are feasible made it clear that English proficiency is a distinctive factor. This research study aspires to improve and enhance the English language skills of the people in the community which is very timely and vital to create a globally competitive society. It is possible that being proficient in the very in demand language will lead to the improvement of the quality of life and provide better chances in achieving productive careers and better jobs that world is ready to give in. Better English speaking people can surely build a progressive environment.

Curriculum Developers. The results of this study will be used by the curriculum developers in developing and modifying the aspects of the curriculum which concentrate on developing English proficiency of teachers and even the learners. In that way, they will not consume much time in designing the curriculum.

Policy Makers. The policy developers will obtain data from the study which can be considered in the formulation of policies relative to English proficiency of teachers and pupils and the academic achievement in English.

Future Researchers. They will be inspired to conduct future similar study by validating and negating the findings of this research. This may also serve them as a rich source of information as they investigate on the same topic with similar proposal and framework.

Definition of Terms

The following terms are defined operationally and conceptually as used in this study.

Academic. It is a characteristic of school, especially one of higher learning which excessively concerned with intellectual matters and lacking experience of practical affairs.

English Proficiency. English proficiency is the ability to speak, read and/or write in English. To be considered truly proficient, one should have advanced abilities in all three areas of communication. (http://wiki.answers.com/Q/What_is_English_Proficiency)

English Proficiency Test. Transparent Language has provided this English test as a way for English language learners to evaluate their English proficiency. We have based this test on the standardized English vocabulary and English grammar that you would find in any English language learning material, so that this proficiency test can measure your command of the English language regardless of your English language learning background. (http://www.transparent.com/learn-english/proficiency-test.html)

Listening. It is the process of understanding, interpreting, and evaluating spoken language in a variety of situations.

Proficiency. It is the skillfulness in the command of fundamentals deriving from practice and familiarity; practice greatly improves.

Reading. It is the process of interpreting and evaluating written language, symbols and text with understanding and fluency.

Speaking. Engage in oral communication in a variety of situations for an array of purposes and audiences.

***Writing*.** Engage in written communication in a variety of forms for an array of purposes and audiences.

REVIEW OF RELATED LITERATURE

English Proficiency

English language teachers in International schools are faced with the task of not knowing which aspect of English should be teaching: listening, speaking, reading or writing They are given the assignment of addressing all of these subjects without a clear understanding of the specific needs of their students. Much of the research in the area of English language acquisition focuses on best practices in teaching English.According to the study of Canales (2008), language proficiency is a coherent orchestration of discrete elements such as vocabulary, discourse structure and gesture to communicate meaning in a specific context. Language usage to users is a dynamic and can achieve communicative competence.

Hernandez (2006) believes that the clear indicators of English performance and proficiency are when the students can read, write and speak the language fluently at a given situation. It is unclear why language preference appears unreliable, but perhaps part of the reason is that language is as much a political concept as it is a cultural one. The popularization of English in many countries (e.g., the Philippines) stemmed from colonization and forcible occupation. Many have argued that the English language was used as a weapon to erode Native American culture and sovereignty. In a different vein, some Asian monolingual speakers report that they prefer to speak English on surveys, even when they cannot, because they would *like* to speak English (Kagawa, 2008). Hence, there may be great heterogeneity in how individuals interpret the questions related to language preference.

According to John & Ehow (2011), problems of English language derived from many different factors in different environments such as school resources, class size, quality of teachers, and the school attendance of learners. Murray & Christison (2010) observed that many students think English is only a school subject and they don’t see its significance for their prospective employment to work with multinational or national companies where English is employed. Dohilio (2012) concluded on her research that intermediate teacher-respondents in Dasmariñas II Central School are neither proficient nor competent to teach English. It was clearly shown from the result of her study wherein the average mean of the grade V teacher- respondents who took the English proficiency test was 46.16 and interpreted as below average, with a standard deviation of 32.11. The grade six teacher-respondents who took the English proficiency test got an average mean of 47.18 and also interpreted as below average, yet it has higher standard deviation of 92.31. It showed therefore that there was a great dispersion or wide range of scores compared to the scores of grade V teachers. However, the total mean from both levels was 46.74 and interpreted as below average.

Listening

Many people are poor listeners, even in everyday life. They tend to listen and think about something else at the same time. This happens even more frequently when people are in conflict. Rather than carefully attending to what the other person has said, many people think about their response while the other person is talking.

Such poor listening makes good communication almost impossible. No matter how much care one person or group takes to communicate their concerns, values, interests, or needs in a fair, clear, unthreatening way, if the listener is not willing to receive that information in that way, the communication will fail.

As concluded in the study of Chand (2007), listening plays an important role in language learning and is possibly the most essential language skill. Studies of listening focused on the pedagogical and assessment aspects of listening, such as listening comprehension and critical listening.

The issues of teaching and learning the listening skill have been particularly concerned by a lot of researchers. Jian (2005) paid much attention to teaching listening in a communicative classroom. She showed the disadvantages of traditional listening teaching and discovered some communicative ways to teach listening from her experience. Djiwandono (2006) indicated a technique for teaching listening comprehension that is a combination of cooperative and strategic learning. According to Vandergrift (2004), listening skills are difficult to observe in a learning environment and equally difficult to define. Moreover, learning listening skills can be very stressful experience for students' learning a second language simply because they are often unable to process information quickly enough to understand (Goh & Taib, 2006).

Apart from expecting basic listening comprehension skills from the students, the study skills teachers are expected to have basic listening skills in order to learn what was being taught in the course. Teachers should first all be able to listen, have that capacity to listen to a 50-minute lecture, or a one-hour lecture (Sahil, 2005).

Speaking

Most researchers are sure that, since speaking is one of the four major skills necessary for effective communication in any language, speaking skills shouls be developed along with the other skills, so that these integrated skills will enhance the students' ability to communicate. Effective communication by means of speaking usually creates a number of benefits for both speakers and business organizations.

A number of researchers investigated this field and came to the conclusion about students' low level of speaking ability and their inability to speak confidently and fluently. One among the many reasons to take into consideration might be the lack of confidence and anxiety about making errors as stated by Trent (2009) and in other related studies. Most college students are not confident in their ability to learn to speak; teachers must overcome their reluctance in order to change this situation.

MacIntyre (2007), drew attention to the learner's decision to voluntarily speak the English language when the opportunity arises, even as basic language skills are being acquired. Nevertheless, despite the emphasis on communication in modern language pedagogy and the well- accepted view that learners require practice in speaking in order to learn, some language learners habitually choose to remain silent. In addition to that, some researchers observe that not enough time is given to various exercises and opportunities for the improvement of speaking ability. Students often complain of scolding, and discouraging by their teachers for not speaking correctly. Although both teachers and students are responsible for the poor speaking ability of the latter, the teachers, who have the professional knowledge and skills, bear a greater responsibility.

Zaremba and Zhang hypothesize that, of the four macro English skills, speaking seems to be the most important skill required for communication (Zaremba, 2006). Students who study English as a foreign language usually have limited opportunities to speak English outside the classroom (Zhang, 2009) and also limited exposure to English speakers or members of the international community. This might be one reason for teachers to provide more situations and activities for students to strengthen their speaking competence. In addition, there are a number of factors relating to speaking skills to be considered for effective English speaking performance. Pronunciation, vocabulary, grammar and collocations are singled out as important factors to be emphasized in building fluency for EFL speakers. Providing students with a variety of situations and frequent speaking tasks plays a significant role in the improvement of students' fluency when

speaking (Morozava, 2013). She also pointed out that linguistic skills such as familiarity with grammatical structures, vocabulary, and phonetics should be emphasized by the teachers in the classroom.
Research consistently supports the notion that oral language or speaking skills, while not sufficient on its own, provides an essential foundation for the development of reading and writing skills in children (National Institute for Literacy, 2008), adults, and English-language learners (August & Shanahan, 2008). “Using words expressively requires a deeper level of word knowledge… and the ability to use a word in speaking or writing demonstrates true ownership of the word” (Moats, 2009).

Reading

Reading is a crucial form of communication through which we get most of the information required in teaching and learning situations and in everyday life. It has also been described as a process of translating alphabetical symbols into a form of language from which the native speaker has already derived the meaning. The ability to read is a crucial skill for information retrieval (Dike, 2006).

Teachers must take responsibility for solving these problems. Folaranmi (2007) believed that the government should involve teachers in working out effective ways of making the teaching profession viable for serving teachers and attractive to incoming ones, in order to address the problem of student poor reading culture. Akinbade (2007) stated that a good environment is necessary to promote effective learning in primary schools.

Jhohon (2011) mentioned that reading daily, reading deeply, and reading widely are the few important skills of reading from which we can enhance our understanding of passage, ameliorate our vocabulary, correct our grammatical mistakes, increase our thinking capacity and helps in improving or learning any part of a language. The more you read the one thing you realize the key to doing well in the examination, and the key to perform or present any task in a well- equipped way.

In fact, according to Aikat (2007), past research has shown a positive relationship between people’s reading habits and their active involvement in other endeavors. Aikat also states that reading plays a very important role in enhancing the minds of young individuals, developing their “capacity for focused attention” as well as their “imaginative growth”.

However, "Imaginative growth" as well as a capacity for attention is only a few of the benefits of reading and literacy. Another possible benefit may be the development of writing skills. In her work *Theories of* Literacy, Stewart (2006) explained the relationship between reading and writing, stating that they are two skills that are “so interrelated that one cannot be understood without the other’’ so that students are able to “draw on their skills in one to develop the other as they build proficiency in both”.

In summary of the data gathered, the researchers were able to conclude that the main reason for teenagers' lack of interest in reading is due to the fact that they "receive little encouragement and guidance in their choice of books", and resort to watching television or playing online games instead.

This lack of interest in reading is an issue that should be duly addressed, as a research conducted by Gaona and Gonzalez (2010) further affirmed the positive relationship between reading habits and academics. The researchers predicted that those who read more and those who visit the library often would end up having better results in academics.

In most, if not all of the research studies cited, the researchers found that there was in fact a positive relationship between reading and students’ academic performances in various subjects.

Writing

Though we live in an era where print media is faltering, and people hand write and mail letters out of novelty rather than necessity, writing skills are still important. In fact, it can be argued that they are even more important now than ever. It's always been important for professionals and academics to use proper grammar and communicate well, but now, it's increasingly important for more people to have good writing skills.

Good writing skills are essential for effective communication. Learning to write well takes time and practice. One way to hold students accountable for their reading progress is to ask them to document the type and quantity of reading they do in their logs as concluded by Herrero (2007) on her investigation. Colorado (2007) stated that there is a very important correlation between writing and language development. As students develop language skills, they often develop listening skills first (lots of input they can understand), then speaking (they begin to formulate their ideas in the second language), then reading (they can understand the sound/symbol correspondence of the new language and make sense of the words) and finally writing (they have enough language to express their own ideas in writing). This is not true for 100% of language learners, but it is true for the majority. Why is writing often the last skill to emerge? It almost seems that reading would be more difficult because the student needs to sound out words and understand the author's message. It would seem writing might be easier because students are sharing their own ideas already in their heads and simply putting them on paper. However, writing requires a lot more processing of language in order to produce a message.
It is claimed that the genre approach provides students with the confidence to handle "real world" writing as it improves students' attitudes and desire toward language learning (Swami, 2008).

METHODOLOGY

This chapter gave the details of research design, research locale, samples and sampling techniques, instrumentation, procedure and the statistical analysis of the data.

Research Design

The descriptive - correlational method of research was used in this research. This method of research is a fact-finding study with adequate and accurate interpretation of the findings. It describes, "what is" and it also illustrates with emphasis on what actually existed such as current conditions, practices, situations or any phenomena. Since the present study or investigation is concerned mainly with the English proficiency of teachers and students and the significant relationship between the teachers' and students' English proficiency, the descriptive correlation of research is the most suitable method to be used.

Respondents

The subjects of this study were the 200 students or around 10 percent of its total population selected randomly and 42 intermediate teachers or 50 percent of its total population from the twelve schools in the district I of Dasmariñas.

The teacher-respondents answered 100-item DepEd Standardized Proficiency Tests in English. The pupil-respondents answered 80-item DepEd Standardized Proficiency Tests in English.

Research Instrument

For the purpose of investigation, the researcher used the following:

1. DepEd Standardized English Proficiency Test for teachers
   This test is prepared by the English Supervisors from Region IV-A CALABARZON and administered to all the teachers who attended the regional training of trainors from the regional level to division down to district level. This test is consisted of 100 items or 25 items in each of the fourdomains listening, speaking, reading and writing)

2. DepEd Standardized Achievement Test in English for grade five pupils
   This test is prepared by the school/district key teacher in English and the test was already administered in the district and division for three years now. This test is consisted of 80 items or 20 items in each of the four domains (listening, speaking, reading and writing).

Table 1: Transmutation Table for 20-Item Test

Scores	*Equivalent*	Scores	*Equivalent*	Scores	*Equivalent*
20	*100*	13	*83*	6	*65*
19	*97*	12	*80*	5	*63*
18	*95*	11	*77*	4	*60*
17	*93*	10	*75*	3	*57*
16	*90*	9	*73*	2	*55*
15	*87*	8	*70*	1	*53*
14	*85*	7	*67*	0	*50*

Table 1 is an instrument used in determining the equivalent rating of each score in the 20-item test administered to grade five pupils in each of the four domains in the English Proficiency Test

Table 2 Transmutation Table for 25-Item Test

Scores	*Equivalent*	Scores	*Equivalent*	Scores	*Equivalent*
25	*100*	16	*82*	7	*64*
24	*98*	15	*80*	6	*62*
23	*96*	14	*78*	5	*60*
22	*94*	13	*76*	4	*58*
21	*92*	12	*74*	3	*56*
20	*90*	11	*72*	2	*54*
19	*88*	10	*70*	1	*52*
18	*86*	9	*68*	0	*50*
17	*84*	8	*66*		

Table 2 is an instrument used in determining the equivalent rating of each score in the 25-item test administered to intermediate teachers in each of the four domains in the English Proficiency

Table 3 Criterion Reference Table for Scoring the English Proficiency Test of Teachers and Pupils

Intermediate Teachers	**Grade Five Pupils**	**Description**
91 and above	91 and above	Superior
88 - 90	88 - 90	Above Average
82 - 87	82 - 87	Average
75 - 81	75 - 81	Below Average
74 and below	74 and below	Low

Table 3 is an instrument used for evaluating the English proficiency level of intermediate teachers and grade five pupils. It was based on the grade point averages from the permanent record.

Data Gathering Procedure

First, the researcher secured a letter of approval from the City Division of Dasmariñas to pursue the present study in the twelve schools in district I which were conducted through channel.

The letter was presented for signing to the school principal in each school followed by the public school district supervisor and lastly to the office of City Schools Division Superintendent, Dr. Mabuela S. Tolentino.

Upon the approval of the letter of permission, the researcher immediately scheduled the English Proficiency Test to the teacher and pupil respondents with the approval of the principal and in cooperation with the teachers concern. In administering the test for teachers and pupils in listening domain to each of the twelve schools in the district I of Dasmariñas, the researcher read aloud the story then asked questions afterwards.

The researcher tallied and tabulated the responses of the retrieved copy of the English Proficiency Tests.

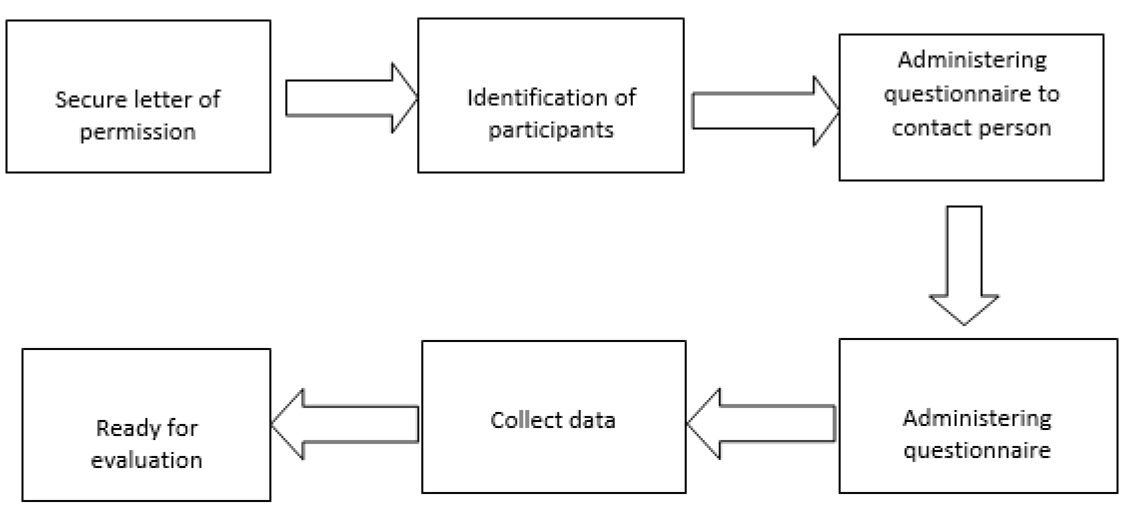

Figure 2: Statistical Treatment of Data

The research is basically an analysis of the data that were obtained. These data were presented, interpreted, and analyzed with the use of frequency counts, ranks, and percentages. Tables were used to present the data which facilitate understanding.

1. To determine the English proficiency level of teachers and students along the four domains, the mean and standard deviation were computed.

Mean. This is regarded as the most frequently and most reliable measure of central tendency. The mean of a set of numbers is simply their average of the sum of scores.

Formula:

$$X = \frac{X}{N}$$

Where:

X stands for mean

X scores

summation

N number of cases or scores

Standard Deviation. It is the most popular measure of variability or the differences among scores. It measures how much subjects differ from the mean of their group. The larger the SD the more spread out the subjects are.

Formula:

$$SD = \frac{d}{N}$$

Where:

stands for the sum

d distance of a score from the mean

2. To determine the significant differences among the four components of English proficiency tests of the teachers and students, the following were used:

F-Test or ANOVA for correlated groups - differences among the four components of English in the English proficiency tests

ANOVA:

$$TSS = X - \frac{(X)}{N}$$

Where: = (Xa) + (Xb) + (Xc)

= (Xa) + (Xb) + (Xc)

Sum of Squares Between – Column (SS)

$$SS = \frac{1}{\text{No. of Rows}}(\text{sum of each column}) - \frac{(\;X)}{N}$$

Sum of Squares Within – Column (SS)

$$SS = TSS - SS$$

Mean Sum of Square Between (MSS)

$$MSS = \frac{SS}{dfb}$$

Where: $dfb = \frac{\text{no. of column} - 1}{3 - 1}$

Mean Sum of Squares Within (MSS)

$$MSS = \frac{SS}{df}$$

Where: df = (row * column) - C

Scheffe's Test

$$F = \frac{(X - X)}{SW \frac{(N + N)}{N \quad N}}$$

Where:

F = Scheffe's Test

X = Mean of group 1

X = Mean of group 2

N = Number of samples in group 1

N = Number of samples in group 2

SW = Within mean squares

3. To determine the significant relationship between the teachers' and students,' English proficiency, Chi- square was used with the formula:

Chi – Square :

$$X = \frac{(O\text{-}E)}{E}$$

X = Chi – square

O = observed frequencies

E = expected frequencies

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the findings, interpretation and analysis of data collected relevant to the English Proficiency of teachers and students. The results of the study are presented in order by which specific questions were raised in Chapter 1.

1. What is the English proficiency level of the teachers and students in the district I of Dasmariñas in terms of:
    - Listening
    - Speaking
    - Reading
    - Writing

2. How significant are the differences among:
    - Components of the English proficiency test of the teachers
    - Components of the English proficiency test of the students

3. How significant is the relationship between English proficiency of teachers and students?

4. What intervention program can be designed to improve the English proficiency of intermediate teachers and grade five pupils?

English Proficiency Level of Intermediate Teachers and Grade Five Pupils along the Four Domains The frequency and percentage distribution of the proficiency level in English of the teachers as to listening skill is presented in Table 1.

Table 1 Frequency and Percentage Distribution of the Proficiency Level in English of the Teachers of Dasmariñas District I as to Listening

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	2	4.76
88 - 90	Above Average	8	19.05
82 - 87	Average	26	61.9
75 - 81	Below Average	6	14.29
74 and below	Low	0	0
Total		**42**	**100**
Mean and Description		**85 = Average**	
		SD = 3.3	**Heterogeneous**

Table 1 shows the English proficiency of teachers as to listening. Data shows that 2 or 4.76 percent of the respondents belongs to superior level, 8 or 19.05 percent belongs to above average,

26 or 61.9 percent belongs to average and 6 or 14.29 percent of the teacher-respondents belongs to low level. The mean of 85 is obtained. This implies that generally, the English proficiency level of the teachers in listening skills is average while the computed standard deviation of 3.3 shows small dispersion from the mean.

The result is supported by the idea that apart from expecting basic listening comprehension skills from the students, the study skills teachers are expected to have basic listening skills in order to learn what was being taught in the course. Teachers should first all be able to listen, have that capacity to listen to a 50-minute lecture, or a one-hour lecture (Sahil, 2005).

The frequency and percentage distribution of the proficiency level in English of the teachers as to speaking skill is presented in Table 2.

Table 2 Frequency and Percentage Distribution of the Proficiency Level in English of the Teachers of Dasmariñas District I as to Speaking

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	0	0
88 - 90	Above Average	2	4.76
82 - 87	Average	31	73.81

75 - 81	Below Average	9	21.43
74 and below	Low	0	0
Total		**42**	**100**
Mean and Description		**83 = Average**	
		SD = 2.24 Homogeneous	

Table 2 shows the English proficiency of teachers as to speaking. Data shows that 2 or 4.76 percent of the respondents belongs to above average level, 31 or 73.81 percent belongs to average and 9 or 21.43 percent belongs to below average level.

The mean of 83 is obtained. This entails that generally, the English proficiency level of the teachers in speaking skills is average while the computed standard deviation of 2.4 demonstrates small dispersion from the mean.

MacIntyre (2007) suggests that although both teachers and students are responsible for the poor speaking ability of the latter, the teachers, who have the professional knowledge and skills, bear a greater responsibility.

The frequency and percentage distribution of the proficiency level in English of the intermediate teachers as to reading skill is presented in Table 3.

Table 3 Frequency and Percentage Distribution of the Proficiency Level in English of the Intermediate Teachers of Dasmariñas District I as to Reading

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	0	0
88 - 90	Above Average	2	4.76
82 - 87	Average	29	69.05
75 - 81	Below Average	11	26.19
74 and below	Low	0	0
Total		**42**	**100**
Mean and Description		**83 = Average**	
		SD = 3.33 Heterogeneous	

Table 3 shows the English proficiency of teachers as to reading. Data shows that 2 or 4.76 percent of the respondents belongs to above average level, 29 or 60.05 percent belongs to average and 11 or 26.19 percent belongs to below average level.

The mean of 83 is obtained. This means that generally, the English proficiency level of the teachers in reading skills is average while the computed standard deviation of 3.33 shows small dispersion from the mean.

This suggests that teachers must take responsibility for solving these reading problems of the pupils. Folaranmi (2007) believed that the government should involve teachers in working out effective ways of making the teaching profession viable for serving teachers and attractive to incoming ones, in order to address the problem of student poor reading culture.

The frequency and percentage distribution of the proficiency level in English of the intermediate teachers as to writing skill is presented in Table 4.

Table 4 Frequency and Percentage Distribution of the Proficiency Level in English of the Teachers of Dasmariñas District I as to Writing

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	3	7.143
88 - 90	Above Average	5	11.905
82 - 87	Average	34	80.952
75 - 81	Below Average	0	0
74 and below	Low	0	0
Total		**42**	**100**
Mean and Description		**85 = Average**	
		SD = 2.87 Homogeneous	

Table 4 shows the English proficiency of teachers as to writing. Data shows that 3 or 7.143 percent of the respondents belongs to superior level, 5 or 11.905 percent belongs to above average and 34 or 80.952 percent belongs to average level.

The mean of 85 is obtained. This illustrates that generally, the English proficiency level of the teachers in writing skills is average while the computed standard deviation of 2.87 shows small dispersion from the mean.

It's always been important for professionals and academics to use proper grammar and communicate well, but now, it's increasingly important for more people especially teachers to have good writing skills (Herrero, 2007).

The frequency and percentage distribution of the proficiency level in English of the students as to listening is presented in Table 5.

Table 5 Frequency and Percentage Distribution of the Proficiency Level in English of the Students of Dasmariñas District I as to Listening

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	9	4.5
88 - 90	Above Average	8	4
82 - 87	Average	50	25
75 - 81	Below Average	74	37
74 and below	Low	59	29.5
Total		**200**	**100**
Mean and Description		**77.72 = Below Average**	
		SD = 7.97 Heterogeneous	

Table 5 shows the English proficiency of the students as to listening. Data shows that 9 or

4.5 percent of the respondents belongs to superior level, 8 or 4 percent belongs to above average, 50 or 25 percent belongs to average, 74 or 37 percent belongs to below average and 59 or 29.5 percent belongs to low level.

The mean of 77.72 is obtained. This implies that generally, the English proficiency level of the students in listening is below average while the computed standard deviation of 7.97shows that there is small dispersion from the mean. It is similar to the idea of Vandergrift (2004), listening skills are difficult to observe in a learning environment and equally difficult to define. Moreover, learning listening skills can be very stressful experience for students' learning a second language simply because they are often unable to process information quickly enough to understand (Goh & Taib, 2006).

The frequency and percentage distribution of the proficiency level in English of the students as to speaking is presented in Table 6.

Table 6 Frequency and Percentage Distribution of the Proficiency Level in English of the Students of Dasmariñas District I as to Speaking

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	1	0.5
88 - 90	Above Average	0	0
82 - 87	Average	15	7.5
75 - 81	Below Average	44	22
74 and below	Low	140	70
Total		**200**	**100**
Mean and Description		**70.21 = Low**	
		SD = 7.22 Heterogeneous	

Table 7 shows the English proficiency of the students as to speaking. Data shows that 1 or

0.5 percent of the respondents belongs to superior level, 15 or 7.5 percent belongs to average, 44 or 22 percent belongs to below average and 140 or 70 percent belongs to low level.

The mean of 70.21 is obtained. This means that generally, the English proficiency level of the students in speaking is low while the computed standard deviation of 7.22 shows that there is small dispersion from the mean.

The result considers the initiative of Patil (2008) who asserted that building up the learner's confidence to eliminate their fear of making errors was a priority that a teacher should consider in order to make learners feel comfortable with their language use. Confidence and competence in speaking could be developed from appropriate syllabus design, methods of teaching, and adequate tasks and materials (Bailey, 2005; Songsiri, 2007).

The frequency and percentage distribution of the proficiency level in English of the students as to reading is presented in Table 7.

Table 7 Frequency and Percentage Distribution of the Proficiency Level in English of the Students of Dasmariñas District I as to Reading

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	16	8
88 - 90	Above Average	11	5.5
82 - 87	Average	69	34.5
75 - 81	Below Average	67	33.5
74 and below	Low	37	18.5
Total		**200**	**100**
Mean and Description		**80.57 = Below Average**	
		SD = 7.91 Heterogeneous	

Table 8 shows the English proficiency of the students as to reading. Data shows that 16 or 8 percent of the respondents belongs to superior level, 11 or 5.5 percent belongs to above average, 69 or 34.5 percent belongs to average, 67 or 33.5 percent belongs to below average and 37 or 18.5 percent belongs to low level.

The mean of 80.57 is obtained. This demonstrates that generally, the English proficiency level of the students in reading is below average while the computed standard deviation of 7.91 shows that there is small dispersion from the mean.

The result needs to grasp the suggestions of Jhohon (2011), he mentioned that reading daily, reading deeply, and reading widely are the few important skills of reading from which we can enhance our understanding of passage, ameliorate our vocabulary, correct our grammatical mistakes, increase our thinking capacity and helps in improving or learning any part of a language.

The frequency and percentage distribution of the proficiency level in English of the students as to writing is presented in Table 8.

Table 8 Frequency and Percentage Distribution of the Proficiency Level in English of the Students of Dasmariñas District I as to Writing

Achievement Level Range	Description	Frequency	Percentage
91 and above	Superior	10	5
88 - 90	Above Average	5	2.5
82 - 87	Average	42	21
75 - 81	Below Average	44	22
74 and below	Low	99	49.5
Total		**200**	**100**
Mean and Description		**75.7 = Below Average**	
		SD = 6.58 Heterogeneous	

Table 9 shows the English proficiency of the students as to writing. Data shows that 10 or 5 percent of the respondents belongs to superior level, 5 or 2.5 percent belongs to above average, 42 or 21 percent belongs to average, 44 or 22 percent belongs to below average and 99 or 49.5 percent belongs to low level.

The mean of 75.7 is obtained. This illustrates that generally, the English proficiency level of the students in reading is below average level while the computed standard deviation of 6.58 shows that there is small dispersion from the mean.

The result contradicts the scheme that it would seem writing might be easier because students are sharing their own ideas already in their heads and simply putting them on paper, However, writing requires a lot more processing of language in order to produce a message (Colorado, 2007).

Results of the one-way F-test (ANOVA) of significant differences among the means of the four (4) domains in the English proficiency test of the intermediate teachers is presented in table 9.

Table 9 Results of the One-Way F-Test (ANOVA) of Significant Differences Among the Means of the Four (4) Domains of the English Proficiency Test of the Teachers

Sources of Variation	df	Sums of Square	Mean of Square	Tabular		Computed	H o
				F .05	F .01	F-Test	
Between Groups	3	1647	549	2.60	3.78	60.86	Reject
Within Groups	164	1479	9.02				
Total	167	3126					

Significant both at 0.05 and 0.01 level

Since the computed F-ratio of 60.86 is greater than 2.60 at 0.05 level and 3.78 at 0.01 level of significance, the null hypothesis is rejected and the alternative hypothesis is accepted. Specifically, we can conclude that listening, speaking, reading and writing domains of teachers differ significantly with respect to English proficiency test. The group means show that listening and writing registered higher than speaking and reading.

The F-test tells us that there is a significant difference in the four domains of English proficiency test of the teachers but as to where the difference lies, it has to be tested further by another statistical tool, Scheffe's test.

The comparison of the significant differences in the English proficiency among teachers in the four domains is presented in table 10.

Table 10 Comparison of the Significant Differences in the English Proficiency Among Teachers Along the Four Domains

Between Proficiency	F1	F .05 = 2.60 F .01 = 3.78	Interpretation
A vs B	.4295	2.60	not significant
A vs C	0	2.60	not significant
A vs D	3.874	2.60	significant

B vs C	3.874	2.60	significant
B vs D	0	2.60	not significant

Legend: **A** is listening, **B** is reading, **C** is speaking and **D** is writing

The above table shows that there is significant difference between proficiency A and D and proficiency B and C. Proficiency A and B, A and C and B and D have no significant difference in their proficiency level. It implies that the teachers are more proficient in listening and writing than in reading and speaking as shown by the computed group means in table 9. But, between listening and writing, teachers are more proficient in writing as revealed by the test.

The result of the one-way F-Test (ANOVA) of significant differences among the four (4) domains in the English proficiency test of the students is presented in table 11.

Table 11 Results of the One-Way F-Test (ANOVA) of Significant Differences Among the Means of the Four (4) Domains of the English Proficiency Test of the Students

Sources of Variation	df	Sums of Square	Mean of Square	Tabular		Computed	H o
				F .05	F .01	F-Test	
Between Groups	3	27,800	9,267	2.60	3.78		
						2,869	Reject
Within Groups	27,796	89,825	2.97				
Total	27,799	117,625					

Significant both at 0.05 and 0.01 level

The significant F-ratio reveals the rejection of the null hypothesis. The alternative hypothesis is accepted that there are significant differences among the means of the four domains in the English proficiency test of the students. The group means shows that reading got the highest and speaking registered the lowest. At this point, it may be correct to say that reading is significantly more effective than the other domains in their learning.

This idea contradicts the researchers' conclusion that the main reason for teenagers' lack of interest in reading is due to the fact that they "receive little encouragement and guidance in their choice of books", and resort to watching television or playing online games instead, Habagat & Rizon, 2012).

The comparison of the significant differences in the English proficiency among the students in the four domains is presented in table 12

Table 12 Comparison of the Significant Differences in the English Proficiency Among Grade Five Pupils Along the Four Domains

Between Proficiency	F1	F .05 = 2.60 F .01 = 3.78	Interpretation
A vs B	.0022	2.60	not significant

A vs C	.0153	2.60	not significant
A vs D	.0020	2.60	not significant
B vs C	.029	2.60	not significant
B vs D	.012	2.60	not significant

Where A is listening, B is reading, C is speaking and D is writing

The above table shows that there are no significant differences between proficiency domains A and B, A and C, A and D, B and C and B and D. Proficiency of the four domains is the same.

Colorado (2007) stated that there is a very important correlation between writing and language development. As students develop language skills, they often develop listening skills first (lots of input they can understand), then speaking (they begin to formulate their ideas in the second language), then reading (they can understand the sound/symbol correspondence of the new language and make sense of the words) and finally writing (they have enough language to express their own ideas in writing). This is not true for 100% of language learners, but it is true for the majority.

The chi-square test of significant relationship between teachers' and pupils' English proficiency in terms of listening is presented in Table 13.

Table 13 Chi-Square Test of Significant Relationship Between Teachers' and Students' English Proficiency - Listening

Teachers' English Proficiency	Pupils' English Proficiency - Listening								
	Superior and Above Average		Average		Below Average		Low		Total
	O	E	O	E	O	E	O	E	
Superior	5	1.7	5	5	5	7.4	5	5.9	20
Above Average	4	3.4	8	10	15	14.8	13	11.8	40
Average	5	9.27	30	27.25	44	40.33	30	32.16	109
Below Average	3	2.64	7	7.75	10	11.47	11	9.145	31
Total	17		50		74		59		200

df = 9 **X = 11.37**

Critical Value at .05 = 16.919 **Interpretation = Not Significant**

.01 = 21.666

Table 13 shows the chi-square test of significant relationship between teachers' and students' English proficiency in terms of listening.

The chi-square computed value 11.37 is less than the chi-square critical value of 16.919 at .05 level of significance with 9 degrees of freedom so the null hypothesis is accepted. This means that there is no significant relationship between the observed and expected frequencies. In other words, no significant relationship existed between teachers' and students' English proficiency in terms of listening.

The chi-square test of significant relationship between teachers' and students' English proficiency in terms of reading is presented in Table 14.

Table 14 Chi-Square Test of Significant Relationship Between Teachers' and Students' English Proficiency - Reading

Teachers' English Proficiency	Pupils' English Proficiency - Reading								Total
	Superior and Above Average		Average		Below Average		Low		
	O	E	O	E	O	E	O	E	
Above Average	5	2.7	5	6.9	5	6.7	5	3.7	20
Average	17	17.82	52	45.54	43	44.22	20	24.42	132
Below Average	5	6.48	12	16.56	19	16.08	12	8.88	48
Total	27		69		67		37		200

df = 6 **X = 8.39**

Critical Value at .05 = 12.592 **Interpretation = Not Significant**

.01 = 16.812

Table 14 shows the chi-square test of significant relationship between teachers' and students English proficiency in terms of reading.

The chi-square computed value 8.39 is less than the chi-square critical value of 12.592 at .05 level of significance with 6 degrees of freedom so the null hypothesis is accepted. This means that there is no significant relationship between the observed and expected frequencies. In other words, no significant relationship existed between teachers' and pupils' English proficiency in terms of reading.

The chi-square test of significant relationship between teachers' and students' English proficiency in terms of speaking is presented in Table 15.

Table 15 Chi-Square Test of Significant Relationship Between Teachers' and Students' English Proficiency - Speaking

Teachers' English Proficiency	Pupils' English Proficiency - Speaking						Total
	Superior and Above Average		Below Average		Low		
	O	E	O	E	O	E	
Above Average	5	1.2	5	3.3	5	10.5	15
Average	6	11.12	30	30.58	103	97.3	139
Below Average	5	3.68	1	10.12	32	32.2	46
Total	16		44		140		200

df = 4 **X = 21**

Critical Value at .05 = 11.070 **Interpretation = Significant**

.01 = 15.086

Table 15 shows the chi-square test of significant relationship between teachers' and students' English proficiency in terms of speaking.
The chi-square computed value 21 is greater than the chi-square critical value of 11.070 at .05 level of significance with 4 degrees of freedom so the null hypothesis is rejected. This means that there is significant relationship between the observed and expected frequencies. In other words, significant relationship existed between teachers' and students' English proficiency in terms of speaking. Therefore, if the teachers are proficient in speaking, the students are also proficient in this domain.

The chi-square test of significant relationship between teachers' and pupils' English proficiency in terms of writing is presented in Table 16.

Table 16 Chi-Square Test of Significant Relationship Between Teachers' and Students' English Proficiency – Writing

Teachers' English Proficiency	Pupils' English Proficiency - Writing								Total
	Superior and Above Average		Average		Below Average		Low		
	O	E	O	E	O	E	O	E	
Above Average	5	2.63	7	7.35	5	7.7	18	17.33	35
Average	10	7.88	35	22.05	39	23.1	81	51.98	165
Total	15		42		44		99		200

df = 3 **X = 38.46**

Critical Value at .05 = 7.815 **Interpretation = Not Significant**

.01 = 11.341

Table 16 shows the chi-square test of significant relationship between teachers' and pupils English proficiency in terms of writing.

The chi-square computed value 38.46 is greater than the chi-square critical value of 7.815 at .05 level of significance with 3 degrees of freedom so the null hypothesis is rejected. This means that there is significant relationship between the observed and expected frequencies. In other words, significant relationship existed between teachers' and students' English proficiency in terms of writing. Therefore, if the teachers are proficient in writing, the pupils are also proficient in this domain.

Summary of Findings

This aimed to determine the English proficiency of teachers and students. Specifically, the study attempted to answer the following:

1. What is the English proficiency level of the teachers and students in the district I of Dasmariñas in terms of
   1.1. Teachers

- Listening

Two or 4.76 percent of the respondents belonged to superior level, 8 or 19.05 percent belonged to above average, 26 or 61.9 percent belonged to average and 6 or 14.29 percent of the teacher-respondents belonged to low level. The mean of 85 was obtained. This implied that generally, the English proficiency level of the teachers in listening skills is average while the computed standard deviation of 3.3 showed very small dispersion from the mean.

- Speaking

Two or 4.76 percent of the respondents belonged to above average level, 31 or 73.81 percent belonged to average and 9 or 21.43 percent belonged to below average level.

The mean of 83 was obtained. This entailed that generally, the English proficiency level of the teachers in speaking skills is average while the computed standard deviation of 2.4 demonstrated very small dispersion from the mean.

- Reading

Two or 4.76 percent of the respondents belonged to above average level, 29 or 60.05 percent belonged to average and 11 or 26.19 percent belonged to below average level.

The mean of 83 was obtained. This means that generally, the English proficiency level of the teachers in reading skills is average while the computed standard deviation of 3.33 showed very small dispersion from the mean.

- Writing

Three or 7.143 percent of the respondents belonged to superior level, 5 or 11.905 percent belonged to above average and 34 or 80.952 percent belonged to average level. The mean of 85 was obtained. This illustrated that generally, the English proficiency level of the teachers in writing skills is average while the computed standard deviation of 2.87 showed very small dispersion from the mean.

1.2. Students

- Listening

Nine or 4.5 percent of the respondents belonged to superior level, 8 or 4 percent belonged to above average, 50 or 25 percent belonged to average, 74 or 37 percent belonged to below average and 59 or 29.5 percent belonged to low level. The mean of 77.72 was obtained. This implies that generally, the English proficiency level of the students in listening is below average while the computed standard deviation of 7.97 showed that there is small dispersion from the mean.

- Speaking

One or 0.5 percent of the respondents belonged to superior level, 15 or 7.5 percent belonged to average, 44 or 22 percent belonged to below average and 140 or 70 percent belonged to low level. The mean of 70.21 was obtained. This means that generally, the English proficiency level of the students in speaking is low while the computed standard deviation of 7.22 showed that there is small dispersion from the mean.

- Reading

Sixteen or 8 percent of the respondents belonged to superior level, 11 or

5.5 percent belonged to above average, 69 or 34.5 percent belonged to average, 67 or 33.5 percent belonged to below average and 37 or 18.5 percent belonged to low level. The mean of 80.57 was obtained. This demonstrated that generally, the English proficiency level of the students in reading is below average while the computed standard deviation of 7.91 showed that there is small dispersion from the mean.

- Writing

Ten 10 or 5 percent of the respondents belonged to superior level, 5 or 2.5 percent belonged to above average, 42 or 21 percent belonged to average, 44 or 22 percent belonged to below average and 99 or 49.5 percent belonged to low level. The mean of 75.7 was obtained. This illustrated that generally, the English proficiency level of the students in reading is below average level while the computed standard deviation of 6.58 showed that there is small dispersion from the mean.

a. How significant are the differences among:

2.1 Components of the English proficiency test of the teachers

Since the computed F-ratio of 60.86 is greater than 2.60 at 0.05 level and 3.78 at 0.01 level of significance, the null hypothesis is rejected and the alternative hypothesis is accepted. Scheffe's test showed that there is significant difference between proficiency A and D and proficiency B and C. Proficiency A and B, A and C and B and D have no significant difference in their proficiency level.

2.2. Components of the English proficiency test of the students

The significant F-ratio revealed the rejection of the null hypothesis. The alternative hypothesis is accepted that there are significant differences among the means of the four domains in the English proficiency test of the students.

Scheffe's test showed that there are no significant differences between proficiency domains A and B, A and C, A and D, B and C and B and D.

b. How significant is the relationship between:

3.1 English proficiency of teachers and students

- Listening

The chi-square computed value 11.37 is less than the chi-square critical value of 16.919 at .05 level of significance with 9 degrees of freedom so the null hypothesis is accepted. This means that there is no significant relationship between the observed and expected frequencies. In other words, no significant relationship existed between teachers' and pupils' English proficiency in terms of listening.

- Reading

The chi-square computed value 8.39 is less than the chi-square critical value of 12.592 at .05 level of significance with 6 degrees of freedom so the null hypothesis is accepted. This means that there is no significant relationship between the observed and expected frequencies. In other words, no significant relationship existed between teachers' and students' English proficiency in terms of reading.

- Speaking

The chi-square computed value 21 is greater than the chi-square critical value of 11.070 at .05 level of significance with 4 degrees of freedom so the null hypothesis is rejected. This means that there is significant relationship between the observed and expected frequencies. In other words, significant relationship existed between teachers' and students' English proficiency in terms of speaking. Therefore, if the teachers are proficient in speaking, the pupils are also proficient in this domain.

- Writing

The chi-square computed value 38.46 is greater than the chi-square critical value of 7.815 at .05 level of significance with 3 degrees of freedom so the null hypothesis is rejected. This means that there is significant relationship between the observed and expected frequencies. In other words, significant relationship existed between teachers' and students' English proficiency in terms of writing. Therefore, if the teachers are proficient in writing, the students are also proficient in this domain.

4 What intervention program can be designed to improve the English proficiency of intermediate teachers and grade five pupils? (See attached intervention program)

Conclusions:

Based on the significant findings of the study, the following conclusions were drawn:

1. English proficiency level of intermediate teachers and grade five pupils
1.1 English proficiency of intermediate teachers is average along:
1.1.1 Listening
1.1.2 Speaking
1.1.3 Reading
1.1.4 Writing

1.2 English proficiency of grade five pupils is below average along:

1.2.1 Listening
1.2.2 Reading
1.2.3 Writing

1.3 English proficiency of grade five pupils is low along:
1.3.1 Speaking

2 Significant differences among:

2.1 Components of the English proficiency test of the intermediate teachers English proficiency of intermediate teachers is higher in listening and
writing than in reading and speaking. But, between listening and writing, teachers are more proficient in writing.
2.2 Components of the English proficiency test of the grade five pupils The group means shows that reading got the highest and speaking registered the lowest. At this point, it may be correct to say that reading is significantly more effective than the other domains in their learning. Proficiency of the four domains is almost the same as revealed by the Scheffe's test.

3 Academic achievement of grade dive pupils in English
Generally, the academic achievement of grade five pupils in English is characterized as fair.

4 Significant relationship between:

4.1 English proficiency of teachers and pupils along

4.1.1 Listening
No significant relationship existed between teachers' and pupils' English proficiency in terms of listening.

4.1.2 Reading
No significant relationship existed between teachers' and pupils' English proficiency in terms of reading.

4.1.3 Speaking
Significant relationship existed between teachers' and pupils' English proficiency in terms of speaking.

4.1.4 Writing
No significant relationship existed between teachers' and pupils' English proficiency in terms of writing.

4.2 English proficiency of Intermediate teachers and grade five pupils' academic achievement in English
No significant relationship existed between teachers' English proficiency and pupils' academic achievement in English.

4.3 English proficiency of grade five pupils and their academic achievement in English
Significant relationship existed between pupils' English proficiency and pupils' academic achievement in English.

Recommendations:

The following recommendations are suggested based from the findings and conclusions drawn:

1. Diagnostic Test in English proficiency should be administered to both the teachers and students. The result should be analyzed and served as basis in the development of different school programs pertaining to English proficiency.
2. Teachers should attend seminars, workshops and trainings to enrich English proficiency along listening, speaking, reading and writing.
   Students should be given special remediation through effective utilization of instructional materials such as worksheets to improve English proficiency along listening, speaking, reading and writing.
3. Implementation of intervention program pertaining to the enhancement of English proficiency of pupils along listening, speaking, reading and writing should be implemented and intensified.
4. Peer teaching among the teachers is given confidence to assist other teachers who need the support.
   Cooperative learning is highly encouraged wherein English proficient students may tutor the slow learners.
   The learning styles of the learners should be taken into consideration towards execution of effective strategies to make teaching and learning enjoyable and meaningful.
5. Future research is encouraged to validate the findings of this study and to consider other variables not taken up by the present researcher.

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An Analysis of Path-Goal Theory and Personnel's Morale at a Large Public University in Thailand via Multivariate Analysis of Variance Technique

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ABSTRACT

This research project has the objectives to a) examine personnel's morale classified by demographic data; 2) examine the level of morale of personnel; and 3) investigate the influence of leadership styles based on Path-Goal theory upon personnel's morale at a large public university in Thailand. Data were collected from 552 respondents who were working at the university during February – March 2016. Questionnaire were used in order to collect data regarding the demographics, leadership styles, and personnel's morale. Staff Morale Questionnaire (SMQ) was utilized to measure personnel's morale. Statistical analysis revealed that gender and work experience affected each dimension of morale and overall morale. Age influenced cohesive pride. Job position affected leadership synergy, personal challenge and overall morale. Multivariate Analysis of Variance (MANOVA) statistical technique revealed that all leadership styles had an influence on almost all dimension of morale except for Participative, and Achievement-oriented leadership styles which did not influence cohesive pride dimension of morale.

Keywords

Employee morale, Leadership, Higher education, Path-Goal Theory

Introduction

Ability to retain employees affects performance of organizations. Organizations have to invest time and resources in order to develop competency of a personnel. Personnel who have been working with an organization for a long period of time have learn the work process and accumulated work skills. Experienced personnel is one of the valuable resources of an organization. They are the key for organizations to attain effectiveness and efficiency. Losing an employee might cause delayed in the work process. Moreover, it increases burdens for the colleagues and might cause other negative consequences such as dissatisfaction, inertia, and others. Morale is related to performance and retention of employees, hence, it is an important issue for organizations. Leaders are the organization's influencers who take parts in creating morale among employees (Jackson, Rossi, Hoover, and Johnson, 2012; and Podsakoff et al., 2006). This research project aimed to study the influence of leadership style upon personnel's morale at a large public university in Thailand.

Research Objectives

The objectives of this research project were to attest the influence of demographics and leadership style's upon personnel's morale at a large public university in Thailand. The objectives were posed as follow.

1. To examine the morale of personnel in a large public university in Thailand.
2. To investigate morale among personnel classified by demographic data.
3. To investigate the influence of leadership styles upon personnel's morale.

Literature

Podsakoff et al. (2006) performed a meta-analysis of extensive literature and reported the relationship between leaders' behavior and positive employees' behaviors. However, Jackson, Rossi, and Johnson (2012) extended the study through another meta-analysis gathering literature from various academic databases such as ABI/Inform and PsycINFO as well as manual search from various relevant academic journals such as Academy of Management Journal, Journal of Applied Psychology, and others. The number of observations of the variables were more than 554. They confirmed the relationships between leaders' behavior and employees' behaviors by introducing employees' morale into the equation and suggested that leaders' fairness could boost employees' morale. Bechtold (2011) conducted a research project in Saudi Arabia and reported that appreciative inquiry process affected employees' morale in an Arab-led organization.

Morale was defined as the "degree of freedom from restraint in action towards a goal" (Stogdill, 1959). Morale comprised of job satisfaction and affective organizational commitment (Harrison et al., 2006). Smith (1976) deliberated that morale is an employee's state of mind that looks forward to attain common purposes. Cattell and Stice (1960) proposed that morale was composed of five dimensions: cohesion, tenacity, leadership synergy, adventurous striving, and personal reward. Later on, Smith (1971) and Williams and Lane (1975), through several studies with different samples, validated and factored the dimensions into 3 independent dimensions namely cohesive pride, leadership synergy, and personal challenge.

Cohesive pride refers to the sense of cooperation towards the organization's objectives.
Leadership synergy refers to the enthusiasm and efforts expressed by employees stimulated by leaders.
Personal challenge refers to the contentment derived from work.

Furthermore, Hunter (1982) contended that employee's participation in decision making was related to employees' morale. Hence, it is very likely that leadership style according to Path-goal theory (House, 1996) could influence employees' morale.

Daft (2017) explained that an individual entitled as a leader is the person who can influence other individuals to act towards common goal. Kinicki and William (2017) described leadership as the characteristics and process leaders used in order to motivate followers. Robbins & Coulter (2013) proposed that leaders utilized various approaches to stimulate followers. One of the most comprehensive and practical is path-goal theory (Bateman, 2014). House (1996) suggested that path- goal categorized leaders' behaviors in relation to the attainment of organizational goals. Path-goal theory described that leaders should specify the organizational goals to be attained and exhibited various approaches to direct the followers towards these goals. These approaches are:

Directive leadership style. Leaders would clarify the goals for subordinates and mandate the work process. Steps and procedures are provided for subordinates to follow strictly, no question is accepted. Close supervision is performed. This style is appropriate for routine tasks and subordinates lack experience in performing the tasks.

Supportive leadership style. Leaders would clarify the goals and specify the work process but open rooms for discussion and subordinates' contribution of ideas. Soft approach is used by utilizing motivation strategies rather than to force subordinates to follow their instructions. This style is appropriate for routine tasks but subordinates possess the skills to perform but lack confidence in performing the tasks.

Participative leadership style. Leaders would clarify the goals and open the floor for full discussion about the goals and the work methods. Leaders motivate subordinates to share their ideas and concerns in the tasks. Final decisions are based on agreed upon comments. This leadership style is appropriate in the situation that lack clear task structure and subordinates are skillful.

Achievement-oriented leadership style. Leaders would not clarify the goals but set a general goals and delegate the authority and responsibility to subordinates to figure out their own goals within the direction of the organization. Subordinates have full responsibility for the attainment of the tasks. This leadership style is appropriate when the organization has flexible task structure and the subordinates are well experienced. Moreover, the organization wants to promote creativity and innovations among subordinates.

Research Methodology

The population of this research project was approximately 3900 personnel at one large public university in Thailand. Convenience sampling was performed at three main cafeterias at the university. 5-point Likert scale was utilized to collect data, ranging from 1 = highly disagree to 5= highly agree, from the samples. Four hundred and fourteen respondents completed the questionnaire. The questionnaire consisted of four parts. Part I elicited demographic data of the respondents. Part II asked the perceptions of personnel toward the leadership styles of their immediate supervisors. The leadership style scale was adopted and modified from Tanchaisak (2009) in which the cronbach's alpha was 0.947. Part III included items based on the Staff Morale Questionnaire (SMQ) designed and validated by Smith (1971) and further construct validated by William and Lane (1975). The scale measured 3 dimensions: cohesive pride, leadership synergy, and personal challenge. The interpretation of score ranged from 1.0-1.80 = highly disagree to 4.21-5.0 = highly agree.

The scale was assessed by 3 experts in the field of educational management and leadership. The instrument was modified according to the comments and suggestions of the experts and reassessed. IOC (Index of Item-Objective Congruence) was utilized to validate the instrument. Items with the IOC higher than 0.5 were retained. A pilot test was performed by asking 30 respondents who belong to the population but were excluded from the final data collection. The cronbach's alphas of the leadership scales which measured directive, supportive, participative, and achievement-oriented leadership styles were 0.921, 0.950, 0.948, and 0.949 respectively. The cronbach's alphas of the morale scale which measured cohesive pride, leadership synergy, and personal challenge were 0.885, 0.981, and 0.981 respectively. The overall reliability of the moral scale was 0.950. Hence, the instrument was reasonably reliable.

Data analysis

Data were obtained from 414 respondents. The majority was female (276 respondents or 66.7%) the rest was male (138 respondents or 33.3%). Most was 31-39 years old (150 respondents or 36.2%) followed by lower than 30 years old group (132 respondents or 31.9%), 40-49 years old (96 respondents or 23.2%), and 36 respondents were higher than 50 years old (8.7%). The majority of the respondents was in the operation level (246 respondents or 59.4%) followed by supervisor (135 respondents or 32.6%) and the management (33 respondents or 8.0%). Most respondents had less than 2 years' work experience (132 respondents or 31.9%) followed by 3-5 years' experience (120 respondents or 29.0%), more than 10 years' experience (99 respondents or 23.9%), and 6-9 years' work experience (63 respondents or 15.2%).

Leadership style

The respondents reported their leaders used directive, participative, supportive, and achievement-oriented styles at the high level. The mean score of perceived directive leadership style was 3.7638 (SD = 0.5380). The mean score of participative style was 3.7594 (SD = 0.5796). The mean score of supportive style was 3.7449 (SD = 0.5642). The mean score of achievement-oriented style was 3.7449 (SD = 0.5528).

Morale

The respondents reported their morale was high (mean = 4.0429, SD = 0.8440). The reported mean score of the perceived delivery of cohesive pride was 4.0290 (SD = 0.3747). The reported mean score of the leadership synergy from work was 4.0944 (SD = 1.2909). The reported mean score of the personal challenge was 4.0341 (SD = 1.2719).

Test of Statistical Significance

T-tests were performed to test the differences between male and female regarding the perceived morale and each dimension of moral. An analysis of mean scores revealed that female had higher morale than male in all dimensions. All mean differences were statistically significant at $p < .05$. T value for overall morale was t = -2.912, df = 246.352. T value for cohesive pride was t = - 2.978, df = 412. T value for leadership synergy was t = -2.031, df = 247.608. T value for personal challenge was t = -3.044, df = 248.605. All t values were less than 0.05.

One-way Analysis of Variance (One-way ANOVA) revealed that personnel in different age group reported statistically difference perception only in the levels of cohesive pride ($F (3, 410) = 2.674$, $p < .05$). For other dimensions of morale, statistical differences were not detected. Post hoc analysis revealed differences in perceived cohesive pride between those in 40-49 and those in < 30 and 31-39 age groups ($p < .05$). Mean differences were -0.1216 between 40-49 and < 30 age groups and -0.1265 between 40-49 and 31-39 age groups.

Respondents who had different job position had different perception regarding the overall morale (F (2, 411) = 27.025, df =); leadership synergy (F (2, 396) = 25.249; and personal challenge (F (2, 393) = 26.938. Differences in the perception regarding cohesive pride was not found ($p > .05$).

Post hoc analysis revealed differences between personnel in operation level and supervisor level (mean difference = 0.84427), and the management (mean difference = 1.04451) regarding leadership synergy ($p < .01$). Personnel in operation level had different perceived personal challenge from supervisor (mean difference = 0.74853) and the management (mean difference = 1.27637) ($p < .01$). Supervisor perceived personal challenge differently from the management (mean difference = 0.52784, $p < .05$).
Regarding work experience, significant differences were found in the perceived morale ($F (3, 410) = 12.416$) as well as in all dimensions. $F (3, 395) = 13.284$; $F (3, 392) = 10.951$; and $F (3, 410) = 5.454$ for leadership synergy, personal challenge, and cohesive pride respectively.

Personnel with 6-9 years of experience perceived cohesive pride differently from those with less than 2 years, 3-5 years and more than 10 years of experience (mean difference = 0.2091, 0.1850, and 0.2121 respectively, $p < .01$).

Regarding leadership synergy, personnel with more than 10 years' experience had different perceived leadership synergy from those with 3-5 and 6-9 years of experience (mean difference =
0.7256 ($p < .01$) and 0.4709 ($p < .05$) respectively. Those with less than 2 years' work experience had different leadership synergy from those who had work for 3-5 and 6-9 years (mean difference = 0.9393 and 0.6846 respectively, $p < .01$).

The General Linear Model procedure was performed to analyze the differences among the leadership styles and each dimension of morale. The adjusted R^2 of the leadership styles and cohesive pride was .782. The adjusted R^2 of the leadership styles and leadership synergy was .917. The adjusted R^2 of the leadership styles and personal challenge was .908. The adjusted R^2 of the leadership styles and morale was .917.

The Multivariate Analysis of Variance between the 4 leadership styles and the 3 dimensions of morale and overall morale suggested that directive leadership style had influences upon cohesive pride (F (8) = 4.281, R^2 = 0.092), leadership synergy (F (8) = 32.548, R^2 = 0.434), personal challenge (F (8) = 34.186, R^2 = 0.446) and morale (F (8) = 33.068, R^2 = 0.438). Supportive leadership style had influences on cohesive pride (F (4) = 26.765, R^2 = 0.239), leadership synergy (F (4) = 56.077, R^2 = 0.397), personal challenge (F (4) = 57.580, R^2 = 0.404) and morale (F (4) = 69.176, R^2 = 0.449). Participative leadership style did not have influence on cohesive pride but had influences upon leadership synergy (F (3) = 19.642, R^2 = 0.148), personal challenge (F (3) = 27.022, R^2= 0.193) and morale (F (3) = 21.989, R^2 = 0.162). Achievement-oriented style did not have influence on cohesive pride but had influences upon leadership synergy (F (2) = 50.423, R^2 = 0.229), personal challenge (F (2) = 27.001, R^2 = 0.137) and morale (F (3) = 37.872, R^2 = 0.182) all differences were statistically significant at .01 level.

In short, supportive leadership style had the highest effect on overall morale followed by directive, achievement-oriented and participative leadership styles respectively.

Table 1 presents the statistical values of the tests which reject null hypothesis and supported the alternative hypothesis.

Table 1. Statistical Values of the Statistical Tests which are Significant

No.	Hypothesis	Statistical test	Sig.
1.1	Gender àCohesive pride	t = -2.978**	0.003
	Gender àLeadership synergy	t = -2.031*	0.043
	Gender à Personal challenge	t =-3.044**	0.003
	Gender àMorale	t =-2.912**	0.004
1.2	Age àCohesive pride	F = 2.674*	0.047
	Age à Leadership synergy	-	0.549
	Age à Personal challenge	-	0.861
	Age àMorale	-	0.467
1.3	Job position àCohesive pride	-	0.280
	Job position àLeadership synergy	F = 25.249**	0.000
	Job position àPersonal challenge	F = 26.938**	0.000
	Job position àMorale	F = 27.025**	0.000
1.4	Work experience àCohesive pride	F = 5.454**	0.001
	Work experience àLeadership synergy	F = 13.284**	0.000
	Work experience àPersonal challenge	F = 10.951**	0.000
	Work experience àMorale	F = 12.416**	0.000
2.1	Directive àCohesive pride	□2 = 0.092**	0.000
	Directive àLeadership synergy	□2 =0.434**	0.000
	Directive àPersonal challenge	□2 =0.446*	0.000
	Directive àMorale	□2 =0.438**	0.000
2.2	Supportive àCohesive pride	□2 = 0.239**	0.000

	Supportive àLeadership synergy	$\square^{2}$ = 0.397**	0.000
	Supportive àPersonal challenge	$\square^{2}$ = 0.404**	0.000
	Supportive àMorale	$\square^{2}$ = 0.449**	0.000
2.3	Particitive àCohesive pride	-	0.537
	Particitive àLeadership synergy	$\square^{2}$ = 0.148**	0.000
	Particitive àPersonal challenge	$\square^{2}$ = 0.193**	0.000
	Particitive àMorale	$\square^{2}$ = 0.162**	0.000
2.4	Achievement àCohesive pride	-	0.947
	Achievement àLeadership synergy	$\square^{2}$ = 0.229**	0.000
	Achievement àPersonal challenge	$\square^{2}$ = 0.137**	0.000
	Achievement àMorale	$\square^{2}$ = 0.182**	0.000

* $p < .05$
* $p < .01$

Discussion

Results revealed that female has higher morale than male in all dimensions. Probably, female has higher tendency to adjust themselves to fit with the leaders than male. Hofstede and Hofstede (2011) explained that females are comparatively more family-oriented than males. Hence, females try to maintain morale and adjust themselves in order to fit with the style of their leaders. Males have less flexibility for maintaining social harmony. They are more likely that female to center on their own feeling show dissatisfaction or low morale if they disagree with their leaders.

Respondents in their forties had less sense of cooperation with the organization's objectives than those lower than 40 years old but higher than 50's do not show the differences. It is likely that personnel crossing 40 years old line might feel they have no need to be cooperative because, in Asian culture, the elders receive some respect, even from leaders. It is also likely that personnel in the forties lack the enthusiasm for work the youngsters have. Moreover, personnel in the 40's are still able to find new jobs. Once they go across 50 border, they realize their employability is lower and have to maintain their morale rather than showing their dissatisfaction, if any.

An analysis of the influence of job position revealed that personnel in the operation level can be stimulated easier than personnel in higher position. They might choose to comply with leaders' stimulation because they are new and eager to learn. Furthermore, they might be looking forward to promotion. Interestingly, the higher the position, the lesser the feeling of challenges. It is likely that those in higher position have to rely more on the rule and regulations, hence, they have to work just according to the regulations and lose their excitement in work.

Personnel with different level of work experience had different level of morale. It seems that the longer they work, the more they cooperate with the organization. Probably, they gradually fit into the culture and norms of the university and be more cooperative. Leaders could stimulate enthusiasm among those who had less work experience because they are comparatively younger organization member and they feel it is better to comply with leaders' strategy.

Results of this research confirm that leadership influenced morale of subordinates as suggested by Jackson, Rossi, Hoover, and Johnson (2012); and Podsakoff et al. (2006). The variances in all leadership styles could explain the variances all dimensions of morale very well. Specifically, supportive leadership style had the highest impact on overall morale. It is very likely that under this style, the personnel feel confident in performing their tasks because leaders provide the steps to follow and at the same time feel content because leaders listen to their opinion.

In Directive style had a bit less impact on morale. It is likely that personnel would feel comfortable in their work by relying on leaders. They do not have to think much, just follow the orders. However, they felt less content because the boss does not listen to them. Personnel had the challenge to achieve what the leaders want them to attain and feel confident they could do it following the path of the leaders.

Achievement-oriented style made personnel feel the autonomy in work but have to work harder because the leaders do not tell them what to do, they have to figure out on their own. Those who work with participative leaders reported the least morale. It is very likely that they work with no guideline and no autonomy, hence they feel like the leaders ignore them.

In conclusion, all leadership styles influenced all dimensions of morale except participative and achievement-oriented styles which did not have influence on cohesive pride. These two styles allow higher autonomy, hence, it is likely that personnel feels they are allowed to follow their own objectives rather than the university. Leaders should utilize more supportive and directive styles which could create more cooperation, stimulated enthusiasm, and challenge for personnel in their work. Although the scale used in this research project was valid and reliable, there are other instruments which used different approaches to examine subordinates' morale, future research should try other approaches to measure morale. Moreover, this project focus only in one public university in Thailand. Next research project should investigate a wider population such as other university or private university.

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The Effect of Multiple Intelligence-Based Learning and Personality Traits on Higher Order Thinking Skills among Undergraduate Students

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ABSTRACT

This study aims to determine the effect of multiple intelligence-based learning and personality traits on higher order thinking skills. A total of 260 undergraduates from the state of Selangor in Malaysia were randomly selected through stratified cluster sampling procedure. This is a descriptive quantitative study with questionnaires as the source of data. Data was analyzed by partial least square-SEM (SEM- PLS) to assess the strength of the relationships between the constructs. The results indicated that multiple intelligence-based learning and personality traits significantly predict students' higher order thinking skills. However, personality traits moderately mediate between multiple intelligence-based learning and higher order thinking skills. The findings indicated that multiple intelligence-based learning were positively correlated with higher order thinking skills ($r=0.249$, $p<0.001$) and personality traits were positively correlated with higher order thinking skills ($r= 0.284$, $p<0.001$). Furthermore, results also showed that almost 50% of the variation of higher order thinking skills in learning process was explained by the variation in personality traits and multiple intelligence-based learning.

Keywords

Higher order thinking skills, Personality traits, Multiple intelligence, Learning, Undergraduate.

Introduction

In today's information age, many researchers acknowledge the significance of higher order thinking skills (HOTS) in the learning process. HOTS are important in the creation of new knowledge (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, & Wittrock, 2001). HOTS need to be enhanced in the teaching and learning process. Malaysia, as a rapidly developing county, has put priority on students' higher order thinking and committed to promote thinking skills in Malaysian education system (Ganapathy, & Kit, 2017). New knowledge is created while utilizing problem-solving, critical and creative thinking skills. Therefore, students need to possess twenty-first century strategies such as (1) critical thinking, evaluation, and problem- solving; (2) communication; (3) collaboration; (4) computing (5) career; (6) cross-cultural; (7) creativity and innovation (Trilling & Fadel, 2009). For instance, evaluation skill refers to the ability of students to make judgments according to the standard. Then they apply their own creativity and ability to assemble parts into successful whole, or reorganize those parts into a new mode or structure (Li, Liu, Yang, Xiao, & Yang, 2016). To encourage students to improve their ability in higher order thinking skills, it is crucial to understand how the personal traits and multiple intelligence influence students' learning process.

Personality traits is an important element in the Malaysian education system and play a significant role in successful learning (Sitra & Abdullah, 2017). Personality traits help students to gain success in higher education as well as improve their higher thinking skills (Herman & Stefanescu, 2017). A study by Lee, Shariffudin, and Mislan (2012) showed that students' multiple intelligence was a factor that effected higher order thinking skills. Another study by Noor and Amir (2017) revealed that Malaysian education policy focused on students' performance and their higher order thinking skills based on multiple intelligences.

Background of the Study

Higher order thinking skills consist of critical, logical, reflective and creative thinking. Higher order thinking skills (HOTS) requires students to manipulate information and ideas in ways that transform the meaning and implication (Newmann, 1990; Palmer, 2016). This is supported by King, Walker, and Broyles (1996) who reported a positive relationship between personality traits and students' creative idea or higher order thinking skills. Furthermore, according to Goodnough (2001), learning based on students' intelligence has influence on students achievement as well as support the development of higher order thinking skills Recognition of students' difference in developmental and core processing operations has provided a much fairer perspective to teaching and learning. Students may have one or several of these intelligences which are; linguistic and logical mathematical, spatial visual, musical, bodily kinesthetic, interpersonal, intrapersonal, and naturalist intelligences (Gardner, 1999).

Academic success is strongly influenced by individual differences towards achievement. Therefore, personality traits should be regarded as equally important in education (Wu, Luo, & Liao, 2017). According to Komarraju and Karau (2005), personality traits influence students' motivation in learning and development of higher order thinking skills. Since personality traits reflect people's characteristic patterns of thoughts, feelings, and behaviors, so persons with the disposition towards critical thinking will present a desire and willingness to inculcate a critical spirit over most issues in their life (Siegel 1988). Although research has shown that personality traits have an influence on academic motivation and achievement, a better understanding is important (Komarraju, Karau, & Schmeck, 2009) to enable a comprehensive view of the phenomenon. In addition, a study conducted by Goodnough (2001) has shown that intelligence has a high positive influence on students' critical thinking inclination. Busato, Prins, Elshout, and Hamaker (2000) reported that personality traits are a positive predictor of students' critical thinking and academic success.

Research objective/ hypotheses

The overall aim of this study is to determine the effect of multiple intelligence-based learning and personality traits on higher order thinking skills among undergraduate students. This overall aim is divided into three specific objectives.

Objective 1

To determine the influence of personality traits on students' higher order thinking skills.

H1: There is a significant influence of the personality traits on students' higher order thinking skills.

Objective 2

To determine the influence of multiple intelligence-based learning on students' higher order thinking skills.

H2: There is a significant influence of multiple intelligence-based learning on students' higher order thinking skills.

Objective 3

To examine whether personality traits mediates students' multiple intelligence- based learning and higher order thinking skills.

H3: Personality traits mediates students' multiple intelligence- based learning and higher order thinking skills.

Methodology

This study adopted a quantitative survey approach using a set of questionnaire that was distributed to 260 undergraduate students in the state of Selangor, Malaysian. The first part of the questionnaire consists of 10 items colleting demographic data. The subsequent parts elicited students' higher order thinking skills, personality traits and students' multiple intelligence- based learning on their in the classroom. The higher order thinking skills consists 21 items, personality traits consists 60 items and multiple intelligence-based learning consists 48 items. The questionnaires were distributed during week eleven to nineteen according to the university academic calendar. The questionnaire used a four-point type of Likert scale indicating never (1), rarely (2), sometimes (3) and often (4).

Data Analysis and Findings

This study used a path-analytic model to evaluate the predictor variables (multiple intelligence- based learning, personality traits) for the dependent variable (higher order thinking skills). The Partial Least Squares SEM (PLS-SEM) objective is to maximize the explained variance of the endogenous latent constructs (dependent variables). In other words, PLS_SEM is used to find out the links between observed and latent variables. In the first stage, internal consistency which is the reliability of each of the constructs was assessed by the Cronbach alpha (α) and composite reliability (CR), whilst convergent validity assessed by indicator reliability (factor loading) and average variance extracted (AVE), and R2. The results show that all the dependent and independent variables were found to be reliable instruments to measure HOTS, multiple intelligence- based learning and students' personality traits. The reliability coefficient, Cronbach Alpha, for each subscale ranged from 0.75 to 0.84 which are greater than 0.7 and acceptable. The average variance extracted (ACE) is 0.52 while the cut off is 0.50 as suggested by (Hair, 2012). Furthermore, the R2 value for endogenous construct (HOTS) is 0.496 which is almost 0.50 according to Hair in 2012 which is slightly moderate. (See table 1).

Table 1. PLS-SEM average variances extracted, composite reliability and R^2 for endogenous construct.

Items	AVE	CR	R^2	Cronbach alpha (α)
HOTS	0.543	0.82	0.496	.75
ML	0.517	0.82		0.84
PT	0.511	0.81		0.78

HOTS: higher order thinking skills; ML: multiple intelligence-based learning; PT: personality traits

Table 2 indicated the mean and standard deviation of each constructs. According to the table the highest mean related to students learning based on their multiple intelligence (M=3.489, SD=1.242) and the lowest one belong to higher order thinking skills (M=3.380, SD=1.463) which emphasis that the mean value is almost same for each construct.

Table 2. Descriptive Statistic for higher order thinking skills, learning based on multiple intelligence and personal traits

Constructs	Mean	Standard Deviation
Higher order thinking skills	3.380	1.463
Multiple intelligence- based learning	3.489	1.242
Personality traits	3.478	1.236

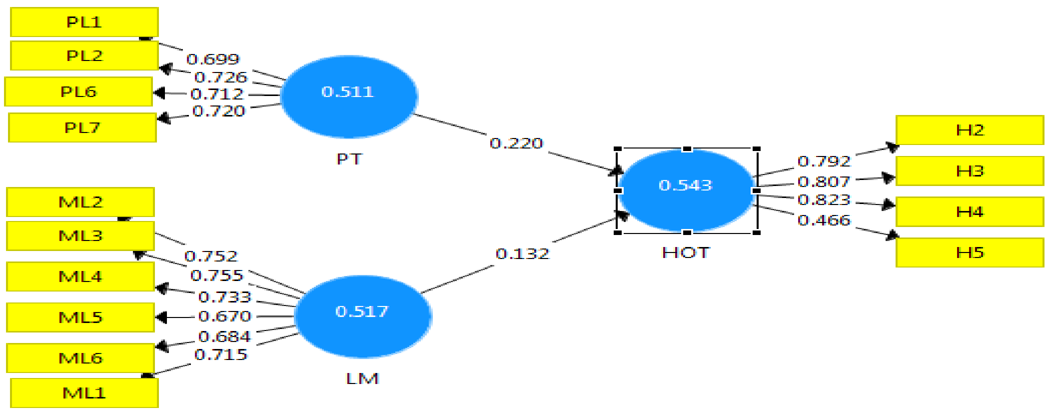
Table 3 shows Discriminant Validity, where discriminant validity is the value indicating to what extent the construct is different from other construct. The construct should be uniquely distinct from other construct which indicates the construct is not represented by other constructs in the model. Also, discriminant validity is supported if the intercorrelation among a set of variables presumed to measure different constructs are not too high, but this evidence is stronger when the measures are not based on the same method (Blunch, 2012). The AVE of a latent variable would be higher than the squared correlations between the latent variable and all independent variables. (Fornell & Larcker, 1981). In addition, discriminant validity considers by comparing the correlations with the square root of AVE.

Table 3. Correlation of latent variables and Discriminant Validity

HOTS		LM	PT
Higher order thinking skills(HOTS)	0.736		
Multiple intelligence- based learning (ML)	0.249	0.701	
Personality traits(PT)	0.284	0.497	0.688

Direct Effects of Constructs

In the structural model, the direct effects between two variables will be examined. These effects refer to the three hypotheses of the study. The direct effect of multiple regression (H1 and H2), standardized path coefficients (R^2), standard errors (S.E), and *t* values were generated in order to assess the significant of each hypothesized relationship. Figure One display the summary of PLS test with factor loading. For personal traits, three from seven items which had factor loading less than 0.5 was deleted. For multiple intelligence-based learning, two from eight items with factor loading less than 0.5 were removed. Lastly, for higher order thinking skills, one of five items was omitted in order to get a standard value of average variances extracted (AVE) above 0.5 (Hair, 2011).



HOT: higher order thinking skills; LM: multiple intelligence-based learning; PT: personality traits
Figure 1 PLS Analysis of the Structural Model for Direct Effects

The path coefficients of personal traits and learning based on students' multiple intelligence with students' higher order thinking skills examining hypothesized direct effects are displayed in Table 4. In addition, findings at the level of significance indicated that the hypothesis is accepted and H1 and H2 are predictor factors on higher order thinking skills.

Table 4. Examining Direct Effects of the independent variables on higher order thinking skills

Hypothesis	Relationship	Coefficient (β)	t-value	P-value	Hypothesis higher order thinking skills
H1	PT -> HOT	0.220	1.528	0.024	supported
H2	LM -> HOT	0.132	2.704	0.00	supported

HOT: higher order thinking skills; LM: multiple intelligence-based learning; PT: personality traits

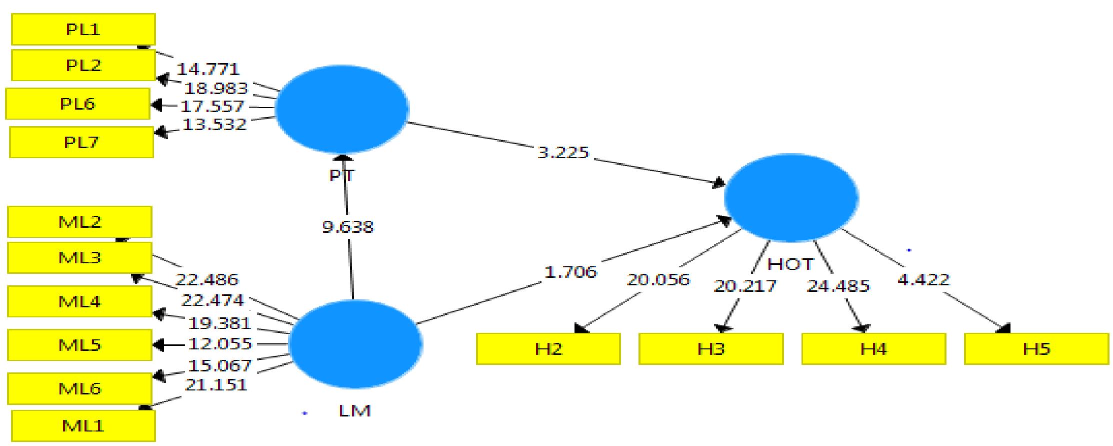
Mediation Effects of personal traits

The mediation analysis was used to determine the mediation effects of personality traits with higher order thinking skills and multiple intelligence- based learning. The indirect effects of the independent variables on the dependent variable through the mediating variable were examined. The result indicated that, the third hypothesis of this paper explored the role of personality traits mediating students' multiple intelligence- based learning and their higher order thinking skills. As zero is outside the range of CI, the research hypothesis (H03) is rejected, indicating that there is the indirect effect of learning based on higher order thinking skills through personality traits. The significance of the regression coefficients between multiple intelligence- based learning and students' higher order thinking skills exist as a path "a'' and after established the mediation the results is significant. Table 5 with the standardized effects of different paths.

Table 5. Mediation effect on higher order thinking skills

Hypothesized Relationship	Path	β	P	***95%BC bootstrap CI***	
				LB	***UB***
Total Effect (IV) on DV without Mediation (path a)	LM → HOT (a)	0.241	0.0000		
Direct Effect of IV on DV with M (path a')	LM → HOT (a')	.0.107	0.0000		
Effect of IV on M (path b)	LM → PT (b)	.0.553	0.0001		
Effect of M on DV (path c)	PT → HOT (C)	.0.107	0.0000		
Indirect Effect of IV on DV through M (path bc)	Path (ab)	0.129	0.0002	0.070	0.208

HOT: higher order thinking skills; LM: multiple intelligence-based learning; PT: personality traits



HOT: higher order thinking skills; LM: multiple intelligence-based learning; PT: personality traits
Figure 2 PLS Analysis of the Structural Model for Indirect Effects

Discussion

Higher order thinking skills is one of the main factors in learning process. Hence, it is increasingly significant to support learners in their development of higher order thinking skills. In addition, learning theories explained the development of students' thinking as an essential learning tool for all students. The findings of this study show that students' performance in multiple intelligence- based learning and personality traits have significant positive effect on students' higher order thinking skills. This is in line with Fern (2016) who reports that students' critical thinking ability helps them to better understand what they are learning. In this study, multiple intelligence- based learning and personality traits are predicting factors of students' higher order thinking skills. Personality traits help students to be able to think more critically and creatively to solve problems as mentioned by Norman, Chang, and Prieto (2017).

Another important factor that influences students' higher order thinking skills development is multiple intelligence-based learning. Since different students have different ability and preferences, they learn in different ways based on their preferred intelligence. This implies that students usually engage in higher order thinking and problem solving using their intellectual strength. It is crucial that students be provided with learning environment that suits their intellectual strength. This is suggested by Noble (2004). A more effective method of teaching and perhaps increasing student comprehension could be to actively engage the students in the learning process by using theory of multiple intelligences as suggested by Zobisch, Platine, and Andree Swanson (2015).Correlational analyses indicated that factors like personality traits and multiple intelligences were positively correlated with students' higher order thinking skills. This study also has similar conclusion with studies by Komarraju and Karau (2005) and Wu (2017).

Research have focused on other variables on the enhancement of higher-order thinking skills, such as multiple intelligent assessment of ideas and information (Binet & Simon, 2006). This study contributes specifically to the area of how personality traits and multiple intelligence-based learning relate to students' higher order thinking skills development.

Conclusion

To ensure the development of students' higher order thinking skills is successful developed special attention must be given to multiple intelligence-based learning and personality traits of the students. Curriculum planners should consider these factors when designing curriculum. Teachers should also take into consideration these factors when planning their lessons. Then they will be able to provide a class environment conducive for the students. Last but not least, all students would have the opportunity to learning well and develop critical thinking skills.

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Leader Behavior and Organizational Climate: Influence on Job Burnout

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ABSTRACT

Behavior and climate are two of the factors that are identified to have influenced a leader's being. Typically, academic administrators adjust their leadership behavior to the kind of work environment to accomplish the mission of the organization. In the process, academic leaders also experience disillusionment and eventually may exhibit some or all the classic burnout symptoms which can be crucial for both the leader behavior and their working environment. This could further influence not only the teachers' job satisfaction but also students under the care of these teachers. This study investigated the extent of burnout and its relationship to leader behavior and perceived organizational climate among middle-level administrators of Teacher Education Institutions in Northern Mindanao, Philippines. It utilized the descriptive correlational design. From a total of 65 institutions with 83 members, 62 participated in the survey. The instruments: Maslach Burnout Inventory (MBI), Organizational Climate (Litwin & Stringer, 1968) and Leader Behavior Description Questionnaire (LBDQ) from the Ohio Studies were duly validated and reliability tested. Descriptive statistics and multiple linear regression analysis were employed to organize the data. Results revealed that leader behavior and organizational climate predict the middle-level administrators' extent of burnout. However, burnout may likely be reduced if leaders become aware and capacitated to manage their behaviors in the context of the working climate.

Keywords

Leader behavior, Organization climate, Job burn-out, Middle level administrators

Introduction

Leaders' influencing function in organizations can never be understated. As they strive to attain organizational goals, their leadership behaviors also generate certain organizational climate that influence the work environment of the organization. Organizational climate reflects the values, beliefs and behavioral norms that are used by employees to give meaning to the situations that they encounter, which in in turn, influence their attitudes and behavior (Robbins & Coulter, 2005 as cited by Tsai, 2011). Leader behaviors on the other hand are thought to result from the complex interactions among personal and environmental factors which can cause overwhelming exhaustion from work (Tsai, 2011). Behavior and climate are two of the factors that are identified to have influenced a leader's being. Studies reported that in the process, leaders also experience disillusionment and eventually may exhibit exhaustion that is associated as burnout symptom which can be crucial for both the leader behavior and their working environment (Schneider & Macey, 2011).

For many years, burnout has been recognized as an occupational hazard for various service-oriented professions, such as human services, health care, and education. Because job burnout is a mental phenomenon, it can be very detrimental as this creates "chronic stress reactions occurred by accumulated and long-term negative effects of job stress" (Hofstede, 2001). Leiter and Maslach (2016) emphasized that this psychological syndrome emerging as prolonged response to chronic interpersonal stressors on the job, are manifested in any or all of these dimensions: an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment.

Accordingly, administrators usually adjust their leadership behavior to the kind of work environment to accomplish the mission of the organization. In academic institutions, administrators commit themselves to building a learning community among students, parents, colleague teachers, and co-administrators. This commitment had been verified by several researchers that many people enter the teaching profession with great enthusiasm, optimism, high expectations, and idealism (Tsai, 2011). In schools, there is already a climate of the organization that had existed for a long time and administrators usually adjust to their work to likewise influence the attitude and behavior of the employees, especially the people they supervise. This study investigated the extent of influence of middle-level administrators' leader behavior and their perceived organizational climate to their level of job burnout among Teacher Education Institutions (TEI) in Region 10, Northern Mindanao, Philippines.

Statement of the Problem

This study looked into personal assessment and relationships of middle-level administrators' leadership behavior, organizational climate and job burnout.

Framework of Study

This study anchored on different theories and concepts; House's Path-Goal Theory of Leadership Behavior (1971), Maslach's Burnout Multidimensional Theory (1982), Litwin & Stringer Organizational Attribute Approach (1968).

Leader Behavior. There is an interaction of leadership behaviors with situation characteristics in determining the leader's effectiveness and suggested that leaders can influence the satisfaction, motivation, and performance of group members in several ways according to House's Path-Goal Theory. House (1971) identified twelve (12) constructs that indicated leader behavior. In the studies of Bishop (2003); Wanjau (2008); and Northhouse (2016), the constructs are: *Representation*, which refers to a leader who speaks and acts as the representative of the group; *Demand Reconciliation*, the leader reconciles conflicting demands of work of the higher management before bringing it down to his members so to reduce disorder to the system. Another construct is known as *Tolerance of Uncertainty* which refers to the leader who can tolerate uncertainty and postponement without anxiety or getting upset. The fourth construct is *Persuasiveness*, this entails the leader who uses persuasion and argument effectively. Another construct is *Initiation of Structure*, which focuses on defining own role, and lets followers know what is expected. The sixth construct is *Tolerance and Freedom*. Bishop (2003); Wanjau (2008); and Northhouse (2016) further described the leader as someone who allows his followers the scope for initiative, decision and action. Another construct is *Role Assumption* wherein the leader actively exercises the leadership role rather that surrendering leadership to others. The next construct is *Consideration*, this is when the leader depicts to what extent the comfort, wellbeing, status, and contributions of followers are considered. The ninth construct is *Production Emphasis*. Here, the leader applies pressure for productive output. *Predictive Accuracy* which is the tenth sees the leader manifesting foresight and ability to predict outcome accurately. The next is *Integration*. It tells that the leader maintains a closely-knit organization. The leader makes sure that he resolves inter-member conflicts immediately. Wanjau 2008 in Blake and Mouton (1964), described this as a relations-oriented leader behavior that include concern for people and an emphasis on employees' needs and teamwork. Finally, the twelfth construct is known as *Superior Orientation*. The final construct of the leader behavior refers to superior orientation as measuring the extent to which the leader maintains cordial relations with superiors and has influence on them and portrays relations whereby the leaders are highly thought of by their superiors; they have the ability to influence others easily.

Job Burnout. In Maslach's Burnout Multidimensional Theory (1982), *job burnout* is described as a prolonged response to chronic interpersonal stressors on the job. The three key dimensions of this response are an overwhelming exhaustion; feelings of cynicism and detachment from the job; and a sense of ineffective and failure (Maslach, 1982). Further, to determine the extent of the administrators' burnout, this study made use of Maslach Burnout Inventory (MBI). This is designed to assess three constructs of the burnout syndrome: *Emotional Exhaustion, Depersonalisation and Reduced Personal Accomplishment*. The authors Maslach (1982); Byrne 1994, Lee & Ashforth 1996 as cited by Leiter et al. (2014); Leiter, Maslach and Schaufeli (2001); Leiter, and Maslach (2016) discussed the three variables under job burnout. First, *Exhaustion* is the central quality of burnout and the most obvious manifestation of this complex syndrome. When people describe themselves or others as experiencing burnout, they are most often referring to the experience of exhaustion. Of the three aspects of burnout, exhaustion is the most widely reported and the most thoroughly analyzed (Leiter, and Maslach, 2016). The strong identification of exhaustion with burnout has led some to argue that the other two aspects of the syndrome are incidental or unnecessary. However, the fact that exhaustion is a necessary criterion for burnout does not mean it is sufficient. If one were to look at burnout out of context, and simply focus on the individual exhaustion component, one would lose sight of the phenomenon entirely. This variable is not something that is simply experienced—rather, it prompts actions to distance oneself emotionally and cognitively from one's work, presumably to cope with the work overload. Within the human services, the emotional demands of the work can exhaust a service provider's capacity to be involved with, and responsive to, the needs of service recipients (Leiter and Maslach, 2016). Second, *Depersonalization* refers to actively ignoring the qualities that make them unique and engaging people which is an attempt to put distance between oneself and other members of the team. Their demands are more manageable when they are considered impersonal objects of one's work. Outside of the human services, people use cognitive distancing by developing an indifference or cynical attitude when they are exhausted and discouraged. Distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to cynicism (depersonalization) is found consistently in burnout research, across a wide range of organizational and occupational settings. Thirdly, the relationship of inefficacy (*Reduced Personal Accomplishment*) to the other two aspects of burnout is somewhat more complex. In some instances, it appears to be a function, to some degree, of either exhaustion, cynicism, or a combination of the two (Byrne 1994, Lee & Ashforth 1996 as cited by Leiter et al. 2014). A work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode one's sense of effectiveness. Further, exhaustion or depersonalization interfere with effectiveness: It is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom one is indifferent. However, in other job contexts, inefficacy appears to develop in parallel with the other two burnout aspects, rather than sequentially. The lack of efficacy seems to arise more clearly from a lack of relevant resources, whereas exhaustion and cynicism emerge from the presence of work overload and social conflict. In a nutshell, emotional exhaustion refers to feelings of being emotionally overextended and exhausted by one's work; depersonalization measures an unfeeling and impersonal response toward recipients of one's service, care, treatment or instruction, and personal accomplishment is a subscale used to assess feelings of competence and successful achievement in ones work with people (Leiter, Maslach and Schaufeli, 2001). The theory and concepts identified in this section helped determine relationships between the variables of the study.

Organizational Climate. Litwin & Stringer, (1968) in their Organizational Attribute Approach gave a macro perspective of analyzing the organization. According to them, climate can be defined as the perceived attributes of an organization and its sub-systems as reflected in the way an organization deals with its members, groups, and issues. The emphasis is on perceived attributes and the working of sub- systems. This framework emphasizes on motivational linkages and seems to be quite relevant for studying organizational climate (Gupta, 2008). In this study, the researcher identified eight motives based from the study of Litwin & Stringer, (1968) as cited in the study of Gupta (2008). For this study, the researcher modified the instrument to fit into the context of the study, then ensured reliability and validity through appropriate measure. Although the constructs are dated 1968, these are still relevant and the researcher used these because they are still applicable in the academic settings. The motives are: *Environment*, referring to the work environment which can be identified as the place that one works; *Team work* implied people working together cooperatively as a team to accomplish the same goals/objectives. Gupta (2008) further emphasized that for a task to be accomplished in a such given timeframe, workers must meet in between so that plans and decisions will work out. Another motive is *Management Effectiveness*. This is the ultimate measure of management's performance is the metric of management effectiveness which includes execution, leadership, delegation, and communication and consideration. The fourth motive is *Competency*. Competence is a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills and behavior utilized to improve performance. The fifth motive is *Commitment*. This means to duty or pledge to something or someone and can refer to personal commitment, organizational commitment, etc. This can be identified as to how leaders motivate their learners to obtain their commitment to the specific job. *Compensation* is the total cash and non-cash payments that the company gives to an employee in exchange for the work they do for business. It is typically one of the biggest expenses for businesses with employees. This motive is more than an employee's regular paid wages. It also includes many other types of wages and benefits. The next motive is *Appraisal System*. A performance appraisal is a systematic general and periodic process that assesses an individual employee's job performance and productivity in relation to certain pre-established criteria and organizational objectives. The last motive is *Involvement.* Gupta (2008) emphasized that employee involvement is creating an environment in which people have an impact on decisions and actions that affect their jobs. It is considered as helpful in continuous improvement and the success of the organization.

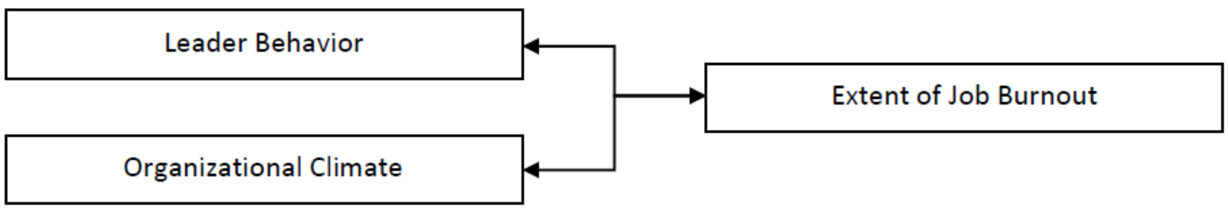

Figure 1. Figure showing the interplay of variables in the study.

Methodology

The study used descriptive-correlational research design. The data was drawn from middle-level administrators of Teacher Education Institutions of Region 10, Northern Mindanao, Philippines. Middle-level administrators are the academic, subject or area coordinators, program chairpersons, student-teacher supervisors, assistant deans and the deans of the colleges who directly report to a vice-president and president of the institution. The researcher used three sets of the questionnaire; *Leader Behavior Description Questionnaire,* adapted from the Ohio State Leadership studies. The experimental revision by Stogdill (1963) which was used by Tsai (2011) was also used in this study: *Litwin & Stringer,(1968) Organizational Climate Index.* For the purpose of the study, the researcher modified items from the study of Gupta (2008) which also used the index; and, *Maslach Burnout Inventory*, which was designed to assess the three constructs of burnout syndrome; emotional exhaustion, depersonalization and reduced personal accomplishment. Frequency distribution, mean and standard deviation were used to organize data, Pearson r Correlation was used to determine the correlation between the leader behavior and organizational climate, and Multiple Regression was used to analyze if the leader behavior and organizational climate predicts the burnout of the middle-level administrators.

Results

Table 1. Normality Measures, Means, Standard Deviation, and Descriptions

Variables	S*	K**	Mean	SD	Descriptions
Organizational Climate	.528	-.256	*3.13*	.39	Agree
Leader Behavior	.727	1.183	*2.89*	.37	Often Practiced
Job Burnout	.412	-.177	*3.84*	.79	Job burnout is experienced once a week

(n=1,509); *Skewness; **Kurtosis

To determine the respondent's responses on the constructs: organizational climate, leader behavior and job burnout, descriptive statistics was used. Table 1 shows the normality measures, means, standard deviations and descriptions of the participants' responses. Skewness and kurtosis values of the constructs are highly acceptable as these are within the accepted ± 2 range and where the values are less than one and nearing zero, except for the $k_{\text{leader beahvior}}$ = 1.183.

For *Organizational Climate*, the researcher identified eight motives based on the study of Litwin & Stringer, (1968) as cited in the study of Gupta (2008); Environment, Teamwork, Management effectiveness, Competency, Commitment, Compensation and others, Appraisal system, Involvement. The construct with the highest mean were *Commitment*, *Environment* and *Teamwork*. *Commitment* means his dedication to his craft. The result can be implied as the leaders have personal commitment both to their team and organizational. This can be identified as to how leaders motivate their members to work together to obtain their commitment on the specific job. Commitment identifies a leader who allows his followers a scope for initiative, decision and action. Where he gives chances to his members' complete freedom in their work and gives them the opportunity to do their task the way they think best. This attitude implies a good sense of trust of the leader towards his members. Moreover, *Environment* has a high mean and that this simply means that they are satisfied with their resources and those that the school provides them. The motive that has the lowest mean is *Appraisal System* and *Compensation and Others*.

For *Leader Behavior*, twelve (12) constructs became the basis of determining the leader behavior; Representation, Reconciliation, Tolerance of Uncertainty, Persuasiveness , Initiation of Structure, Tolerance and Freedom, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration, Superior Orientation. *Tolerance and Freedom* received the highest mean together with *Integration*. While the lowest mean is *Representation* and *Role Assumption*. Because the leader should act as a representative of his team, *Representation* means to stand in behalf of his co-workers especially in dealing with the higher management. He becomes the voice of his team and presents concern in their behalf. As observed by the researcher, in as much as the middle-level administrator wanted to be the voice of his members, he becomes hesitant at some point because he also needs to submit himself to his superiors and his institution. Though in *Role Assumption*, the leader actively exercises the leadership role rather that surrendering leadership to others, he needs to consider the management and the decisions of the higher officials and, also confront his members of whatever decisions is determined and actively exercises the leadership role rather than yielding control to others. Thus, Richard (2006) highlighted that school leaders must function within an organization a sense of dynamism and must wear different hats for different situations. This is one good trait that the researcher believes a leader must possess.

For *Job Burnout*, the researcher made use of three constructs to determine the extent of burnout; Emotional Exhaustion and Reduced Personal Accomplishment. Depersonalization, the first indicator which refers to the *Emotional Exhaustion* was interpreted as *Job burnout is experienced once a week.* The indicators identified that the middle-level administrators feel strained, used- up and exhausted after working, and this is experienced a few times a week. Meanwhile for *Depersonalization,* which was interpreted as *Job burnout is experienced a few times a month*. This implies that the middle level administrators are more manageable when they are considered impersonal objects of one's work. Outside of the human services, people use cognitive distancing by developing an indifference or cynical attitude when they are exhausted and discouraged. Distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to cynicism (depersonalization) is found consistently in burnout research, across a wide range of organizational and occupational settings. This study reveals that despite experiencing *emotional exhaustion* generally once a week, and *reduced personal accomplishment*, also experienced *every day*, middle-level administrators responded *happy and delighted after working with colleagues*.

Table 2: Pearson r Correlation of Leadership Behavior and Organizational Climate

Variables	Overall Mean	SD	Description	Pearson r
Leadership Behavior	2.89	0.372	Leader behavior is practiced most of the time	0.597**
Organizational Climate	3.12	.388	Climate where I belong is somewhat observed all the time	

**Correlation is significant at the 0.01 level (2-tailed)

Table 2 discloses that there is a significant relationship between the leader behavior and the observed overall organizational climate where r=0.597 and significant at 0.01. The null hypothesis is rejected. This means that leader behavior is significantly associated with organizational climate. Higher education institutions have recognized the connection between organizational climate and leadership behavior (Tiu, 2001). Several studies have examined the influence of institutional leadership on the organizational climate of the university, as well as the community college (Olson, 1988). Evidence suggests that leadership behavior influences climate, however, research also argues that climate influences a leader's behavior. Organizational climate creates a norm that forces a person to adjust behavior to fit the norm congruently. Tsai (2011) asserted that organizational climate is the quality or property of the organizational environment that is perceived or experienced by organizational members. Tsai (2011) used Smith and Piele (1989) definition of school climate as the feeling individuals from their experiences within a school's social system. This feeling or subtle spirit is the global summation of the individual's perceptions of how the leader, administrators, staff, faculty and students behave and interact. These behaviors, in turn, are largely determined by the underlying norms in the school, which dictate what kinds of behaviors and interactions are appropriate. Norms are largely self- perpetuating. The behaviors they define tend to reinforce and confirm the norms that gave rise to them Tsai (2012).

Table 3 reveals that most of the leader behavior constructs have bearing and impact on burnout. In fact, the adjusted R^2 of 0.352 implies that 35.2% of the administrators' burnout can be attributed to leader behavior. It further explains that the amount of influence of the whole set of leader behavior taken as one, on the administrators' burnout. With f-value 3.544, the model is significant at 0.001. In this case, the hypothesis is rejected. Eight of the twelve variables can explain the burnout of administrators. It is said that individuals experience *tolerance of uncertainty*, individuals able to tolerate uncertainty postponement without anxiety or getting upset. Considered as a task-oriented leadership behavior, the leader puts emphasis on activities performed by the group in order to achieve organizational goals (Wanjau, 2008). Another construct that significantly contributes to burnout is *production emphasis.* This is a situation where superiors encourage overtime work and drive hard when there is job to be done. It is also interesting to note that *role assumption* is a significant factor contributing to burnout. According to Bishop (2003); Wanjau (2008); and Northhouse

(2016), this is the tendency of administrators to actively exercise the leadership role rather than surrendering leadership to others. This construct describes the leader being in control and easily recognized as the leader of the group. Wanjau (2008) further emphasized that the this is often identified as an authoritative type of leader. *Superior orientation* also figured out as having a strong bearing on burnout. This construct describes the leader as having cordial relations with top management and yields influence upon them. This leader portrays relations whereby they are highly thought of by their superiors and they can influence others easily (Wanjau, 2008). In this current study, *superior orientation* construct was among the highly rated mean scores among the twelve (12) factors, along with *production emphasis*. Furthermore, since the leader behavior, organizational climate and burnout query were self-assessments of the middle-level administrators themselves, this finding implies that burnout are most often self-imposed and emerges from the behavior of the leader themselves.

Table 3: Multiple Linear Regression Analysis Between Leader Behavior and Middle Level Administrators' Extent of Burnout

Independent Variables	Regression Coefficients	t-value	P-Value
Representation	.984	2.996	.004
Reconciliation	1.111	2.883	.006
Tolerance of Uncertainty	1.152	3.452	.001
Persuasiveness	.901	2.789	.008
Initiation of Structure	.484	1.130	.264
Tolerance and Freedom	.515	1.563	.125
Role Assumption	1.221	3.139	.003
Consideration	1.057	2.396	.021
Production Emphasis	1.231	3.440	.001
Predictive Accuracy	.716	1.922	.060
Integration	.417	.930	.357
Superior Orientation	1.046	2.909	.005

Constant :	2.016
Adjusted R^2:	0.352
F-Value	3.544
Sig. Level	0.001

Table 4 shows external factors that are assumed to influence burnout using the organizational climate constructs. Multiple regression results show that three (3) of the eight (8) organizational climate constructs have a significant bearing on burnout. The data further reveals that with the value of the adjusted R2, 25.7% of the occurrence and or variation of burnout in the administrators can be attributed to all the organizational climate subvariables. With the f-value of 3.642, and P = 0.001, the model is highly significant and therefore the hypothesis is rejected. Although, the whole organizational commitment constructs as one whole set was found to influence the changes in the burnout variable, further analyses disclose that *commitment, compensation and others, as well as appraisal system* were observed to be significant influencing factors. The negative regression coefficients of *commitment* and *compensation and others* imply that the reverse influence of these two factors to burnout. This means that the higher the employees' commitment, the less likely would their burnout.

Table 4: Multiple Linear Regression Analysis Between Organizational Climate And Middle-Level Administrators' Extent of Burnout

Independent Variables	Regression Coefficients	t-value	P-Value
Environment	.053	.225	.823
Team Work	.236	.724	.472
Management Effectiveness	.071	.338	.737
Competency	.494	1.694	.096
Commitment	-1.176	-4.022	.000
Compensation and Others	-.522	-2.469	.017
Appraisal system	.702	3.314	.002
Involvement	-.156	-.722	.474

Constant:	5.193
Adjusted R^2:	0.257
F-Value	3.642
Sig. Level	0.002

Likewise, the higher their regard of *compensation and others* factor, the least likely would their burnout. In this present study, *compensation and others* together with *commitment* and *appraisal system* as constructs of *organizational climate* were found to be among the significant factors that contributed to the administrator-respondents' burnout. This study also determined whether leader behavior and organizational climate when taken could also influence the respondent-administrators' burnout. Table 9 presents the multiple linear regression analysis between the independent variables and the middle-level administrators' extent of burnout. The adjusted R^2 value explains the amount of influence of the whole set of independent variables taken as one, on the extent of burnout, the dependent variable. With f-value of 4.571, the model is highly significant at 0.014. Thus, the hypothesis is rejected; the independent variables can explain and or predict the extent of burnout among the administrators.The final model is represented as:

Burnout = 3.015 + .957 leader behavior – 0.620 organizational climate.

Table 9: Multiple Linear Regression Analysis Between Independent Variables And Middle-Level Administrators' Extent of Burnout

Independent Variables	Regression Coefficients	t-value	P-Value
Leader Behavior	.957	3.009	.004
Organizational Climate	-.620	-2.030	.047

Constant :	3.015
Adjusted R^2:	0.105
F-Value	4.571
Sig. Level	0.014

Moreover, the figures in the table disclose that for every unit change in the leader behavior, there is a corresponding increase of 0.957 in the administrators' extent of burnout. This further means that the higher the administrators exercises these leader behavior constructs, the higher would they experience burnout. For organizational climate, the beta coefficient is negative coefficient (-0.620) imply that for every unit of increase of the administrators' regard for the organizational climate, there is a corresponding decrease of their extent of burnout. It further means that the higher the regard for the organizational climate, the least likely would the administrator experience burnout. Positively speaking, Schneider *et al.*, (2014) mentioned that "satisfaction and morale of student and staff are higher in schools with healthy climates than in schools with unhealthy ones." Furthermore, negatively speaking, Schneider *et al*., (2014) said that teacher burnout is due to organizational inefficiency and various forms of occupational stress and rigid organizational climate that hamper people who try to do an excellent job.

The proposition of this study has been wholly supported and confirmed by the empirical data gathered in this study. Thus, this study maintains that together with leader behavior, both independent variables significantly influence the administrator-respondents' extent of burnout.

Conclusions

The leader behavior and climate that leaders generate are crucial factors of their own burnout. How they manage these constructs is critical and plays a larger role in whether it is a happy and healthy environment in which to work. Thus, they have a control lessen their own burnout and the people they work with. Employee burnout is very much part of the organization and cannot be avoided. But when leaders become aware and capacitated to manage their behaviors in the context of the working climate, burnout may less likely be reduced. In the working climate, teachers may feel less frustrated when their superiors adequately provide them with mental and emotional support, feedback, and physical resources to reduce their stress and reconcile their burnout. Studies claimed, and results of this research identified that if higher administrators are responsive to the needs of the middle-level administrator, practice efficient school system, and provides community support for middle-level administrators' problems, this can lead to greater possibility that these leaders may minimize experiences of job burnout. Supportive and dynamic leaders can significantly reduce the likelihood of burnout if they display confidence, understand difficulties, help overcome problems, offer professional and personal growth, support member initiatives by making the required resources available, and appreciate achievement and sacrifices of their members. Motivated professionals consume great amounts of energy and emotional resources on the job. But, if those resources are replenished with the help of a good leader, a crisis that might lead to burnout would most likely become a turning point to greater success and improved performance.

Recommendations

From the drawn conclusions, the following measures are recommended; to the school heads or top administrations- it is highly suggested that top management take cognizant of the dynamics of burnout and provide support structures that enable the middle-level administrators to adapt and achieve a healthy work-life balance. This could take the forms of school-based programs and activities that are geared towards the development of the middle-level administrators. Provide seminars and workshops that cater to the development of their leadership skills, decision making, organizing and implementing programs, managing interpersonal and intrapersonal anxieties and the like. Moreover, to the middle-level administrators- consider other resource to improve skills in leadership, such as attend outside gatherings that enhance personality traits. Also, to the future researchers- replicate and use to compare and assess elementary schools, secondary schools, and tertiary school's supervisors and teachers' perceptions regarding the variables, and qualitative studies be further undertaken by interview, observation, and content analysis in order to develop an understanding of targeted groups of supervisors and teachers suffering from burnout

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The Effect Of Bankruptcy On Audit Delay And Timeliness (Empirical Study on Manufacturing Companies Listed in Indonesian Stock Exchange in the Period of 2012-2016)

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Abstract

Audit delay and timeliness are important factors that influence the quality of accounting information. This study provides empirical evidence to answer the question of how bankruptcy impacts on audit delay and timeliness. External secondary data uses annual reports and collected from manufacturing firms listed in Indonesian Stock Exchange (IDX) in the period of 2012-2016. This research uses a quantitative research method, to examines the relationship between bankruptcy, audit delay, and timeliness. Measurement of Z- Score Altman model prediction also used in this reserach. This study finds that bankruptcy which is measured by Z-Score is negatively influence audit delay and timeliness. Any decrease of Z-Score shows the possibility of a company experience bankruptcy and therefore causes audit delay and timeliness.

Keywords:

Audit delay, timeliness, bankruptcy, Altman prediction model.

Introduction

The availability of accessible capital market has been one of many factors that facilitate the growth of business in Indonesia. To be eligible to trade it shares in Indonesian Stock Exchange (IDX), a company must submit audited financial report on timely basis that comply with Financial Accounting Standard (SAK) to Financial Service Authority (OJK). This requirement is implemented to ensure that the financial information is reliable and relevant, especially for investors to assess how much return they will get in each share they buy.

However, timeliness of publication of financial report depends on timeliness of completion of audit process by auditors. Audit delay happens when audit process is completed behind the schedule. It is time span of completion annual financial statements audit, measured based on the number of days required to complete independent audit report of financial statements since the company closing book that is 31 December until the date stated on audit report (Lestari, 2010). There has been growing interests to research study audit delay because of various causes of audit delay and its effect to corporations. Some researchers conduct study regarding bankruptcy factor as one of the reason audit delay occurrence. It is argued that company size, financial industry, operational complexity and internal control quality are correlated with audit delay (Dyer and McHugh, 1975; Courtis, 1976; Ashton *et. al*, 1987).

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To ensure timeliness of financial report publication, OJK requires that listed firms must submit their annual reports no later than at the end of the fourth month after closing financial year (OJK Reg. No.

29/POJK.04/2016). The sooner a financial statement is published, the more relevant of information in the report to be utilized as decision making basis by its users. The value of timeliness is an important factor for a financial statement to be useful (Givoly and Palmon, 1992). It influences benefit expected from financial statement by its users (Feltham, 2002).

However, timeliness in publishing financial report is dependent to the time reqiured to finish the audit. According to Schawrz and Menon (1985), the probability of bankruptcy is one of variables that cause the change of auditor. The potency of bankruptcymay be the reason for auditor to take more time to ensure the real condition of the company, by expanding audit sampling and other procedure. Therefore, precaution and additional steps taken by auditor lead to prolonged audit process and causing delay which is called audit delay.

When auditors detects bankruptcy sign, it affects their opinions to the financial statement. As for management, when bankruptcy is detected, it becomes detrimental effect to publish its financial statement. The management worries that potency of bankruptcy, if known to external stakeholders, will cause negative response that worsen the problem. For example, stockholders will sell their stocks when they learn of bankruptcy is going on. This will further exacerbate the problem, as more stocks are sold the value of the company will decrease further. To mitigate negative effect of bankruptcy possibility, management delays the submission of audited financial statements to the public. Therefore occurs the delay of publication of financial statements which violate the principle of timeliness. Based on above explanation, this research will study the effect of bankruptcy to audit delay and timeliness.

THEORETICAL FRAMEWORKS AND HYPOTHESIS

Agency Theory

Research regarding audit delay and timeliness are based on agency theory. The theory derives from contractual relationship between principal and agent. In agency theory, the agency relationship is occured when one or many individuals (principal(s)) employ or contract other person or many persons (agent(s)) to provide goods or services. In this regards, principals delegate their authorities to make decision making to agent. The agency problem emerges because of separation between principal as the owner of business and agency as managers who run the business or companies. It happens because each party has incentive to maximize their utility functions.

Management as agent runs the company by making strategic decision through audit service under auspices from audit committee. A company needs to perform management to oversee its business operation. Stockholder as a principal, assigns the audit committee to monitor the management performance in term of financial reports. Principal also employ audit service to control company's management performance. Therefore, financial statements are product of management performance and can be used to assess how well the management performance.

Given the different incentives, conflict of opinions frequently happen between principal and agent. It happens because principals are motivated to secure contract that enrich themselves with increasing profitability rate. Whereas for managements are driven to maximize their economic and psychological fulfillments, such as to secure investments, loan, or compensation contracts.

Managements are internal party who run day to day therefore they know better information regarding business they operate. Meanwhile owners have limited access to information regarding day to day business operation. One of the media used by business owners to learn condition of companies is financial statements. Therefore, when financial reports are delayed to be published, it impacts on information received by principals.

Bankruptcy

Bankruptcy is a condition when an entity has financial trouble, from liquidity problem when a company cannot convert or acquire enough current assets to meets its liabilities to insolvability problem when a company accumulates more debts than its assets and hence cannot service its debts. Bankruptcy is economic failure when a company loses money or revenue to cover its cost in long run. Adnan (2003) identifies two kinds of financial failures as insolvency with the basis of cash flow and stock. A company faces bankruptcy when it cannot generate adequate cash flow or when its liabilities exceed its asset.

Generally the causes of bankruptcy are economic factor, financial factor, negligence, disaster, fraud and other factor.

Scharwtz and Menon (1985) argue that bankruptcy potency is solvability problem when debts are exceeds the assets. When there is no prospect of servicing the debt, then the logical consequence is liquidation. Several models of bankruptcy prediction are as follow:

(a) Step wise multiple discriminant analysis or called Fulmer model (Fulmer, 1984) is formulated as follow:

H= 5.528 V1 + 0.212V2 + 0.073 V3 + 1.270 V4 – 0.120V5 + 2.335V6 +0.575 V7 + 1.083 V8 + 0.894 V9 – 6.075
Whereas:
V1 = *Retained Earning/Total Asset;* V2 = *Sales/Total Assets;* V3 = *EBT/Equity;* V4 = *Cash Flow/Total Debt;* V5 = *Debt/Total assets;* V6 = *Current Liabilities/Total Assets;* V7 = *Log Tangible/Total Assets;* V8 = *Working Capital/Total Debt;* V9 = *Log EBIT/Interest*

If H < 0, a company is categorized as default.

Using ratio analysis called as Zimijewski model to measure leverage and liquidity performance of a company it is formulated as follow:

X = -4.3 - 4.5X1 + 5.7X2 - 0.004X3
Whereas:
X1 = ROA (*return on asset*); X2 = *Leverage (debt ratio;* X3 = Liquidity (*current ratio*)

(b) Predicting business failure by calculating evaluated financial ratio. Its result is then compared to average ratio in similar industry (Blasztk, 1984).

(c) Using step-wise multiple discriminant analysis or called CA-Score model, which was developed by Jean Leagult, it is calculated as follow:

CA- Score = 4.5913 (shareholders investment(1) / total asset (1)) + 4.5080 (earnings before taxes and extraordinary items + financial expenses(1) / total assets(1)) + 0.3936 (sales(2) / total assets(2)) - 2.7616
Whereas:

Description of previous period

Description of two previous periods
CA – Score ,< -0.3, a company is categorized fail or default.

(d) Springate Model is basically follows Altman's calculation (1968). The calculation of bankruptcy prediction is applicable to predict bankruptcy with accuracy rate 92,5%. The calculation of Gordon Springate (1978) Model is as follow:

S = 1.03A + 3.07B + 0.66C + 0.4D
Whereas:
A = working capital / total asset; B = net profit before interest and taxes / total asset; C = net profit before taxes / total asset; D = sales / total assets

(e) Calculation of bankruptcy prediction with Multiple Discriminant Analysisto five types of financial ratio namely working capital to total assets, retained earnings to total asset, earnings before interest and taxes to total assets, market value of equity to book value of total debts, and sales to total assets. The model calculation is as follow:

Z-Score = 1.2T1 + 1.4T2 + 3.3T3 = 0.6T4 + 0.999T5
Whereas:
T1= *working capital / total assets;*T2= *retained earnings / total assets;* T3= *earnings before interest and taxes / total assets;* T4= *market capitalization / book value of debt;* T5= *sales / total assets*
The model was devised by Altman in1968. However, it is developed and revised in 1 variable of T4, so the calculation of model is as follow:

Z-Score = 0.717T1 + 0.847T2 + 3.107T3 + 0.420T4 + 0.998T5
Whereas:
T1= *working capital / total assets;* T2= *retained earnings / total assets;* T3= *earnings before interest and taxes / total assets;* T4= *book value of equity / book value of debt;* T5= *sales / total assets*

Audit Delay

Audit delay is the length of time of completion of audit process calculated from the date of closing book until the date of completion of audit process by auditor (Ahmad and Kamarudin, 2010; Halim, 2011; Ashton and Hudson, 2011). Audit delay effects investors' decision making significantly, especially in deciding whether or not to buy share, and therefore it also affects companies' quality. The audit delay influences quality of information in published financial reports and in turn it affects uncertainty in decision making process based on published financial statements.

According to Dyer and McHugh, as cited by Putri (2011) delays in the process of audit are grouped into: (i). Preliminary lag, as interval between the end date of fiscal year until the date when preliminary financial statements are accepted stock exchange authority; (ii). Auditor's signature lag, as interval between the end date of fiscal year until the date of audit report. From this definition, auditor's signature is audit delay; and (iii). Total lag, as interval between the end date of fiscal year until the date when the audited financial statements is received by stock exchange authority.

Timeliness

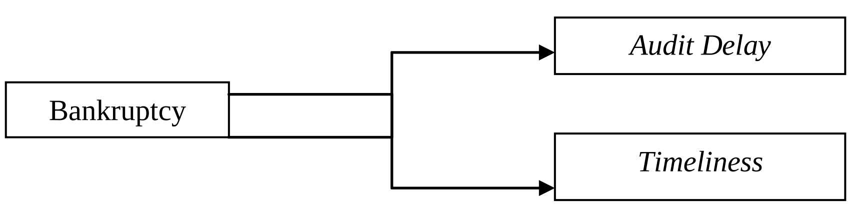
Information in financial statements which is presented accurate and timely is useful to both internal and external users because it relevantly used as the basis for policy making or decision making (Fetham, 2002). Indonesian Stock Exchange Authority regulates that the listed companies must submit their financial reports timely. Furthermore, the importance of timeliness is stated in Statement of Financial Accounting Standard (PSAK) number 1. It is stated that the benefit of of financial reports is lesser when they are not available on time.

Dyer and McHugh (1975) argues that timeliness is primary element of financial statements. Furthermore, Dyer and McHugh conducted empirical study regarding factors that correlate with timeliness behavior of financial reports. Dyer and McHugh study the factors of company size, end date of closing book period, and profitability rate. Dyer and McHugh find that there is significant correlation between company size and end date of closing book period with timeliness, while profitability rate has no significant correlation with timeliness of financial report. In addition to Dyer and McHugh study, in his research of industrial companies, Courtis (2006) finds that industrial companies in areas of energy, fuel, and finance prepare their financial statements faster than those firms of mining, exploration and service.

Frame of Reference

Timeliness influences how useful financial statement to its users. Tolerance of timeliness is four months after the end date of fiscal year the financial statements should be reported. Factor such as complexity of operation is not correct justification of inability to meet the requirement to present financial report on time (Marom, 2001).

There is, however, a factor that cause audit delay and further delaying submission of financial statement to stock exchange authority and publishing to general public, namely the possibility of a company going bankrupt. The more probable of bankruptcy on a company, the more probable audit delay occurrence. When auditing a company that has prospect of bankrupt, an auditor needs more procedure, be more cautious and therefore needs more time to carry out the audit in order toarrive at appropriate opinion. Meanwhile, for management, when it is evident that the company is going to bankrupt, it becomes incentive to delay submission of financial statements because if the condition known to public, through financial statements, it will have adverse effect to company. The shareholders might release their stocks massively and concurrently which will drop company's value in stock market. Potential investors who interested to invest their money might withdraw immediately when learn about the possibility of bankruptcy. Delaying to publish financial statement is expected by management to minimize risk of decrease of stock value on market. Based on the explanation, the frame of reference for this research is as follow:



Figue 1. Frame of Reference

Hypotheses

Auditors are more likely to complete audit process and come up with opinion when auditors certain that the auditees are in bankruptcy category based on bankruptcy calculation model. On the other hand, auditors are also more likely to complete audit process timely when auditors certain that the auditees have high profitability and consistent with going concern principle and therefore lead to easiness in giving audit opinion (Altman, 1968).

Bankruptcy is condition when a company faces trouble, either caused by internal or external factor, that lead to continous financial problem. Mismanagement may lead to bankruptcy from internal factors, while the emergence of more efficient competitors might have become the cause of bankruptcy from external factor. Based on theoretical framework and frame of reference, this research develops hypotheses to seek the effect of bankruptcy to audit delay and timeliness as follow:

H_1: bankruptcy affect audit delay H_2: bankruptcy affect timeliness

RESEARCH METHODS

Research Variables

According to Sugiyono (2014:2), research variable is anything that has a quantity or quality that varies to be studied. Two kinds of variables in research are dependent and independent variables. Dependent variable is a variable that is influenced directly or indirectly by exogenous variable in the model or by independendt variable (Sugiyono, 2012:59). In this research, the dependent variables are Audit delay, notate by AUD and Timeliness, notate by TIME. Meanwhile, Independent variable is a variable that influence value of dependent variable in a research model (Sugiyono, 2015:5). In this research, the independent variable is bankruptcy.

Population and Sampling

Population is all subjects that have certain qualities and characteristics to be studied and inferred (Sugiyono, 2014). In this research the population is all companies listed in Indonesian Stock Exchange (IDX). Sample is part of population which have same characteristics (Sugiyono, 2014). In this research the sample is 24 manufacturing companies listed in Indonesian Stock Exchange in the period of 2012-2016. The firms included in the sampling are companies that manufacture cement, ceramics, metal, and chemistry.

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistics is used to explain data description of all variables included in research concept, which consist of minimum value, maximum value, average value and standard deviation of each variable. The list of companies sampled is in Annex 1. While the descriptive statistics is presented as follow:

Table 1. Descriptive Statistics Data

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
BANG	120	.00	8.69	1.9933	1.36290
AUD	120	43.00	206.00	83.7250	25.14361
TIME	120	48.00	212.00	93.8667	25.45681
Valid N (listwise)	120				

Source: data processed with SPSS

Based on statistical test from descriptive statistics table, acquired 120 research data, with the following details:

(f) Audit Delay variable has minimum value 43, maximum value 206 and average value 83.7250 with standard deviation 25.14361. It means time span required by independent auditor to complete the audit is 43 days the fastest, 206 days the longest, therefore the average days is 83.725 days.

(g) Timeliness variable has minimum value 48. maximum value 212 and average value 93.8667 with standard deviation 25.45681. It means time span required by company to submit audited financial statements is 48 days the fastest, 212 the longest and therefore average time is 93.8677 days.

(h) Bankruptcy variable has minimum value 0.00, maximum value 8.69 and average value is 1.9933 with standard deviation 1.36290. It means that bankruptcy value for sampled companies is 0.00 the smallest, the largest is 8.69 and averaged at 1.9933 therefore they are not considered bankrupt according to Z-score criteria.

Classical Assumption Test

Linear regression model is suitable to fulfill several assumptions that later called classic assumption that includes normality test, multi co-linearity test, hetero-skedacity test, and auto-correlation test (Priyanto, 2012). These are the tests:

Normality Test

Normality test in this research is done with normal graphic method. The followings are the results of P-P test Plot of regression standardized as in Graphic 1:

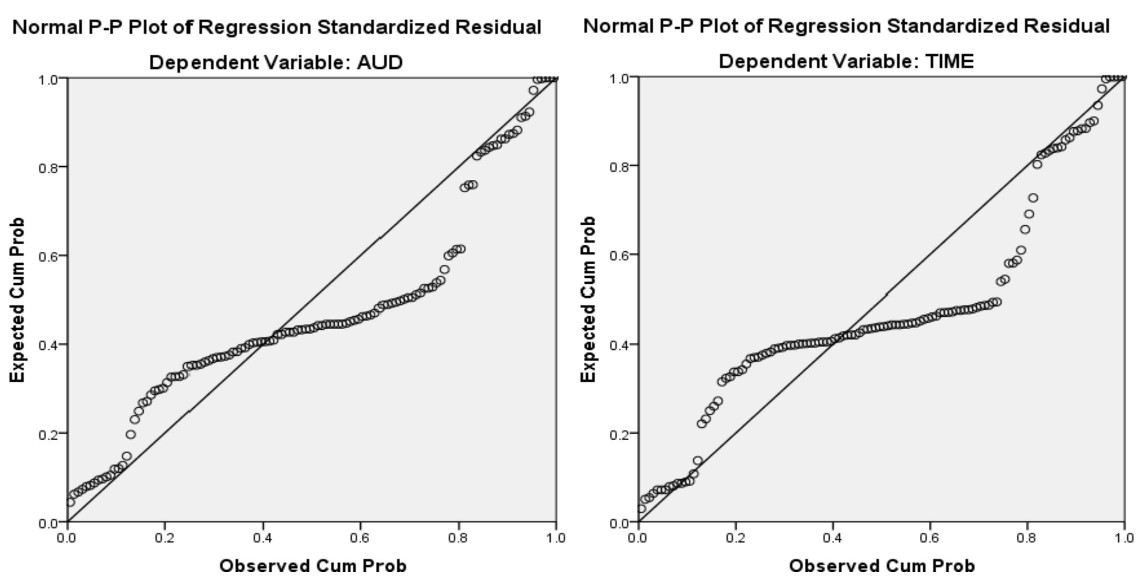


Figure 2. Normality Test Result
Source: data processed with SPSS

Residual normality test with graphical method is conducted by observing data dispersion on diagonal source on the graphic of Normal P-P Plot Regression Standardized Residual. As the basis for decision making, if the dots disperse around the line and following diagonal line, then the residual value is normal (Priyatno, 2012:144). Based on Graphic 1, it can be observed that the dots disperse around the line and following diagonal line, therefore it can be conclude that the residual value is normal.

Multicollinearity Test

Multicollinearity test is used in research by observing tolerance value and variance inflation factor (VIF) value. The following is the result table of multicollinearity test:

Table 2. Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
BANG	1.000	1.000

Dependent Variable: AUD, TIME
Source: data processed with SPSS

Based on Table 2, it is observed that tolerance values of both variables are greater than 0.10 and VIF value is less than 10. It means that there is no multicollinearity problem in regression model.

Heteroscedasticity Test

Heteroscedasticity test used in this research is Glejser test (Priyatno, 2012). The following table is the result of Heteroscedasticity test:

Table 3. Heteroscedasticity Test Result

Model	Sig.	Note
(Constant)	0.000	
BANG-AUD	0.112	No Heteroscedasticity
BANG-TIME	0.133	No Heteroscedasticity

Dependent Variable: ABS_RES Source: Data processed with SPSS

From Table 3 it is observed that all independent variables have significance value more than 0.05. Therefore it can be conclude that all variables have no problem of heteroscedasticity in regression model.

Autocorrelation Test

Autocorrelation test in this research uses Durbin-Watson (DW Test) (Piryatno, 2012). The following is the result of autocorrelation test:

Table 4. Autocorrelation Test Result Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.156[a]	.024	.016	24.94209	1.793

Predictors: (Constant), BANG
Dependent Variable: AUD, TIME
Source: Data processed with SPSS

Based on Table 4 it can be observed that the value of Durbin-Watson (DW) is 1.793. DU and DL values are acquired from Durbin-Watson table, that is number of data (n) = 120 and the number of independent variable (k) = 1. Based on statistics table of Durbin-Watson, for n = 120 and k = 1, the results are DU value at 1.7189 and DL value at 1.6853. Having acquired DU and DL values, it is then progress to calculate 4-DU and 4-DL values. By inputting the values of DU and DL, the result of 4-DU value is 4- 1.7189 = 2.2811 and the result of 4-DL value is 4-1.6853 = 2.3147.

After the values of DW, DU, DL, 4-DU and 4-DL are known, the next step is exercising decision making on Durbin-Watson test. The decision making is exercised by taking into accounts the following conditions (Priyatno, 2012):
DU < DW < 4-DU, then H_0 is accepted which means there is autocorrelation.
DW <DL, or DW > 4-DL, then H_0 is rejected which means there is no autocorrelation.
Dl > DW < DU, or 4-DU < DW < 4-DL, it means there is no certainty or no solid conclusion.
Because the value of DU = 1.7189, DW = 1.793 and 4-DU = 2.2811, then it is certain that the value of DU < DW < 4-DU = 1.7189 < 1.793 < 2.2811. Therefore H_0 is accepted.

Measurement of Overall Model Result (Overall Model Fit)

Model test is conducted by observing the result of model summary as follow:

Table 5. Overall Model Measurement Data

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.156[a]	.024	.016	24.94209

a. Predictors: (Constant), BANG
b. Dependent Variable: AUD, TIME
Source: data processed with SPSS

From Table 5 it can be observed that R = 0.156 and it indicates correlation between dependent variable and independent variable at 0.156 which also means that the correlation between dependent variable and independent variable is close enough. Meanwhile R square (R^2) = 0.024 indicates determinant coefficient, which is percentage of influence contribution of independent variable and dependent variable. It also can be said that the percentage of influence contribution of independent variable to dependent variable is 2.40%, while the rest is influenced by other variables that not included the model developed in this research.
Adjusted R square is 0.016 and it indicates the influence of independent variable to dependent variable is 1.60%. Adjusted R square is employed to measure the extent of influence if the regression model includes two or more variables. Meanwhile, the value of Standard Error of Estimate is 24.294209 indicates that the error that might occur in predicting the value of company is 21.29%.

Regression Coefficient Test (F Test)

Regression coefficient test (F Test) is conducted to test whether an independent variable is significantly influence dependent variable or not. The result of the test is as follow:

Table 6. Regression Coefficient Test Result (F Test) – Audit Delay

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1823.191	1	1823.191	2.931	.045[b]
	Residual	73408.734	118	622.108		
	Total	75231.925	119			

a. Dependent Variable: AUD
b. Predictors: (Constant), BANG

Source: Data processed with SPSS

Based on Table 6 it can be explained that F-Test value is 2.931 is significant at 0.045. Because significance value 0.045 is smaller than 0.05 it can be concluded that the bankruptcy influences audit delay.

Table 7. Regression Coefficient Test Result (F Test) – Timeliness

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1799.804	1	1799.804	2.820	.048[b]
Residual	75318.063	118	638.289		
Total	77117.867	119			

a. Dependent Variable: TIME
b. Predictors: (Constant), BANG
Source: Data processed with SPSS

Based on Table 7 it can be explained that F value is 2.2820 and significance value at 0.048. From this result in can be concluded that bankruptcy influences timeliness as proven by significance value 0.048 is less than 0.05.

Partial Test (t Test)

Partial test is used to discover whether partial independent variable has significant influence of dependent variable or not. If significance value < 0.05 then H_0 is rejected and H_a is accepted, which means independent variable partially influences dependent variable. While if significance value > 0.05, then H_0 is accepted and H_a is rejected, which means that independent variable does not partially influence dependent variable (Priyatno, 2012).

Table 8. t Test Result – Audit Delay

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	89.450	4.046		22.111	.000
BANG	-2.872	1.678	-.156	-1.712	.045

a. Dependent Variable: AUD Source: Data processed with SPSS

Table 8 indicates that the result of t value is -1.712 with significance 0.045. Because significant value is less than 0.05 then it can be inferred that bankruptcy variable has negative influence to audit delay.

Table 9. t Test Result – Timeliness

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	99.554	4.098		24.295	.000
BANG	-2.853	1.699	-.153	-1.679	.048

a. Dependent Variable: TIME Source: Data processed with SPSS

Table 9 shows that t value is -1.679 with significance value at 0.048. Because the significance value is 0.048 under 0.05 then it can be conclude that bankruptcy variable has negative value to timeliness.

Discussion Hypothesis

The calculation results in Table 6 and Table 7 shows that both audit delay and timeliness are significantly influenced by bankruptcy. Table 6 shows that the siginificance value of bankruptcy influences audit delay is at 0.045, while in Table 7 points out that the bankruptcy influences timeliness of financial reports publication is significant at 0.048. It can also be said that audit delay and timeliness are simultaneously affected by the probabilty of bankruptcy. Furthermore, based on calculation in Table 8, it shows that bankruptcy variable has negative value to audit delay at -1.712. It means that the first hypothesis “bankruptcy affect audit delay” is **accepted**. A firm that face the threat of bankruptcy will be likely to face audit delay because the auditor will take more precaution on audit process they take. It means that more time is needed by auditors to finish their audits which is very likely to cause delay from the scheduled time.

The calculation in Table 9 shows that bankruptcy has negative value to timeliness at -1.679 and significant at 0.048. Therefore, the second hypothesis “bankruptcy affect timeliness” is **accepted**. A firm that face the prospect of bankruptcy will be more likely to delay the publication of its financial statement, lest the public know about the negative prospect. Therefore, this researach confirms previous research which find that the probability of bankruptcy will be likely to result both in audit delay and untimeliness of financial reports publication (Lawrence, 2003).

CONCLUSSIONS AND SUGGESTIONS

Based on discussion on the research, it can be concludes the following points: (i). The average time of audit delay of manufacturing companies that listed in Indonesian Stock Exchange in the period of 2012- 2016 is 83.725 days, meanwhile the average value of their timeliness is 93.8667 days; (ii). The result of F Test (simultaneous test) shows that bankruptcy variable influences audit delay and timeliness; and (iii). The result of t Test (partial test) shows that bankruptcy variable influences negatively to audit delay and timeliness. According to these conclusion, hence this research suggest that: (i). The next research should extend the sample, for example all manufacturing companies on several sectors and (ii). The next research might include more independent variables such as profitability, liquidity, or other independent variables.

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ANNEX 1
SAMPLE OF COMPANIES RESEARCHED (Manufacturing Sector)

No.	Code	NAME OF COMPANIES	The Date of Listing in IDX	Sub Sector
1	SMBR	SemeBaturaja (Persero), Tbk	28/06/2013	Cement
2	SMCB	Holcim Indonesia, Tbk	10/08/1997	Cement
3	SMGR	Semen Indonesia (Persero), Tbk	08/07/1991	Cement
4	WTON	WijayaKaryaBeton, Tbk	08/04/2014	Cement
5	AMFG	Asahimas Flat Blass, Tbk	08/11/1995	Ceramics, porcelain and glass
6	ARNA	Arwana Citra Mulia, Tbk	17/07/2001	Ceramics, porcelain and glass
7	IKAI	Inti KeramikAlamAsriIndustri, Tbk	04/06/1997	Ceramics, porcelain and glass
8	KIAS	Keramika Indonesia Assosiasi, Tbk	08/12/1994	Ceramics, porcelain and glass
9	MLIA	MuliaIndustrindo, Tbk	17/01/1994	Ceramics, porcelain and glass
10	TOTO	Surya Toto Indonesia, Tbk	30/10/1990	Ceramics, porcelain and glass

11	ALKA	Alaska Industrindo, Tbk	12/07/1990	Metal
12	ALMI	Alumindo Light Metal Industry, Tbk	02/01/1997	Metal
13	BAJA	Saranacentral Bajatama, Tbk	21/12/2011	Metal
14	BTON	Beton Jaya Manunggal, Tbk	18/07/2001	Metal
15	GDST	Gunawan Dianjaya Steel, Tbk	23/12/2009	Metal
16	INAI	Indal Alumunium Indutry, Tbk	05/12/1994	Metal
17	ISSP	Steel Pipe Industry of Indonesia, Tbk	22/02/2013	Metal
18	JKSW	Jakarta Kyoei Steel Work, Ltd Tbk	06/08/1997	Metal
19	JPRS	Jaya Pari Steel, Tbk	08/08/1989	Metal
20	BUDI	Budi Stach& Sweetener, Tbk	08/05/1995	Chemistry
21	DPNS	Duta Pertiwi Nusantara, Tbk	08/05/1990	Chemistry
22	EKAD	Ekadharma International, Tbk	14/08/1990	Chemistry
23	INCI	IntanWijaya International, Tbk	24/07/1990	Chemistry
24	SRSN	Indo Acitama, Tbk	11/01/1993	Chemistry

Source: Data processed

A Phenomenological Inquiry of Experiences of Pioneer Senior High School Graduates under General Academic Strand (GAS): Influence on Career Decision Making

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ABSTRACT

As Philippines fully implemented one of the biggest changes in its educational system, the impact of the new K to 12 curriculum to pioneer senior high school (SHS) graduates in their selection of career after completing the basic education should be described. Thus, this paper presents the experiences of General Academic Strand (GAS) graduates in different subjects which they find significant and influential in their identity development and career choice and come up with recommendations on how to improve teachers' instruction and the implementation of the school GAS program itself. The main sources of data were from the survey, interviews participated in by pioneer graduates and documentary analysis of their individual portfolio. All fifty-seven graduates were asked to rate the level of influence of thirty-one subjects in their career choice. Seven interviewed participants who shared their individual experiences were purposefully selected based on the ratio of the outcome of the survey about their plan as they exit SHS: four will pursue college, one will enter the military, one is planning to look for a job and one is undecided on the day the interview was conducted. Clark Muostaka's phenomenological treatment of qualitative data was done to analyze and interpret the individual transcript of interviews. Findings from the study showed individual textural description of experiences: "A More Responsible and Compassionate Research Leader", "Built Character through Various Social Sciences Disciplines", "Fascinated by Technology", "From a Carefree to a Disciplined Man", Mystified by Philosophy", "Enlightened by World Religions" and "The Accidental Writer". Though reduction, eidetic insights to serve as the essence of the experiences include "Self-discovery and Awareness", "Guided by Educators" and "Transformation".

Keywords

Senior High School, General Academic Strand, K to 12 curriculum, career choice, experiences

Introduction

Philippines through the Department of Education (DepEd) implemented a new curriculum which started during the school year 2012-2013. This is a major reform in basic education. One of the changes introduced in the said curriculum is the extension of years spent in school. From ten years of basic education it has been modified to twelve years. There are additional two years for Senior High School (SHS). Daquiog (2012) in his article emphasizes that SHS aims to produce productive and responsible citizens equipped with essential competencies and skills for lifelong learning and employment.

While other Academic SHS strands focus on specific college courses and career of students, General Academic Strand (GAS) on the other hand is offered to senior high students who are undecided on what course to pursue in college. The aim of GAS is to help students realize their potentials and skills to decide for the future. According to Commission on Higher Education (CHED) Memorandum Order Number 105 series of 2017 or the Policy on the Admission of SHS Graduates to the Higher Education Institutions (HEI) Effective Academic Year 2018-2019, all grade 12 graduates are eligible to enter college regardless of the track or strand taken in the senior high school as long as they passed the admission requirements of the admitting HEI.

GAS curriculum has a total of thirty-one subjects. The SHS students are required to take up 15 core subjects with eight learning areas which include Language, Humanities, Communication, Mathematics, Science, Philosophy, Social Science and Physical Education, 7 applied subjects in which the context depends on the track and 9 specialized subjects. Under specialized subjects offers two electives depending on what the school can offer and students' interest.

Two years of SHS brought students new learning experiences to assess themselves, their interest and skills to help them make up their mind on what career to pursue after SHS. Guiding students with their decisions is a very crucial responsibility of the school. Career choice has become one of the significant matter and a complicated science, considering that the decision is influenced by numerous factors (Nyamwange, 2016). Hewit (2010) as mentioned in the study of Nyamwange (2016) said that most students are heavily influenced by professions of their parents or their achievement, some is because of the high salary and benefits of the career and some follows their passion and interest.

The main objective of this study was to identify and highlight the subjects or activities for two school years which greatly influenced the pioneer graduates' decision on what path to take after exiting SHS and uncover the picture of the experiences of the first batch of senior high school graduates of Gen. E. Aguinaldo National High School-Bailen under General Academic Strand (GAS). This paper wanted to describe how subjects' experiences influenced the graduates' identity development and career decision- making and recommend ways to improve teachers' instruction related to GAS curriculum as well as school's GAS program.

Statement of the Problem

The main objective of this study was to describe the experiences of the first batch of senior high school graduates of Gen. E. Aguinaldo National High School-Bailen under General Academic Strand (GAS) and examine the influence of the subjects' experiences on graduates' identity development and career decision-making.

Specifically, it sought answers to the following questions:

1.) What experiences related to subjects, lessons or activities under GAS curriculum the pioneer senior high school graduates find substantial to their decision making on what path to take after SHS?
2.) What are the implications of the insights from the subjects' experiences of the participants on improvement of instruction?
3.) Based on the first batch graduates' experiences and perspectives, what suggestions can be made to teachers and school for improved instructions related to General Academic Strand curriculum?

Paradigm of the Study

The description of the different experiences of pioneer senior high school graduates helped the researchers to come up with recommendations to teachers to improve their instruction for coming school years and to suggest how to improve school's GAS program. These suggestions would help the teachers on their professional development as they continue their work as senior high school teachers and also to school administrators.

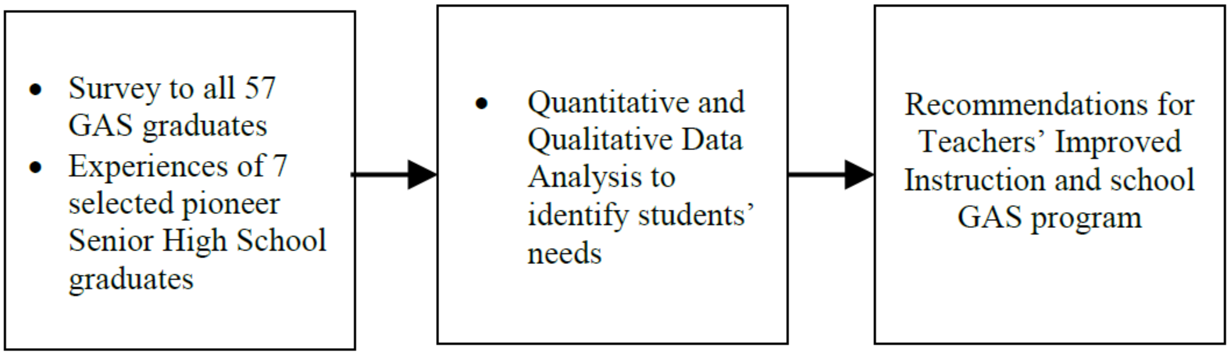

Figure 1: Research Paradigm

Scope and Limitations of the Study

This research is subjected for various limitations. This study covered pioneer SHS graduates of Gen. E. Aguinaldo National High School-Bailen under GAS only.

The responses of the 57 GAS students on survey about the level of influence of each subject depend on how they reflect on their individual experiences during the semester when they took the subjects. Furthermore, recommendations on how to improve teaching instructions were also based on students' perspective and narration of their experiences.

Methods

Research Design. In this study, quantitative and qualitative means of investigation were employed through a simple survey questionnaire followed by interviews and documentary analysis for selected participants. SHS graduates' perspective, insights and experiences showed the extent of how the subjects in the curriculum affect their major decision in life and identify the need for improvement of the teachers' instruction through some suggestions on selected subjects.

Instruments. The researchers listed 31 subjects under GAS and ask 57 students to rate the level of influence of these to their identity development and career decision-making. Students based their responses on their subject experience during the semester it was taught. It is answerable by a 5-point Likert scale as follows:

Table 1. Scale Used in the Study

Scale	*Range*	*Level of Influence /Verbal Interpretation*
5	4.21-5.00	Extremely Influential
4	3.41- 4.20	Very Influential
3	2.61- 3.40	Somewhat Influential
2	1.81-2.60	Slightly Influential
1	1.00-1.80	Not at all Influential

The researchers also asked students on their plan after senior high school. The students have five options: will go to college, will be an entrepreneur, will look for a job and undecided. With the help of the survey result, purposive sampling was used as a basis for selecting participants for the individual interview. Since more students will go to college, 4 students from this exit option were interviewed and 1 participant each from other options.

For qualitative part, the perspective of the pioneer SHS graduates regarding some questions such as "What are the subjects that made you realize and discover your skills and potentials?", "What are your experiences in SHS that made you decide to continue to college/ apply in the Armed Forces of the Philippines (AFP)/ find a job"?" Was there an instance that an activity for a particular subject convinced you to take up the course you are enrolled now?" What keeps you undecided of the college course or path until now?" served as basis for the analysis of data and arrived to individual textural description.

Respondents and Participants. Respondents who answered the simple survey are the 57 grade 12 students who are expected to graduate when the survey was conducted. Among 57 students, the researchers selected participants for the qualitative part of this study. Researchers selected participants with different plans after senior high during the time this research was conducted based on the outcome of the survey: four of them will go to college, one will enter the military, one has to stop and will look for a job and one is still undecided on what to do after senior high school.

Data Gathering Procedure. Survey was administered a month before the graduation of the pioneer batch of senior of high school while interviews were done after graduation on April 7, 2018. This was an open-ended interviewing and discussions. According to Creswell (2008), meanings are constructed by human beings as they engage with the world they are interpreting. Qualitative researchers tend to use open-ended questions in the interview so that the participants can share their views. The researchers also used the power of social media whenever there are follow-up questions to the participants or something to be clarified. Transcript of individual interviews was examined to draw out meaningful experiences from the lives of the participants. Another source of data is from a documentary analysis of the individual students' portfolio that the participants prepared and submitted to SHS department as part of a subject requirement. The portfolio consists of students' autobiography, personal essay, achievements, narrative of significant experiences from elementary to senior high school with emphasis on unforgettable learning and experiences in academic life and future plans and goals.

Data Analysis. For the first set of survey, all grade 12 students were asked about their plans after senior high school. It was then followed by a list of subjects in the curriculum that they rated. The aim of these surveys was to determine how these subjects influenced their realizations of their potentials and what to do after SHS. Frequency, percentage and weighted mean were used to determine the students' plan after SHS and subjects' level of influence to the students' career decision-making. Said surveys and results were used as basis in selecting participants. The last part of the data gathering is the interview of seven participants. Clark Moustakas phenomenological method of analyzing qualitative data was used to describe the experiences of the participants. In his book, he mentioned "by adopting a strictly descriptive approach, we can let the phenomena speak for themselves (Kaam, 1966). The aim is to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general or universal meaning are derived (Moustakas, 1994, p. 13).

Ethical Issues. There are some ethical issues being discussed by researchers to senior high school teachers before the conduct of this study. First, it was clearly explained by the researchers to the teachers that the results of students' responses on the survey is not an evaluation of their teaching performance during the two school years but rather how the experiences influenced the students. That is why the researchers only revealed the top influential subjects to the expected graduates to avoid negative impact on the teachers on some subjects which ranked low. All agreed that students' responses to surveys down to the interviews will be respected and will not be treated personally. Moreover, the names of the seven student-participants were not revealed in this study.

Results and Discussions

Through a simple survey, the researchers asked all fifty-seven students who are expected to graduate on April 2018 about their plans or options as they exit SHS. The summary of the responses is written on the table below:

Table 2. Senior High School Candidates for Graduation Exit Options

Exit Options	*Number of Students*	*Percentage*
will go to college	33	57.90%
Will be an entrepreneur	0	0
will enter Armed Forces of the Philippines (Philippine Air Force)	8	14.03%
Look for job	8	14.03%
Undecided	8	14.03%
Total	57	100%

The table above gave the idea to the researchers of the plan of grade 12 students as they exit SHS. Based on the results, more than half of the expected graduates will continue to college to pursue a degree. All other options obtained a percentage of 14.03%. It is evident that today's young people are inherently aware of the return on investment provided by a college education (Glatter, 2016). This result served as one the basis in selecting participants for the interview on the qualitative part of this study.

On the other hand, top 10 subjects which greatly influenced their identity development and SHS exit options is shown in the table below:

Table 3. Top 10 Influential Subjects to Expected SHS Graduates SY 2017-2018

No.	*Subjects*	*Weighted Mean*	*Verbal Description*
1	Introduction to the Philosophy of the Human Person (IPHP)	4.62	Extremely Influential
2	Work Immersion/Research/ Career Advocacy/ Culminating Activity	4.48	Extremely Influential
3	Contemporary Arts from the Philippine Region (CPAR)	4.21	Extremely Influential
4	Introduction to World Religions and Belief Systems	4.16	Very Influential
5	Personal Development (PerDev)	4.06	Very Influential
6	Empowerment Technologies (E-tech)	3.88	Very Influential
7	21st Century Literature from the Philippines and the World	3.81	Very Influential
8	Practical Research 1 (PR1)	3.63	Very Influential
9	Business Mathematics (BM)	3.63	Very Influential
10	Disaster Readiness and Risk Reduction (DRRR)	3.51	Very Influential

Based on the result, most of the students' way of thinking of how to decide for their career or plans upon exiting senior high school was influenced by the subject IPHP, one of the fifteen core subjects in the curriculum. According to the students, they can freely think and express their thoughts during the discussions in the subject without worrying what their classmates will think about them. A participant said that most questions on this subject helped him to reflect on his life and provided direction for his future. It is through this subject that students are able to think for themselves. It is in discussing philosophy, people can think, this way it builds thinking people and the intelligentsia are engaged (Hicks & Holbrook, 2017). This is somewhat similar on what they experienced in the subject PerDev wherein they became aware of different stages of development and maturity. A participant said, "I became more mature and realized that I have to act my age." In an article Rodrigo (2012) mentioned that the more doors an individual opens the more he or she realizes there are to be opened. Personal development starts at a point of self-awareness and may as well be the ultimate end (Johns, 2005).

Moreover, the subject Work Immersion/Research/ Career Advocacy/ Culminating Activity also affects how the students will plan their career. High number of students said that experiences outside the school especially when they conducted a community research project related to the town's arts and culture provided them with insights and realizations on the importance of appreciation of one's community. It helped them to reflect on the needs of the society. One of them said, "Our town is rich with agricultural resources but I know only one student who is currently taking up course related to agriculture." As of the writing of this study, 2 graduates will take Bachelor of Science in Agriculture in a nearby State University. Their experiences on the research project regarding the irrigation system of a remote place for farmers motivated them to pursue the course. Also, under the same subject, 1-week Career Orientation likewise helped them to be motivated on what path to take after senior high school. Part of the activity is a forum wherein the school invited 10 young professionals in different fields who are all product of the school. Students said that this activity opened up their minds to what the real world is all about.

It was revealed from the results that these subjects served their purpose for GAS students. Aside from they enjoyed different activities in the subjects, they were influenced by these subjects on finding their interest. Furthermore, it was shown that students enjoyed arts subjects It was shown in the subjects Research Project and Culminating Activities, CPAR and E-tech. Also, influential subjects and activities are those that get into the inner part of the students' personality as they have experienced in PerDev and Introduction to the Philosophy of the Human Person.

Individual Textural Descriptions

The following highlights brief individual subject experiences of selected participants:

A Compassionate Research Leader and Environment Lover -Participant 1 is taking up Bachelor of Science in Environmental Science. In his statement, "In senior high school, I have developed skills which I was not able to discover when I was in junior high school, I can be a leader in a research group and help struggling members. I learned to love the environment more because of the DRRR and Philosophy subjects. My love for environment was strengthened when we had a career orientation and a speaker talked about this course. I got more curious and now have more willingness to know what this course is all about." ("Sa senior high school, andami kong nadevelop na mga skills ko na hindi ko natuklasan noong junior high school, pwede pala akong maging leader sa research at makatulong sa mga kagrupo, mas minahal ko ang environment dahil sa DRRR at Philosophy na lalong ipinamulat sa akin noong career orientation ng isang guest kaya lalo akong nacurious at nagkaroon ng willingness na alamin ang nilalaman ng kursong ito.")

Built Character through Various Social Sciences Disciplines – Participant 2 is a consistent student-leader who is very communicative and can express her feelings and ideas well. She wanted to be a teacher since she was in junior high school. However, her problem is what specialization to concentrate on. In her stay in GEANHS, she was fascinated by the different social science disciplines such as Philosophy, Understanding Culture, Society and Politics, World Religions and Personal Development. She said, "PerDev helped me to realize what specialization to take in college. In our lesson about stages of maturity, I appreciate Human Science. I also enjoyed other social science subjects like Philosophy which made me to think deeper about life. I can always relate my life to the lessons. During the career talk, when I listen to the forum, my plans became clearer when I realized that having a degree will bring more benefits in my life." ("PerDev po talaga isa sa nakatulong sa'kin noong grade 11, pinag-aralan po namin ang stages of maturity. Naappreciate ko ang ganda pag-aralan ang Human Science. Natulungan po ako ng subject sa pag-iisip ng kukuning course. Tapos nag-enjoy po ako sa ibang social sciences gaya sa Philosophy nakakapaisip po ‘yung lalim ng hugot sa buhay, naiirelate ko ang sarili ko. Pero noong career talk po mas naging malinaw sa akin ang lahat dahil alam ko mas maraming benefits sa buhay kapag tapos sa pag-aaral.”) Now she is taking up Bachelor of Secondary Education major in Social Science in a State University in the province of Cavite.

Fascinated by Technology- Participant 3 is currently taking up Bachelor of Science in Information Technology. Because he is from a big family of 8, he never experienced a life of abundance. He is known to his classmates as a student who keeps on looking for means to earn money to support his everyday needs. An example is encoding classmate’s assignments. He said during the interview that before senior high, he has many choices on what course to take in college such as Business Management, Nursing, Education and Tourism. During his journey in SHS, he had enough time to know and discover his skills. Among the subjects he taken in SHS, he said that Empowerment Technologies helped him to realize his potential. He enjoyed web designing with hypertext marked-up language (HTML) programming. He said, “The subject E-tech molded me to become a computer enthusiast. I learned so much in every lesson, things that I never encountered in my academic life but I learned them easily and I enjoyed so much.”

(“E-tech po talaga ang humubog sa akin na maging mahilig sa computer. Andami kong nalaman na lessons na never ko pang na-encounter pero andali kong natutunan at naging masaya ako.”)

From A Carefree to a Disciplined Man – Among the participants, participant 4 is the most improved student when it comes to behavior. During his junior high school days, he was one of the problem students. Gradually, he has shown great improvement in his academics and behavior during his senior high school. He said some subjects helped him to have plans and opened his mind about life. He also mentioned that guidance and advises of teachers made him to be more mature and eventually became disciplined in doing his responsibilities as a student. He said, “Philosophy and World Religions opened his mind to the realities of life. Before I am just a happy-go-lucky person but my experiences in senior high helped me to be mature.”) “Ang Philosophy po at World Religions ang nagpalawak ng kaisipan ko tungkol sa buhay. Dati pa easy-easy lang po ako pero ngayon nagmature na rin po ako kahit papaano.”) However, eventhough he wants to go to college, he needs to help his family. He decided to enter the military after senior high school. He added, “I need to help my family in terms of financial needs. I don’t like to wait for the time that I can go to college, I don’t want to waste my time.” (“Kelangan ko po makatulong sa pamilya ko, ayoko naman po tumambay habang naghihintay kung kailan po ako makakapag-aral kaya ayoko po mag-aksaya ng panahon.”)

Mystified by Philosophy- Participant 5 was chosen to be a part of this study because from the very start of his senior high school journey, he was very vocal to tell that he has no plans to go to college due to his family’s financial constraints. He said after SHS, he will find a job to help his parents. When the researcher interviewed him, he said, “Philosophy is the best subject. I know what to do with my life now without thinking of what other people will say. It opened my mind to the beauty of life and made me to think deeply about its realities.”(“Philosophy talaga ang best subject para sa akin, namulat ang kaisipan ko sa kung anong dapat kong gawin sa buhay. Hindi ko dapat iniisip ang sasabihin ng ibang tao. Napalalim ko ang aking isipan tungkol sa ganda ng buhay at katotohanan ng buhay.”). His determination to improve his life was reinforced when he heard a testimony during career orientation week of a Department of Science and Technology scholar that he never let poverty defeat his dreams to become a teacher. Participant 5 mentioned that he can help his parents more when he has a degree. Currently, he is enrolled at Cavite State University to pursue his dreams of becoming a computer scientist. He will be helped financially by relatives and still look for part-time jobs to support his studies to reach his target in life.

The Accidental Writer- Participant 6is a Journalism freshman in a State University. She wanted to be a teacher but discovered her skills in writing when they had activities on poem interpretation on the subject

21st Century Literature from the Philippines and the World. She said, "We had an activity about interpreting a poem and iluustrating it. I enjoyed that activity on that subject and aside from career talk, that convinced me to continue college and take Journalism course." ("Meron po kaming activity tungkol sa pagpili ng landas then may poem and illustration. Iinterpret po namin 'yung poem. Nagustuhan ko po ang ginagawa namin sa subject na 'yon at 'yun po ang nagpakumbinsi sa akin na magpatuloy sa college at kumuha ng kursong Journalism, bukod po sa career talk.")

Enlightened by World Religions – Participant 7 is enrolled in a State University and taking up Bachelor of Science in Mechanical Engineering. His original plan and dream since he was a child is to take up Bachelor of Evangelical Ministry. He has a deep love for his religion, Iglesia ni Cristo, an International Church originated in the Philippines. He was also inspired by the subject Introduction to World Religions and Belief Systems. He said, "The subject Introduction to World Religions and Belief Systems became "Naging sobrang relevant sa akin ng subject. Naging informed ako sa mga religions sa buong mundo at itong subject na ito ay hindi lang para malaman ang tungkols a mga religions kundi mapromote and respeto sa mga 'yon at paniniwala ng ibang tao." However, during his 2 years of stay in senior high school, his mathematical knowledge and skills were enhanced, ("When, we are doing the payroll system, it was a great challenge that tested my skill and also I topped in our Statistics class." ("Noong gumagawa po kami ng payroll system, challenge po talaga, 'yun po ang sumubok sa kakayanan ko plus ako po ang nag-excel sa Statistics.") He added that after he finished an engineering course, he will continue his first plan of finishing Evangelical Ministry course. He realized that he has to have a degree in engineering first before continuing to serve his religion. He said, "I will study again. I think it is better to have a college degree before pursuing my plans." ("Mag-aaral po ako ulit. Mas maganda po kasi may pinanghahawakan na akong degree.")

Eidetic Insights

Self-discovery and Awareness. Finding the importance of little things means a lot. Senior high school graduates' experiences helped them to discover their interests and potentials. They said that although during the start of senior high school that they experienced lack of facilities and learning materials, these served as a new beginning of an amazing journey. With the school head and teachers, they learned to be resourceful and flexible. One of the graduates said that it was not easy for them to adapt to the new system such as new policies, new set of subjects and new way of teaching in SHS. However, opportunities through experiences came their way and helped them to be aware of themselves and discovered their wants in life.

Guided by Educators. During the early month of second semester of SY 2017-2018, only 19 students plan to go to college. But thru teachers' motivation, 19 became 33 and as of the final writing of this paper, 41 of them are currently enrolled in college. Pioneer graduates said that it was the teachers who made a great impact on their career choice. Because of the small number of enrolled students during the first year of senior high school at Gen. E. Aguinaldo National High School, they were properly guided by teachers. Moreover, they said that teaching style which influenced them most. Teachers need to stop teaching to the test and adopt a more philosophical teaching style across the curriculum (Taylor, 2012). This was proven when they had their first-hand experience in conducting a research. They said that this brought them to conquer their fears and proved to themselves that they can do what they thought they cannot.

Transformation. Pioneer SHS graduates became mature as they face big challenges in this curriculum. They learned how to manage their time because of the requirements for the subjects and as they survive to different activities and subjects, their self-confidence increased and realized that they can do more things than what they have expected.

Summary and Implications

Implementation of senior high school is a great shift in the history of the Philippine education. It already produced 3 batches of grade 11 since its implementation. Its objective to prepare the 21st century learners to the real battlefield has served its purpose this 2018 and should continue to look for the improvement of the instruction as well as curriculum.

The coming of SHS brought many questions to students and they experienced critical adjustment during the transition period. The results of this study showcased the different manners on how the curriculum impact the lives of the pioneer graduates. General Academic Strand is a crucial strand. It has to serve its purpose for students who are struggling to know themselves and find what they really want in the future. If the school guided these GAS students, that goal will be attained. The school has to maximize all the resources to meet this goal. Slowly, the goal of K to 12 particularly senior high school will be seen in the lives of young Filipino students.

Conclusion and Recommendations

Since the subject Introduction to the Philosophy of the Human Person is one of the most loved subjects by the students, the curriculum should promote to include philosophical discussion, if applicable in every subject because the subject teaches the student not only what to think but how to think which helped them to be guided in every decision they will make.

Use of Differentiated Instruction. Teachers should provide more differentiated activities based on the interest of students. Students should be freer in doing performance task and other written outputs on subject where it is applicable.

Maximize Elective subjects. The school should provide more options for electives and primarily will focus on 3 Academic Strands: Humanities and Social Science, Accountancy and Business Management and *Science, Technology, Engineering and Mathematics*. A survey can be conducted to junior high school students of the school prior to the start of the school year to identify the interest and skills of incoming senior high school students. Furthermore, to fulfill the ultimate mission of senior high school which is to produce students who are ready for Kolehiyo (College), Negosyo (Entrepreneurship) and Trabaho (Employment), the school offering GAS should provide other options for elective subject such as Cookery, Bookkeeping, Computer System Servicing and other area that will make students more competent and ready for employment and business.

Work Immersion, one area in the subject Work Immersion/Research/ Career Advocacy/ Culminating Activity should be strengthened and be given more effort. Graduating SHS students' interest should be identified and grouped so that they can be brought to agencies purposefully based on what they need to be developed and not merely to comply with the subject requirement only.

Journalism in SHS should also be strengthened. This co-curricular activity can be an avenue to discover and develop students who have the potential to write or any other skill related to it such as lay outing and cartooning.

All teachers must have a knowledge on research to serve as advisers of students in conducting researches. For instance, GAS students can conduct a research related to STEM strand. Aside from the research teacher, Mathematics and Science teachers can be the research advisers of the students who will conduct STEM-related research.

As of today, the school has 142 grade 11 enrollees. Too far from 57 pioneer graduates. For 2 years, the school has a tremendous increase in its enrolment. The first batch has an ideal number of students per section which resulted to giving of more attention and guidance to each student. Due to increasing number of students, the school should improve mechanisms on how to serve its students leading to the realizations of their skills and potentials that will help them to plan for their future career.

Finally, because of the reality that not all Filipino parents can bring their children to college, the school can also design a scholarship program to financially-challenged but deserving SHS graduates to send them to colleges and universities.

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An Analysis on the Needs of Master Teachers Adhering to the Philippine Professional Standards for Teachers Towards Development of Master Teachers' Training Program

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Abstract

The teaching profession is a public statement of professional accountability. Every teacher demonstrates a vital role in improving the students' learning and increasing their competencies (World Bank Group, 2016). One must consider teacher quality which leads us to professionalizing the profession through a set of standards. Every individual working in an educational institution needs a clearer understanding of the professional standards required for the teachers and school leaders (Green, 2013). With the enactment of the Philippine Professional Standards for Teachers (PPST) through DepEd Order No. 42, s. 2017 an educational reform was born enhancing the concern of teacher quality in the Philippines. At this juncture, the researchers aim to identify the needs of the master teachers based on different key result areas and duties and responsibilities aligned to the new standards based on PPST which is embodied in the new DepEd Order No. 42 s. 2017. From the survey conducted by the researchers, results showed the various areas which may require enhancement and additional training programs. Master Teachers need an in-depth training on the conduct of basic and action research, conduct of coaching and mentoring of teachers and a viable system of instructional supervision in giving technical assistance to teachers. The Division of Cavite Province continues to provide professional development program to its teachers based on the different needs of the teachers. This would not only be reflected in the teachers' Individual Performance Commitment and Review Form (IPCRF) rating for the coming S.Y. 2018 - 2019 but in an improved academic performance among the learners and this is what teacher quality and standards are all about.

Introduction

Philippines is facing problems in its educational system for years and the qualities of teachers and of teaching are among the most affected by these problems (Durban & Catalan, 2012). Philippines as a member of the United Nations is committed to continuously giving a quality education to all students as mentioned in number 4 global goal in the 2030 Sustainable Development Goals. On school year 2012-2013, Department of Education (DepEd) has shifted its curriculum from Basic Education to K to 12 Basic Education under R.A 10533 otherwise known as Enhanced Basic Education Act of 2013. The full implementation of this curriculum started last S.Y. 2016-2017 when Senior High School was added in basic education. As Philippines changed its educational system and meet the demands of the time especially of the 21st century learners, changing the standards for professional teachers is equally important and should be given priority. Teachers are ought to continuously develop themselves personally and professionally.

In every educational institution, a clear understanding of the required professional standards for teachers and school leaders should be well-explained and realized (Green, 2013). In this way, individuals working in schools can perform their duties and responsibilities towards a common goal. In the Philippines, for many years, public school teachers follow what stipulated in the National Competency-Based Teacher Standards (NCBTS). This standard defines an effective teaching and learning into different dimensions which has 7 domains, 23 strands and 80 performance indicators. DepEd, to formulate policies on hiring, promotion, supervision and other DepEd-related policies on teaching profession served this as their basis.

In improving student learning, high-quality teaching workforce is the single most important factor (Tandon & Fukao, 2015). Through Research Center for Teacher Quality (RCTQ), upgrading the teacher quality of the Philippine teachers is another educational reform that needs researches in guiding evidence-informed policy. DepEd Secretary Leonor Magtolis Briones issued DepEd Order. No. 42 s. of 2017 or the National Adoption and Implementation of the Philippine Professional Standards for Teachers. This was issued in recognition of the importance of professional standards in the continuing professional development and advancement of teachers based on the principle of lifelong learning. The changes of the previous standards was brought about by various national and global frameworks such as the K to 12 Reform, ASEAN Integration, globalization, and the changing character of the 21st century learners. This educational reform has been started in 2013 through series of research studies. Former DepEd Secretary Bro. Armin Luistro, during the approval of the national validation of standards happened on February 3, 2015 stated that he would like to see that PPST pushes forward because he believes that this will encourage good teachers to become great teachers and stay inside the classroom. PPST's goal is to set out clear expectations of teachers in different career stages of professional development from a beginning teacher to a distinguished one and further engage teachers to continue in making individual and collaborative efforts in increasing proficiency in different area and apply a uniform measure to assess their performance. Assessment that may lead to identifying needs and providing support for professional development.

Teachers in the Philippines are ranked from Teacher I, Teacher II, Teacher III, Master Teacher I and Master Teacher II while Master Teachers III and IV are soon to be opened. PPST sets the expectation of a Master Teacher to be in the third stage of career development which is "Highly Proficient". This expectation lead them to do additional tasks. A master teacher needs to be equipped with supervisory skill, mentoring and coaching skills to co-teachers, knowledge in conducting researches and many other areas that are stated in PPST.

This inspired the researchers from the Division of Cavite Province to conduct the assessment of the needs of the master teachers in the Province of Cavite with regard to their key result areas and duties and responsibilities aligned on the 7 domains under the Philippine Professional Standard for Teachers gearing towards the formulation of Master Teacher Professional Development Program in Cavite.

Statement of the Problem

The main objective of this study was to assess the needs of the master teachers in the province of Cavite based from the key result areas and duties and responsibilities aligned on the Philippine Professional Standard for Teachers towards the development of master teacher professional development program.

Specifically, this study sought to answer the following questions:

1. What particular Key Result Areas (KRA) needed by the master teachers in the province of Cavite?
2. What are the specific duties and responsibilities of master teachers that are in need of training?
3. Under the Highly Proficient Career Stage based on PPST , what domain/s are needed by

master teachers for training/enhancement?

4. What strand/s are needed by master teachers for training/enhancement?
5. Based from the results of the study, what master teacher professional development training program can be designed?

Conceptual Framework

The researchers, to design a professional development program for master teachers used the paradigm below:

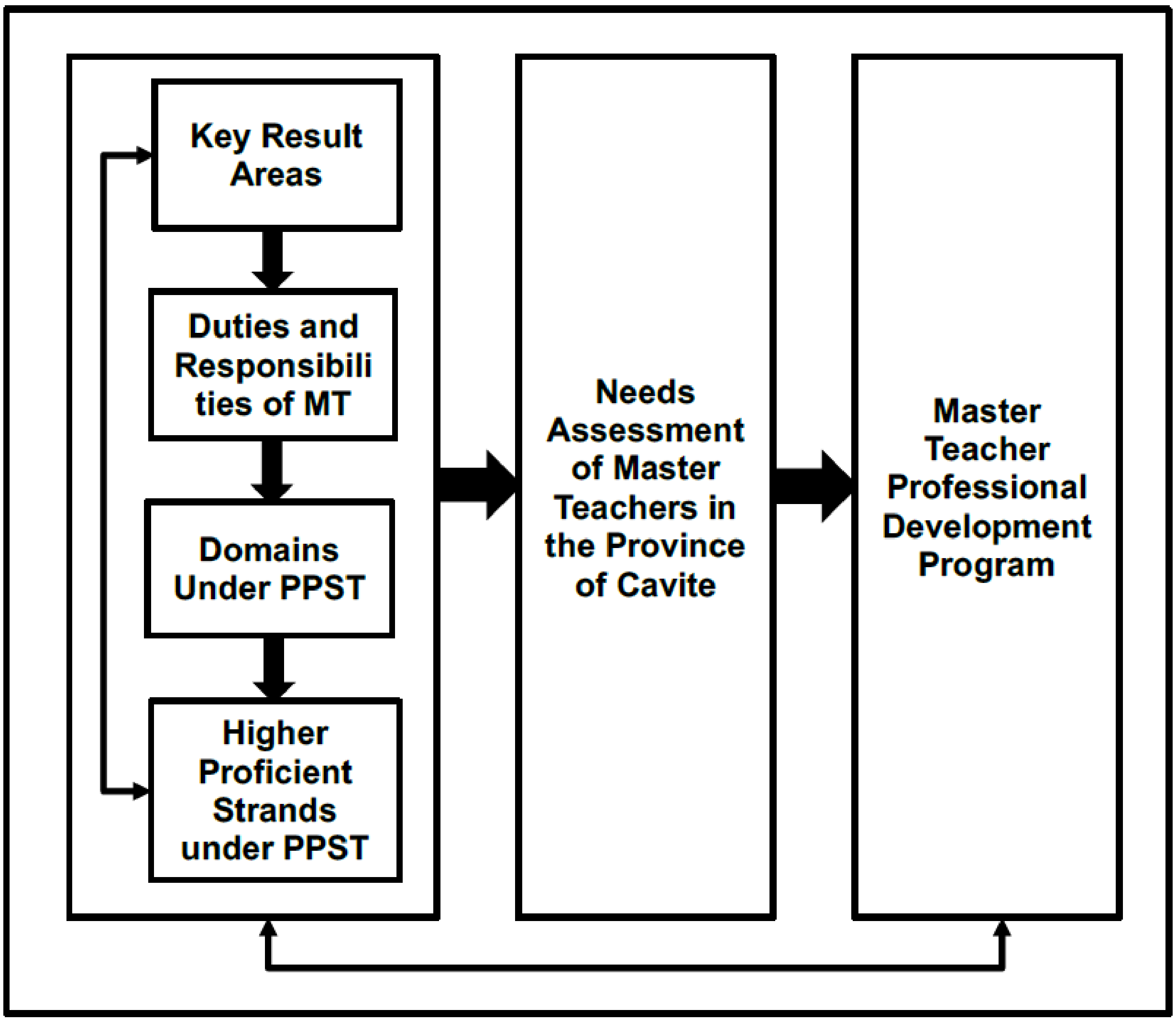

Figure 1: Research Paradigm

Figure 1 shows the data gathered from the study from the key result areas, duties and responsibilities of master teachers, 7 domains and the highly proficient strands under the Philippine Professional Standards for Teachers. This needs assessment was given by the selected master teachers in the province of Cavite that served as the basis on the formulation of the master teacher professional development program.

Methodology and Research Design

The researchers used an evaluative-descriptive method of research to assess the needs of the master teachers from their key result areas and their duties and responsibilities aligned to the domains and highly proficient strands under the Philippine Professional Standards for Teachers.

The respondents of the study were the selected master teachers in the province of Cavite. From the 398 the elementary level, 126 in the junior high school level and 149 in the senior high school level, the researchers have selected 349 master teachers who answered the needs assessment questionnaire given. This was higher from the recommended sample respondents of 245 with a 5% margin of error and 95% confidence level using Raosoft as a tool in computing a sample size from a population.

The answered were analyzed using the frequency percentage to show the dominant key result areas, duties and responsibilities, domains and strands that are needed by enhancement and training that became the basis on the formulation of the master teacher professional development program.

Result and Discussion

Problem 1. What particular Key Result Areas (KRA) needed for training/enhancement by the master teachers in the province of Cavite?

Table 1. Key Result Areas (KRA) of Master Teachers

Key Result Area (KRA)	Frequency	Percentage
Instructional Competence	59	16.91%
Instructional Supervision	169	48.42
Community Involvement	232	66.48
Professional Growth and Development	109	31.23
Professional Ethics	23	6.59

Table 1 shows the key result areas expected for the master teachers to perform. Result shows that master teachers have a need in the areas of Community Involvement and Instruction Supervision with a frequency of 232 and 169 among 349 master teachers as respondents. This shows that the master teachers should be equipped on how to conduct different community programs and projects and in the supervision of instruction through classroom observation and the process of observation. Gregoric and Owen (2015) indicate that while many positive outcomes occur when schools and the community work together, the potential of school-community involvement is not always fully realised. The recommendations aim to redress this by enhancing opportunities, reviewing policies, and building capacity within schools and the community. Service-learning provides community service as well as authentic, curriculum-driven learning experiences (Fuco & Root, 2010). Dooley and Mays (2014) investigate how 54 preservice elementary teachers (hereafter called teachers) learned about literacy development and cultural responsivity by engaging in a service-learning experience.

The field of instructional supervision faces an urgent need to help teachers thrive in the classroom. Both instructional supervision and professional development have been identified as vehicles to enhance the performance of teachers. Sabra (2011) indicates that although the process is well established and systematic, several misgivings were recorded and some recommendations were stated by participants.

Problem 2. What are the specific duties and responsibilities of master teachers that are in need of training?

Table 2. Duties and Responsibilities of Master Teachers

Duties and Responsibilities of Master Teachers	Frequency	Percentage
Assists principals in instructional monitoring of teachers.	109	31.23
Conducts in-depth studies or action researches on instructional problems	235	67.34
Serves as trainer in school-based INSET	56	16.05
Provides technical assistance to teachers to improve their competencies	130	37.25
Serves as demonstration teacher, facilitator or resource person at the school level	40	11.46
Conducts post conferences with teachers for feedback on teaching-learning process	82	23.50
Designs and validates training programs for teachers	126	36.10
Interprets test results and utilizes them for improvement of instruction	101	28.94

Table 2 shows the duties and responsibilities of master teachers. From among the duties and responsibilities of master teachers listed, it was found out that they need a training on the process of conducting in-depth studies or action researches on instructional problems, providing technical assistance to teachers to improve their competencies, and designing and validating training programs for teachers with a frequency of 235, 130, and 126 respectively. As a researched-based curriculum under R.A. 10533, policy and program formulation and evaluation should be based from research to be able to address the needs of the stakeholders of the institution.

Critics within and outside the field of education often point out the absence of a strong reciprocal connection between research and practice. There is little clarity about how research results are actually used in education, or what kinds of evidence are most useful to practitioners and policymakers. Barnsford (2009) shows how the leading scholars in the field examine the available research on the use of evidence in education and provide suggestions for strengthening the research-to-practice pipeline.

Problem 3. Under the Highly Proficient Career Stage based on PPST , what domain/s are needed by master teachers for training/enhancement?

Table 3. 7 Domains Under Philippine Professional Standards for Teachers

Domain	Frequency	Percentage
Domain 1 Content Knowledge and Pedagogy	157	44.99
Domain 2 Learning Environment	36	10.32
Domain 3 Diversity of Learners	101	28.94
Domain 4 Curriculum and Planning	211	60.46
Domain 5 Assessment and Reporting	111	31.81
Domain 6 Community Linkages and Professional Engagement	61	17.48
Domain 7 Personal Growth and Professional Development	71	20.34

Table 3 shows the 7 domains under the Philippine Professional Standard for Teachers. It was found out that from the 7 domains, master teachers assessed that they need an intervention about domain 4 under curriculum and planning and domain 1 under content knowledge and pedagogy. They should be equipped with the knowledge and skills underlying domains 4 and 1.

Teachers learn about designing various learning activities such as experiments, field trips, and computer- based simulations and to select and use appropriate learning resources to support student learning. On the other hand, Law (2014) pointed out that in knowledge building classrooms, rather than assigning questions for students to inquire, teachers should guide students in identifying good questions and ways to become self-directed learners in developing and implementing their own inquiry strategies and to evaluate their own inquiry outcomes. Science teachers are increasingly called on to support students in understanding the key scientific ideas needed for making sense of phenomena in the world around us. They are expected to implement inquiry-based science teaching [IBST] in order to enhance students' learning and motivation regarding scientific activities (Grangeat, 2015). From the study of Umami (2018), evidence collected from teacher's questionnaire show that most participants held a good knowledge of curriculum, pedagogy and assessment practices gained through long experience in the education sector. The implications of this study have wide perspectives as its findings would be beneficial for policy making. Recommendations of the study focus on the implementation of good practices.

Problem 4. What strand/s are needed by master teachers for training/enhancement?

Table 4. Strands Under Highly Proficient Career Stage

Strand/s	Frequency	Percentage
Model effective applications of content knowledge within and across curriculum teaching areas.	128	36.68

Collaborate with colleagues in the conduct and application of research to enrich knowledge of content and pedagogy.	172	49.28
Develop and apply effective teaching strategies to promote critical and creative thinking, as well as other higher-order thinking skills.	214	61.32
Work with colleagues to model and share effective techniques in the management of classroom structure to engage learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within a range of physical learning environments.	103	29.51
Exhibit effective and constructive behavior management skills by applying positive and non-violent discipline to ensure learning focused environments.	64	18.34
Work with colleagues to share differentiated, developmentally appropriate opportunities to address learners' differences in gender, needs, strengths, interests and experiences.	83	23.78
Develop and apply effective strategies in the planning and management of developmentally sequenced teaching and learning process to meet curriculum requirements and varied teaching contexts.	214	61.32
Review with colleagues, teacher and learner feedback to plan, facilitate, and enrich teaching practice.	62	17.77
Advise and guide colleagues in the selection, organization, development and use of appropriate teaching and learning resources, including ICT, to address specific learning goals.	92	26.36
Work collaboratively with colleagues to review the design, selection, organization and use of a range of effective diagnostic, formative and summative assessment strategies consistent with curriculum requirements.	104	29.80
Interpret collaboratively monitoring and evaluation strategies of attainment data to support learner progress and achievement.	102	29.23
Apply skills in the effective communication of learner needs, progress and achievement to key stakeholders, including parents/guardians.	75	21.49

Table 4 shows the the strands under the highly proficient career stage in the Philippine Professional Standards for Teachers. Result shows that master teachers have a need for training or enhancement on the strands on how to develop and apply effective strategies in the planning and management of developmentally sequenced teaching and learning process to meet curriculum requirements and varied teaching contexts, develop and apply effective teaching strategies to promote critical and creative thinking, as well as other higher-order thinking skills and how to collaborate with colleagues in the conduct and application of research to enrich knowledge of content and pedagogy with a frequency of 214, 214, and 172 respectively. The strands stated belong to the strands under domain 1 and domain 4. This shows that the needs of the master teachers as shown in table 3 which are domain 1 and 4 reflected the specific strands they need an intervention. Master teachers should be able to develop and apply different effective strategies on how to meet the curriculum requirement during the teaching and learning process. Moreover, effective strategies should be developed and apply in promoting critical and creative thinking including higher order thinking skills to students.

Miller (2015) states that the high standards and expectations embodied by effective teachers that serve to positively inspire their students. Culturally responsive teachers create an atmosphere of learning that supports academic success, conveying their belief in their students' ability based upon their own reflectivity. Master teachers were aware of the importance of educational research and school support activities as well as their classroom teaching practice and teacher support activities. The research findings of Lee (2014) are expected to be used for the improvement of master teacher training program curriculum and further for other teacher training programs.

Problem 5. Based from the results of the study, what master teacher professional development training program can be designed?

As reflected in the HRD's Five Year Development Plan, training for master teachers is one of the prioritized area. Capacitating them in conducting classroom observations, facilitating in learning sessions, and even in conducting researches were among the important areas for enhancement.

Table 5. Master Teacher Professional Development Training Program

Programs/ Training	*Objectives*	*Target Activities*	*Persons Needed*	*Timeline*	*Output*
Orientation of newly- hired master teachers	*To orient newly promoted master teachers on the mandate, services, benefits, policies and work ethics	*Lectures on duties and responsibilities of master teachers	*Division Office personnel, School Heads	*June 2019	*Newly Hired MTs are familiar with the DepEd mandate, services, benefits, policies and work ethics
*Revisiting PPST	*To conduct separate PPST training for master teachers in the whole division	*Lectures and workshops on different domains of PPST	*Division Office personnel, MTs who were involved in the PPST regional training	*March 2019	*Obtaining a "Highly Proficient" stage are cleared to MTs in the division

My MT, My Mentor	To ensure that Master Teachers are equipped with proper way of mentoring/ coaching to co-teachers	*Lecture and workshop on Daily Lesson Log (DLL) Making *Lecture and simulation of class observation and post-conference * Lecture and workshop on applications on	*Experienced Master Teachers *National and Regional Trainers on various subjects in terms of content and pedagogy *MTs who served as DLL writers in various National,	*May 2019 (or before the start of every school year)	*Master Teachers have knowledge, skills and credibility in mentoring co-teacher. Ethical considerations in conducting mentoring sessions will be learned too.
		different pedagogies used in K to 12 curriculum *Lecture and workshop on learners' assessment	Regional and Division workshops *MTs who are experienced and willing to share knowledge in classroom assessment		
Technology-Based Instructional Materials' Training	*To provide master teachers with skills and knowledge on utilizing different software that can be used in teaching	*Master teachers who specialize in Information and Communication s Technology will conduct training-workshops on MTs	*ICT Master teachers	*Summer 2019	*MTs will not only coach co-teachers in terms of DLL making and using different pedagogies, but also on maximizing the potential if ICT
Research Training Program	*To equip master teachers with proper knowledge on conducting basic and action researches	*Lecture and workshop of master teachers who conducted researches *Oral presentation of researches conducted by master teachers	*Master teachers who have broad knowledge and skills in research	*Semestral break of every school year	*All MTs can produce meaningful researches not only as a requirement for PPST but as a basis for DepEd policies

Conclusion and Recommendation

Based from the foregoing results of the study, the following conclusions and recommendations were drawn:

Not all Master Teachers were from public schools. Some MTs in senior high school, about 25.78%a were from Higher Education Institutions. They need more intensive trainings so as to properly perform the duties and responsibilities of a master teacher and be more oriented with the culture of public schools. Classroom management can also be a topic of their seminar. There is a big difference between the behavior of learners from junior high school and college students which they handled for the past years of their teaching career.

Master Teachers should have more and deeper knowledge in terms of subject's content, pedagogy and learners' assessment than other teachers under their supervision in order for them to provide meaningful and purposeful coaching and mentoring sessions.

A master teacher should be skilled in conducting researches. It is a requirement for PPST and a master teacher should be the one to initiate doing researches to his fellow teachers. As it ranked number one among the duties and responsibilities of a master teacher that needs training, this should be one of the top priorities of a division.

Collaborative working should be encouraged in all departments in public school. Researches, intervention programs, special projects cannot be done by a teacher alone. As a head of a department, master teachers should capacitate themselves in initiating and managing collaborative works of teachers under their supervision.

Master teachers must be one of the most dependable individuals in a school system, they should be equipped with all knowledge, skills, attitude and values professional teachers must possess. Therefore, there is no excuse that they do not know how to perform tasks stated in PPST domains. They should continuously improve themselves personally and professionally.

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Manage of Service Atmospheric for Increasing Service Encounter Satisfaction

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Background

Simultaneous is one of the characteristics of services, namely when the production coincides with the time of consumption (Kotler and Keller, 2014; Zeithaml et al., 2012; Sierra and McQuitty, 2005). This characteristic causes the consumer to see and assess all service presentation process including environment around service process progress. Consumers assess whether service employees are competent, professional, friendly, clean and tidy appearance when serving them? Consumers also assess how the situation around the services take place, such as room comfort, lay out equipment, how the exterior and interior design, decoration and atmosphere in general come into the consumer's attention. This condition is different from the goods when the production is different from the time of consumption, so consumers never judge how the process of goods production takes place. Whether the factory in which goods are produced is convenient or not, clean or not, light or dark, the equipment is neat or not, whether the employee making the goods friendly or not, dirty or clean and so on is not a part of the consumer's judgment.

The results of the literature study show that consumers often make the atmosphere around the service take place as an extrinsic guidance of the quality of a service, if the intrinsic instructions or attributes that are part of the service are difficult to evaluate or not available (Ha and Jang, 2012). Extrinsic instruction is anything related to a service even though it is not part of a core service (such as the environment or atmosphere surrounding services). Even according to Coughlan et al. (2013), the physical environment or service atmosphere is the first aspect assessed by the consumer when visiting a service business and establishing an impression of the level of service to be received.

A good service atmosphere will create a pleasant emotional state for both the consumer and the service provider itself. The quality of the service atmosphere is determined by several dimensions such as the quality of modern service equipment, the architectural design of the space or the building of attractive, clean, healthy and comfortable services as well as the precise and pleasant music and lighting background (Coughlan et al., 2013). When a consumer is exposed to a good service atmosphere it is expected to stimulate a good emotional state, further enhancing the perception of service quality and customer satisfaction which in turn will affect positive behavior such as repurchase or positive WOM (Rajic and Dado, 2013; and Liang, 2009; Auh 2005). The important role of atmospheric service in building consumer perceptions of service encounter satisfaction that encourage this research. Research on atmospheric service is still very rare in the context of education services. This study was conducted with the aim to identify the influence of atmospheric service on student satisfaction in an education service in the classroom.

Research Problem

Does atmospheric service have effect on service encounter satisfaction?

LITERATURE REVIEW

Service Atmospheric

The atmospheric service is the environment surrounding the service process. Service atmospheric was first introduced by Kotler and Martin (1973) as one of the marketing tools. Some terms that are often used to refer to atmospheric service is service scape and environmental psychology. The results of literature studies conducted by Ha and Jang (2012), the service atmosphere has an important role because the consumer's emotional response from the atmosphere of a service has a relationship with the buying behavior of the service. Further explained by them, that there are several dimensions that make up atmospheric service such as ambient, design and social factor. The ambient dimension is related to smell, noise, music and color. Design dimensions are related to layout and furniture. While the social dimension relates to the type of consumer, employee appearance and crowd.

According to the results of a literature study conducted by Turley and Milliman (2000) shows that the dimensions of atmospheric service consist of:

1. exterior dimensions (exterior sign, entrances, size and color building, parking, walls, location, architectural style)
2. interior dimensions (florring, carpeting, color schemes, lighting, music, scent, paint and wall paper, merchandise, temperature, cleanness)
3. dimensions of layout and design (space design, placement of merchandise, furniture),
4. dimensional decoration (picture, wall decoration),
5. dimension of human variable (employee and customer characteristic, crowding, privacy, uniform).

The results of Rajic and Dado (2013), show that atmospheric service has a positive effect on service quality. While the results of research Moore et al. (2005) proves that atmospheric service affects the quality of interaction (customer to customer interaction). Rahayu (2012) research results shows that the quality of interaction between lecturers with students that occur in a class can increase student satisfaction in following the lectures. Lloyd and Luk (2011) and Rahayu (2016) have identified that the quality of interaction will affect consumer's sense of comfort during consuming a service. A high level of comfort does not only directly increase consumer satisfaction (Rahayu, 2016), but also reduces consumer concerns due to the risks involved in consuming high-priced services, can also make consumers feel highly valued (Schneider and Bowen in Lloyd and Luk, 2011). Furthermore, this feeling of appreciation has an impact on consumer perceptions in assessing the quality of service and customer satisfaction itself. If consumers feel comfortable in dealing with service providers then they will also be more willing to complain in case of service failure (Lacey, 2012). The results of Lacey's (2012) and Rahayu (2015) research indicate that consumers who feel comfortable when they complain will spread positive news to other consumers and will be willing to cooperate when companies do marketing research.

Behavioral interactions are soft attributes of service quality (Auh, 2005). The result of Auh's research (2005) shows that the soft side attributes of service quality in the form of interaction behavior becomes the hard side stimulus of service quality which is the core performance of the quality of a service. The more qualified the service behavior will be the higher the performance of services which in turn will increase consumer confidence and loyalty.

From the above discussion, it appears the important role of atmospheric service in creating consumer loyalty through a series of responses such as quality of interaction, comfort, service quality, customer satisfaction and trust. This study focuses on the influence of atmospheric service on service encounter satisfaction.

Service Encounter Satisfaction

Various definitions of the service encounter have been expressed by marketing experts. Czepiel (in Jayawardhena, 2010) provides the service encounter definition as "role performances in which both customers and providers have role to enact". While Solomon defines service encounter as "a dyadic interaction between customer and service provide" (in Jayawardhena, 2010). The service encounter is defined as the meeting point between the consumer and the service provider in which interaction occurs between the two parties (Zeithaml et al., 2012). Zeithaml further explained that a service has many service encounter. Each service encounter has an important role to customer satisfaction and loyalty. In addition, there are three kinds of service encounter that must be considered by the service manager are: remote encounter, phone encounter and face to face encounter. This study focuses on face to face encounter

The literature study conducted by Wu and Liang (2009) states that "service encounter as the lasting personal impressions that customer receive upon first encountering a service which they hopefully take with them and communicate to others". Wu and Liang further explained that there are three elements in the service encounter namely: environmental elements, elements derived from service providers and elements derived from the interaction of consumers with other consumers (interaction between consumers). While the literature study conducted by Brexendorf et al. (2010) shows the existence of two dimensions in the service encounter that is the dimension of task competence and dimension of interaction competence.

The term service encounter is widely used to indicate a contact situation between the consumer and the service provider. Service encounter is often called the momenth of truth, which will leave an impression of the company as a whole. Since most services are produced by requiring the presence of its customers, the occurrence of contact with the consumer (service encounter) can not be avoided. Furthermore, the quality of contact or service encounter is greatly affect how consumers assess the quality of the service as a whole. Dyadic interaction between two parties is also a determinant of overall consumer satisfaction. Further satisfaction will affect loyalty. Farrel et al. (in Lloyd and Luk, 2011) states that consumer perceptions of service quality are almost entirely determined by the interaction behavior that occurs in the service encounter. Thus the interaction behavior in the service encounter becomes the key of consumer loyalty.

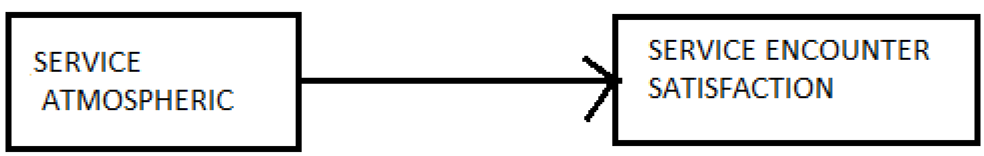
A service is a series of several service encounters. Some services have a small number of service encounters, some other services have a large number of service encounters. From the consumer's point of view, the most prominent impression of a service occurs in every encounter service, where it is this time that the consumer receives quality snippets from a service company and each piece of this quality will contribute to total customer satisfaction. While from a marketer's point of view, each service encounter is an opportunity to prove the quality and opportunity to increase customer loyalty.

Errors or problems that occur in the initial stages of the service encounter (from a series of service encounters of a service thoroughly) will largely determine whether a consumer will continue to use services or stop consumption before service delivery ends. However, the subsequent encounter - service encounter service also has an influence on customer satisfaction and loyalty. Each service encounter will create its own impression in the minds of consumers. Therefore, marketers must maintain the consistency of the quality of each service encounter.

The results of a literature study conducted by Zeithaml et al. (2012) indicates that every service company has several service encounters that are the key to success because it has a big role in determining customer satisfaction. Consumers have expectations that are more specific and more real than each encounter than expectations of overall services. For example, the number of minutes that a consumer expects when waiting for an order to arrive at the table is more specific than the customer's expectation of the speed of restaurant service in general. Therefore, marketers must identify customer expectations in each service encounter, especially for the service encounter which is the key of its services.

Research Model

Results from several studies show that customer satisfaction with a service encounter is influenced by the quality of atmospheric service. A good quality atmospheric service will create the convenience of consumers in enjoying a service. This sense of comfort will make the relationship of service providers with consumers to be closer so that consumers are more open in expressing their desire for services. This condition is an opportunity that service providers can use to tailor the services provided. The suitability of service performance with consumer desire is the key to customer satisfaction. Therefore some strategies to optimize atmospheric service need to be considered in order to increase consumer satisfaction to a service encounter.



Source : Wu and Liang (2009).

Figure 1 Research Model

Hypotheses

If the classroom is spacious enough, the temperature is quite comfortable, enough lighting, clean floors, wall color, table layout of the chalkboard and all the learning process supports, then this atmosphere will attract attention and create an emotional condition that pleases the student in following the learning process in the classroom. These conditions can improve the perception of student satisfaction in taking classes in class.

The quality of the service atmosphere is determined by several dimensions such as the quality of modern service equipment, the architectural design of the space or the building of attractive, clean, healthy and comfortable services as well as the precise and pleasant music and lighting background (Coughlan et al., 2013). When a consumer is exposed to a good service atmosphere it is expected to stimulate a good emotional state, further enhancing the perception of service quality and customer satisfaction which in turn will affect positive behavior such as repurchase or positive WOM (Rajic and Dado, 2013; and Liang, 2009; Auh 2005).

Based on these reasons, the hypothesis proposed in this study are:

H1: The atmospheric service has positively affects the service encounter satisfaction

RESEARCH METHODOLGY

Research design

This study was designed as a type of field research with the aim of testing the hypothesis. The sample unit used is individual, ie 230 private university students in Jakarta. Data collection is done cross-sectional, that is, at the last meeting of course before Final Exam.

Variable and Measurement

Variables that become the focus in this research are service atmospheric and service encounter satisfaction. To measure these variables, the instruments used in previous studies (Coughlan et al., 2013, Ha and Jang, 2012; Wu and Liang, 2009; Auh, 2005; Turley and Milliman, 2000; Paswan and Young, 2002 ; Gremler and MCCollough, 2002 and Serva and Fuller, 2004; Peltier et al., 2005) will be modified for reuse. Likert scale 1 (strongly disagree) to 5 (strongly agree) is used to answer each item of statement.

Service encounter satisfaction is measured by the following statement items Feel satisfied to follow the course
Feeling has added value after following the course Feel happy to have followed the course

The atmospheric service is measured by several statement items as follows: Quality and modern classroom equipment and supplies
The interior design in the classroom is charming

The layout of the classroom table supports the learning process Classroom lighting is appropriate for learning

The class temperatures are comfortable

The color of the walls and floors support the learning process (not dark or unimpressed glare)

Clean classroom

The classroom atmosphere is generally fun

Instruments to measure these variables are tested for validity and reliability first. The results of the validity test show that the loading factor of each item is above 0.5. Thus the measurement items for service atmospheric variables and service encounter satisfaction are valid or can measure the variables studied. Similarly for reliability test results, both service atmospheric variables and service encounter satisfaction show cronbach alpha value more than 0.7. This means there is an internal consistency between items used to measure atmospheric service variables and service encounter satisfaction.

Data Analysis Method

The hypothesis proposed in this study was tested using SEM. This technique is considered appropriate to test the research model. With SEM analysis tool then the instrument validity test and hypothesis test can be done at once. Prior to hypothesis testing, the fitness model of the model (Goodness of Fit / GOF) was performed. The results of the GOF test show that the research model is quite fit with the data obtained. This can be seen from the following GOF test tables:

Table 1 Model Testing

Measurement	**Score**	**GOF**	**Result**
Chi Square	p value = 0,000	P value > 0,05	Not GOF
RMSEA	0,075	< 0,10	GOF
CFI	0,897	> 0,90	GOF
IFI	0,909	> 0,90	GOF
TLI	0,886	> 0,90	GOF

From the table of GOF test results it appears that the value of CFI, IFI and TLI above or close to 0.9; while the RMSEA value is less than 0.10. These values meet the eligibility requirements of a model, so that the hypothesis test can proceed.

Descriptive Statistic

The table below shows the descriptive statistics of variables and measurement items of all respondent data.

Table 2 Deskriptive Statistic

Variable and Items	Means
Service Atmospheris	3,90
Quality and modern classroom equipment and supplies	4,09
The interior design in the classroom is charming	3,87
The layout of the classroom table supports the learning process	3,54
Classroom lighting is appropriate for learning	3,80
The class temperatures are comfortable	3,85
The color of the walls and floors support the learning process (not dark or unimpressed glare)	3,90
	4,12

Clean classroom The classroom atmosphere is generally fun	4,01
Service Encounter Satisfaction	4,01
Feel satisfied to follow the course Feeling has added value after following the course Feel happy to have followed the course	3,90 4,16 3,98

From the table it appears that the atmospheric service is quite good (with an average grade of 3.90), and the students feel satisfied to follow the course in the class (with an average rating of 4.01). When examined, the lowest average value is an item related to the table and chair layout. This is due to the only research done in the regular class which is the layout of the traditional still facing all front desk. So there is still a distance between students who sit in the backseat with lecturers and other students who sit on the front bench. This layout condition is not good for two-way learning. Unlike the classroom table layout that is designed in the form of U or circular letter, so it can maximize two-way communication (either between lecturers and students or between students).

Hypotheses Testing

The results of hypothesis testing can be seen from the table below:

Table 3 Hypotheses Testing

Hypotheses	Beta Coefficient	p-value	Result
H1 : The atmospheric service has positively affects the service encounter satisfaction	0,098	0,035	Accepted

From the table can be seen that there is influence of service atmospheric to service encounter satisfaction. This can be seen from the value of p value less than 0.05. Coughlan et al. (2013) finds that atmospheric service directly affects the quality of service provided by service providers before affecting overall quality and customer satisfaction. While Auh (2005) proves that the atmospheric service will affect the performance of services first before affecting the behavior of others. Similarly Moore et al. (in Lloyd and Luk, 2011) found that atmospheric service can improve the quality of interaction between consumers and service providers, which in turn can improve customer satisfaction.

Conclusion

The results showed that the atmospheric service variable positively affected the service encounter satisfaction. Therefore, atmospheric service must be managed well, because the results of other studies show that the influence of atmospheric service is either directly or indirectly to service encounter satisfaction. Even atmospheric service also affects other variables that are important for the sustainability of service companies, such as service quality (Rajic and Dado, 2012), perceived performance excellence, trust, loyalty (Auh, 2005), experiential value (Wu and Liang, 2009), and customer to customer interaction (Moore et al., 2005).

Descriptive statistics, especially table and chair layout items in the classroom are still not optimal. It is considered less support the running of quality learning process. To create student satisfaction on the learning process in class then the manager must improve the layout of the desk chair that can support quality learning process. In the process of student-oriented learning, the layout of the table chair can be made in circular or U-shaped. So the two-way communication process will run well. The process of exchange of ideas between students or between lecturers and students will take place smoothly with a good layout. Some classes must also be repaired by lighting and air conditioning to create a comfortable classroom.

This research still uses convenience sampling procedure, so the conclusion can not be generalized. This research focuses only on atmospheric service in influencing service encounter satisfaction. There are many other variables that need to be considered for further investigation.

Further research is expected to overcome the limitations of the problem as described previously. Better withdrawal procedures are done more representative of the population so that the results of research more generalizable. Other variables such as service quality (Rajic and Dado, 2012), perceived performance excellence, trust, loyalty (Auh, 2005), experiential value (Wu and Liang, 2009), customer to customer interaction (Moore et al., 2005) considered so that the research model will be more comprehensive.

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Achievement on Instructional Magnagement of Political Science's Faculty, Ramkamhaeng University, Thailand

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ABSTRACT

The objectives of this research were 1) to study the levels of achievement on instructional management of the Faculty of Political Science at Ramkhamhaeng University regarding the aspects of the professional ethics, teaching efficiency and teaching performance and 2) to compare the levels of achievement on instructional management of the Faculty of Political Science at Ramkhamhaeng University. The study found that the level of overall achievement on instructional management was at high level ($\bar{X}$ = 4.29, S.D. = .494). The aspect of achievement composed of the aspect of professional ethic ($\bar{X}$ = 4.39, S.D. = .494), followed by the aspect of teaching efficiency ($\bar{X}$ = 4.24, S.D. = .659), and the teaching performance ($\bar{X}$ = 4.19, S.D. = .580) respectively on instructional management was also at high level. All aspects of achievement were in high level of achievement. The comparison of the achievement levels on instructional management of the Faculty of Political Science at Ramkhamhaeng University was classified by the supportive instruction and the readiness of learners. It was also found that the difference of supportive instructions was influenced by the achievement of instructional management together with the significant difference at <0.05 (t- test = -7.52, Sig = 0.00) and the different readiness of learners for overall.

Keywords

Achievement, Instructional Management, Ramkhamhaeng University

Introduction (significant problem and problem statement)

Instructional management of higher education is self - philosophy and structural differences and the concept on the conceptual framework of learner experience. To achieve the goal of educational mission for higher education, focusing on curriculum design which conform content and learner experience, therefore, it provides knowledge skill, ethic to learners including the development new body of knowledge and academic services to community and society. Moreover, it is building the strength for community with collaboration all levels education. It is the key major potential process of higher education (Pornchulee Archawaaumroong, 2003, p. 40) as follows:

1. Rationally, all universities must be administrated by decentralization, academic independence, and streamlined administration. It can be a monitoring and measuring system.
2. Publicly, all universities provide accountability for learners, society and country.
3. Potentially, all universities must be provided subsidy both for formal and informal education. Therefore, all universities; formal and informal education, should achieve 6 missions as follows:

1) Doing research for development and Building for body of knowledge. 2) Instructional management and Training to develop Thai learners. 3) Being accountability, solving problem, collaboration, promoting the strength of community and environmental conservation. 4) Maintaining Thai culture and Thai local wisdom. 5) Supporting frequent study to high ranking education. 6) Supporting and collaborating each level of education. Additionally, this should monitor and develop the curriculum, conforming to social change and

learners such as building curriculum by focusing on characteristic of graduates and holistic. Moreover, it should integrate conceptual curriculum for creating intellectual, moral and spiritual. Furthermore, the characteristic curriculum design of universities should contain social problem solving; local developing course. Therefore, the bachelor degree curriculum will emphasize the real world in which the graduates can work. However, the instructional process must be changed into focusing on learners interaction and lecturer including community. Consequently, Instructional and Curriculum design must be considered the demand of the community for collaboration and development. Learners must be stimulated and inspired by lecturers for study. For this reason, they can apply their knowledge to plan and solve the problem. (Pornchulee Archawaaumroong, 2003, pp. 40-44).

The Faculty of Political Science of Ramkhamheang University is s part of instructional management in higher education, responsible for bachelor, master and Ph.D. students. (Not only the students in Political Science Faculty but also the students in other faculties who study Political sciences as general education courses, compulsory courses, minor courses and selective courses, accordingly to the academic policy of Ramkhamheang University.) Additionally, this should support and promote academic advances of Political sciences including, Political sciences dissemination to the publics, which are the social services of Ramkhamheang University (Political sciences faculty, 2012).

Nowadays, the paradigm of administration has been changed into focusing significantly on outcome mission, objective, goal, strategy, Key Performance Indicator, efficiency and effectiveness of the organization. This is the method of Result Based Management-RBM due to adjusting the old pubic management to the new public management (Tossaporn Sirisamphan, 2002, p. 145). In particular, Self Assessment Report – SAR's according to the quality assurance instruction.

Research Objectives

1. To study the levels of achievement on instructional management of the Faculty of
2. Political Science at Ramkhamheang University.
3. To compare the levels of achievement on instructional management of the faculty of Political Science at Ramkhamheang University.

Literature Review

The instructional management on Information Technology has been changed rapidly, so the people who are concerned about the instructional management; educational policy maker, educational administrator and lecturer must adjust teaching- learning process to be suitable for the world situation. Thailand has faced the economic crisis the reason of educational management. In order to solve the problem, focusing on qualifying educational management in accordance with The National Educational Plan (2002 - 2006, Section 6) with regarding, The National Education Act, Year 1999, it was based on fundamental principles as follows:

- The flourishing of individual wisdom, thinking, mind and morality is a necessary and essential goal toward creating balanced development between spiritual and material and economic growth.
- Human being must realize the importance of judicious utilization and conservation of natural resources without causing detrimental effects to the environment.
- The proper balance between dependency and self – reliance is an essential basis for co- operation at individual, community and national levels for the promotion of sustainable development.

In organizing the system, the structure and the process of education, the following principle shall be observed: unity in policy and diversity in implementation; decentralization of authority to educational service areas, educational institutions and local administration organizations; setting quality assurance for all levels and types of education; raising the professional standards of teachers, faculty staffs and educational personnel, who shall be developed on continuous basis; mobilization of resources for different sources for provision of education; and partnership with individual, families, and communities. Consequently, they can transfer their credits for focusing on learning outcomes, Bologna Process (2009).

Thailand has enacted the National Education Act, Year2002, issue 2, which reformed each educational level by focusing on improving the curriculum design and instructional management. Therefore, the learners can solve their problems and promote Thai cultural awareness. Moreover, the Rajabhat Institutes and the Rachamongkol Institutes of Technology were promoted to University level.

Additionally, private Universities can be operated independently. This change caused each University to grow up rapidly. Yet, it is the opportunity for the people to study. However, there are many problems, such as the degree of graduate, the standard of equivalent of each University. The Higher Education Commission is responsible for promoting each University's performances.

Therefore, Thai Qualification Framework for Higher Education - TQF: HEd must be set in order to standardize and monitor each University, focusing on learning outcomes. The requirements of bachelor degree student are standardized as follows:

1. The moral and ethics aspect; learners can have discipline, responsibility, integrity, sympathy, optimism and understanding to other people.
2. The knowledgeable aspect; learners will have the body of knowledge broadly and
3. systematically. They should be aware of the research theory that is relevant to carrier curriculum and problem solving in accordance with rules and regulations.
4. The cognitive ability aspect; learners can evaluate the fact information from many various
5. by themselves, in accordance with the theory is filed and the experience filed.
6. The interpersonal relation and responsibility; learners can assist the members in solving the problem as the leader of the group. Learners can apply leadership to innovate in any unclear situation.
7. The numerical analysis communication and information technology aspects; learners can apply statistical technique to study and suggest the solution by using information technology on data collection, interpreting, computing and presenting as usual. Moreover, they will communicate effectively listening speaking, and choosing the appropriate presentation to different groups of people.

To sum up, the bachelor degree's curriculum design must focus on morality and ethics, analytic, broad knowledge, and the research that learners should aware of theoretical knowledge concern. The performance evaluation for the achievement management aims primarily retrieving the information for management decision support to enhance the efficiency and effectiveness of the organization operation. The good performance evaluation system should be able to produce the information that shows the updated work progress completely. Recently, the performance evaluation has been developed to conform more to the management context by tending to the Strategic performance approach. This would focus more on the holistic performance evaluation which are considered the work achievement by equally weighing the importance of the internal and external factors of the organization, prioritizing the connection between the organization structure and the mission of each level of the organization, and prioritizing the client and stakeholder's expectation to have multiple dimensions for the achievement indicator.

The Results Based Management-RBM is the management innovation that the developed countries use in bureaucratic reformation to enhance the efficiency and effectiveness for transparency and accountability. In Thailand, the Office of Civil Service Commission is using this new management approach along with the Performance Based Budgeting System-PBBS to reform the government organization to provide more satisfying public service. The achievement core in using the achievement management approach is to develop the straightforward, accepted, and convenient use of Key Performance Indicators—KPIs in order to retrieve the information for controlling, monitoring, and reporting the organization operation. However, the instructional achievement in the part of the Faculty of Political science must go with the learning outcome because it is the student capabilities receiving the from the experience in the instruction process. The instructor should study the achievement evaluation for the planned learning outcome in advance from the certain period of the learning process.

Some educators have given the detailed definition of the learning achievement in the same direction. Somporn Choeupun (2004, p. 53) has concluded that the learning achievement is the capability, success, and performance in many aspects of the learner receiving from the learning process, training, and experience of each person which can be measured from the variety of testing method. Pimpun Techakup (2005, p. 125) said that the learning achievement is how much success we have from the learning process. Pranee Kongjinda (2006, p. 42) said that the leaning achievement is the capabilities or success which are received from the learning activities that could change the learning behaviors and experience in cognitive, affective, and psychomotor domain. It is also categorized according to the objective characteristic of the different learning. All of these are in the same direction with the objective of this research in terms of focusing on the achievement learning management of the Faculty of Political science at Ramkhamhaeng University in the year 2011. The study aspects are composed of the achievement level in the learning management of the Faculty of Political Science at Ramkhamheng University in the year 2011 in terms of professional ethic, instruction efficiency, and instruction effectiveness which are very challenging for the achievement management of the Faculty of Political Science.

The achievement in learning management is the learning process management in the academic year 2011 which focused primarily on the achievement of the Faculty of Political Science in 3 aspects which are professional ethics, instruction efficiency, and instruction effectiveness. The professional ethics is the behaviors of the instructors at the Faculty of Political Science that is constantly on time in class, determined, not leading student in the wrong way, be a good example, and no negative attitude to the students.

The instruction efficiency is the behavior of the instructor of faculty of Political science that explained the detail of the class, set the course direct to the point along the content, create the self-learning activities, prepare proper teaching equipment, offer document and text book that are suitable to the course, and capable of transferring the knowledge to the students.

The instruction effectiveness is the behavior of the instructor at the Faculty of Political Science that satisfy the student by providing the knowledge from the content of the course that can be utilized and giving the opportunity to the students for the discussion and question. The instruction support is all the building and instructional equipment that Ramkhamhaeng University has provided properly. The students readiness is the expression of the students attending the course that the Faculty of Political Science offered in the academic year 2011 and also, paying attention, being punctual, being prepared, and doing the extra study for the course.

Research Design

This research is quantitative method by using questionnaire, which is developed by the evaluated form of instructional management at Ramkhamheang University. The questionnaire is divided into 4 parts as follows: 1) background of study or the attendant class subject, 2) the supportive instructional management, 3) the readiness, and 4) the level of achievement on instructional management which is composed of ethics, efficiency teaching, and effective teaching.

The independent variables are the support and readiness on the instructional management. The dependent variable is the achievement on the instructional which is composed of ethics, effective teaching, and efficiency teaching of the Faculty of Political Science at Ramkhamheang University.

The data were collected by the following stage:

Research Population and Sample

Population
The population was the bachelor degree's students who enrolled to study Political Science course, totally 176,058 students at Ramkhamheang University Huamak Campus, Bangkapi, Bangkok.

Sample

The sample was derived through the sample selection method by proposed Taro Yamane (Surasak Amornrattanasak, 2002) which specified that the collected data must be of interval scale and the acceptable sampling error of not over 5%, as shown below.

$$n = \frac{N}{1+Ne^2}$$

n = sample size
N = population size
E = acceptable sampling error

$$n = \frac{176{,}058}{1+(176{,}058x0.05)^2}$$

$$= 400$$

Therefore, the sample size was 400 respondents

Moreover, the research was divided by the respondents who were studying the PS code subject and PA code subject in which there are 200 respondents for each subject at the proportion of 1:1 by accidental sampling.

The data collection by questionnaire were computed by descriptive statistic, which were percentage, mean, frequency, and standard deviation-SD. While inferential statistics for hypothesis testing was using parametric test and one way ANOVA (F-test)

Research outcomes

The level achievement on instructional management is composed of the aspects of ethics, effective teaching, and efficiency teaching of the Faculty of Political Science at Ramkhamheang University. The outcomes revealed that the overall of achievement on instructional management were at high level ($\bar{X}$ = 4.29, SD = .494) the highest level was the ethics ($\bar{X}$ = 4.39, SD = .494), the effective teaching ($\bar{X}$ = 4.24, SD = .659, the efficiency teaching ($\bar{X}$ = 4.19, SD = .580) respectively. The comparison outcomes of level achievements on the instructional management were categorized as the supportive teaching and the readiness of the students. The supporting learner was analyzed by one way ANOVA which revealed that the difference supportive teaching influenced the overall different of achievement on instructional management significantly at <0.05 (F-test=12.884, Sig=0.00) and have reliability at 95% level. Therefore, the results of achievement on instructional management depended on the supportive teaching of each aspect. It also revealed that each aspect among was different the group. As a result, the achievement on instructional management were the aspect of professional ethics (F-test= 10.461, Sig. = 0.00), the efficient teaching (F-test = 10.762, Sig. = 0.00), and the effective teaching (F- test = 7.027, Sig, = 0.00). It was significantly different at <0.05, and have the reliability at 95% level. The mean of the learner's readiness analyzed by one-way ANOVA, revealed that the different learner's readiness influenced the overall of different of achievement on instructional management significantly at <0.05 (F-test = 10.033, Sig. = 0.00) and have reliability at 95% level.

To sum up, the results of achievement on instructional management divided into the learner's readiness of each aspect revealed that the aspect of each group was different. As a result, the achievements on instructional management were the aspect of professional ethics (F-test = 6.043, Sig.= 0.00), the efficiency teaching (F-test=8.358, Sig.=0.00), and the aspect of effective teaching (F- test=9.784, Sig.=0.00). It was significantly different at <0.05 and has the reliability at 95% level.

Discussion

The achievement on instructional management of the Faculty of Political science at Ramkhamheang University revealed the overall study at high level at 4.29, which was the professional ethics, the effective teaching, and efficiency teaching respectively. Moreover, the learners were focusing on the professional ethics of the lecturers, causing to attendant class, therefore, the achievement on instructional management conformed to the aspect of professional ethics for bachelor degree's student. It is ethical competence that they can apply the value systems and principle of the subject field to their conducts and the principles of sustainable development in action. Moreover, they take responsibility, work according to jointly agreed principles, measures and take other people into account action (The Higher Education Commission, 2010, p. 9). The effective teaching aspect showed that the learners were interested in the lecturer pedagogy to which they can apply their knowledge acquisition. Additionally, the learners can discuss with the lecturers, therefore it was in accordance with cognitive ability and methodological ability assessment (The Higher Education Commission, 2010, pp. 9-10). The efficiency teaching revealed that the learners demanded to conduct studies independently, which are conformed to the relationship skills between among members of the group which can help other people to solve the problem and to work creativity by using leadership with innovation (The higher Education Commission, 2010, pp. 9-10). The supportive activity for conduct studies independently was average 3.90, at the lowest level but was still at high level. Therefore, the faculty should provide instructional media through adequate high speed internet which is a two way communication to learners for retrieving information by themselves (Jiraporn Poungsuwan, 1994). The study title "A Comparative Study of the 4^{th} Year Mahidol University Student Achievement by Attending a Regular Class and Self-Study through the internet Lesson in the Information System Analysis and Design Course" showed that the students who study through the internet have scored better than the students who study in the regular class in terms of educational achievement at a significant level of 0.05 which is conformed to (Dunn.R. & Dunn.K, 1975, p. 254).

1. The supporting learning on instructional management at Ramkamkeang University, was affected by significantly the different level achievements on instructional management on the atmosphere, location, and teaching Aids. This was at high level on each item. It was conformed to the instructional management to the learners on different environment affecting developmental learners and the satisfaction on self-study development (James, 1972). The sampling was 400 students; divided into 2 groups, the first group would study independently with text book or self-study and the second group would study by lecture-base. The result found that the instructional management on interactive at a significant level of 0.05.

2. The readiness of learners on instructional management was affected by the different level achievements on instructional managements significantly punctuality, attention and pre-study, which was at high level on each item. Therefore, the learners were aware of achievement on

instructional management depending on self-study. This is conformed with the study of (Amorn klamsri, 2007), the title “the Study of the Relationship between Personal Factor and Self-Study Readiness Factor of Learners on Instructional Management, Informal Education, Higher Secondary School, theYear2005, Chonburi Province”, and (Guglielmino, 1978), the title “Development of Self-directed Learning Readiness Scale”. It found that the components of self-study consisted of 8 components as follows: open learning, independent study, autonomous learning, self-planned learning, learning project, self-education, self-teaching and autodidaxy.

Recommendations

1. The Faculty of Political Science at Ramkhamheang University, should stimulate the students to be able to self – evaluate their competences and development and learning needs conduct independently, recognize and utilize available learning opportunities and scopes for action in accordance with course syllabus which provided document, text book, and database of knowledge that the learner can search from internet.

2. The Faculty of Political Science at Ramkhamheang University should facilitate communication channel to the learner and the lecturer such as email, web Board or web Blog of each subject; moreover, the academic exchanging period online should be set.

3. The Faculty of Political Science should promote the self-learners, (1) individual study, (2) self-discipline of leaner, (3) to develop the skills of the learners, (4) to develop the social skill for study, (5) to develop self-assessment skill and assessment with others, and (6) to provide the supportive factors for self- study to leaner.

4. The Faculty of Political Science at Ramkhamheang should stimulate the lecturers to increase the instructional activities and self-study skills to learners.

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Who is A Creative Teacher? A Language Definition of Luis Y. Ferrer Jr. Senior High School Teachers

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ABSTRACT

This study seeks to describe the experiences of the teachers of Luis Y. Ferrer Jr. Senior High School in their teaching activities on who for them is a creative teacher based on the different pedagogies and teaching strategies they are using in the class. This would serve as a piece of information that would be a basis for the different in-service training and faculty development program of the teachers of LYFJSHS.This study would also be a great help to the future teachers that might serve as an idea for them to be a creative teacher. It could also give inspiration and motivation for them to adapt strategies from the experiences of the participants. The participants were selected public 13 SHS teachers in Luis Y. Ferrer Jr. Senior High School. The researchers used a qualitative type of study through interview and focus group discussion. Qualitative data was analysed using Litchman's 3Cs of Analysis (Coding to Categorizing to Conceptualizing) to generate the emerging themes. Teachers in Luis Y. Ferrer Jr. Senior High School agreed about different definitions of a creative teacher. The five themes are as follows: A Creative Teacher is: Seeker of New Knowledge, Collaborator of Learning, Motivator of Creative Problem-Solving, Giver of Inspiration, and Originator of Excitement. This study focused only to the senior high school teachers of Luis Y. Ferrer Jr. Senior High School during S.Y. 2016-2017. This serves as a reference or basis for the formulation in-service training and faculty development program for effective teaching and learning process using different creative strategies and methods of teaching.

Keywords

Creative teacher, Language definition, Senior high school, Pedagogies, Teaching strategies

INTRODUCTION

Learning and education have the vital role of life-changing in the lives of people. Therefore, an educator has an obligation to keep developing the quality and impact of education. Due to the rapid development of technology and society, it is now difficult to predict which skills will be needed in future jobs. On the other hand, no matter the area of focus or discipline, every job or task will require different abilities within areas like communication, collaboration, critical thinking, and creativity. Different companies want their employees to be able to find multiple answers to the different challenges so that they can choose which best fit the organization. In the global society, we are in need of different innovative solutions to challenges we are not able to identify. Hence, if we want to successfully prepare our students for the jobs and challenges in the future, the education and learning must start fostering creative leadership of the students in the classroom. Students must be given opportunities to engage in creative and collaborative problem solving in the classroom. Teaching should give focus on students' learning process skills, learning how to create innovative and surprising solutions to new problems. Educators can also be considered as risk-takers, sometimes they explore and try new ideas of teaching without any fear to fail as long as they become an effective instructor. A creative teacher is the one who encourage reasonable risks and unpredictable situations, while reinforcing creative activities (Morais & Azevedo, 2010).

There is a need to change the way we think about teaching. A hands-on - minds-on approach can help the students actively take an ownership of their learning process and be able to help them develop 21st-century skills such as collaboration, creativity and critical thinking skills through personally relevant and engaging learning experiences in the school. Introducing creativity to the classroom is a concern for teachers, governments and future employers around the world, and there has been a drive to make experiences at school more exciting, relevant, challenging and dynamic for all young people, ensuring they leave education able to contribute to the global creative economy (Sanders, 2011). The administrator must ensure that a school practice creativity in all classrooms with the presence creative teachers teaching the creative minds of the students. In making an engaging learning experiences in the classroom, the teacher should be creative in able to make the learning a creative process wherein the students will be able to explore their own competencies as creative and collaborative problem solvers. According to Jamili (2017), "Creative teachers use a variety of teaching methods and a wide range of resources and activities that better suit their students' interests, needs, and learning styles". Thus, the teachers should be able to develop different approaches and strategies to make their teaching creative, productive and effective.

With the full implementation of the K to 12 Curriculum by the Department of Education and applying creativity as one of the 21st skills needed by the teacher to possess, the researchers as senior high school teachers would like to know and find out how the teachers of Luis Y. Ferrer Jr. Senior High School define who for them is a creative teacher through their experiences as senior high school teachers in the classroom. It will make the researcher find out how the teachers of Luis Y. Ferrer Jr. Senior High School perceived the word creative teacher.

The main purpose of this qualitative study is to describe the lived experiences of the senior high school teachers of Luis Y. Ferrer Jr. Senior High School in their teaching activities on who for them is a creative teacher based on the different pedagogies and teaching strategies they are using in the class. This is to support the 21st century skills that the student possess and one of them is creativity and it can be learned and enhanced with the help of their creative teachers.

This study will give a piece of information that will be a basis for the different faculty development program of the teachers of Luis Y. Ferrer Jr. Senior High School into different pedagogies and teaching strategies that will develop their creativity in teaching. It will also benefit the students because they will be able to develop also their creative skills into different learning activities made by the teacher. This would also be a great help to the future teachers that might serve as an idea for them to be a creative teacher. It could also give inspiration and motivation for them to adapt strategies from the experiences of the participants.

REVIEW OF RELATED LITERATURE

Pedagogies in teaching have been changed in time because of the demands of changing the kinds of students in the school. In the 21st century, learners have evolved wherein creativity is being considered. Creative Learning in the Primary School book used the ethnographic research in considering the main features of creative teaching and learning within the context of contemporary policy reforms (Jeffrey &

Woods, 2009).It shows promoting creative learning in the school and how the school responded into the different policy reforms of recent years.

Teachers have a great impact to the lives of the students and the way they behave inside the classroom. Since teachers have the power of affecting their students, it was said that teachers' behavior can also be transferred to their students. According to Sali and Koksal (2015), there is a significant relationship between various measures of teachers' and students' creativity. The research determines how teachers' creativity affects their students' creative development, wherein there were 90 preschool and elementary school teachers and 90 pupils who were assessed for creative thinking.

Creativity has a broad meaning that may depend on someone's own definition of it. Being creative is a brief description to some teachers. They have different perspective of how they will give a definition from that word. According to Cox (2009), "Creative teachers make real-world connections for students". It implies that a teacher will be able to be call as creative teacher if he/she knows how to relate their subjects in the real world. They want the students to apply the knowledge they share as connection to the reality.

Classroom is the best avenue of nurturing the students as the main function of the teachers. Though there is a strong sense in education that creativity should be nurtured in classroom settings, still, there is little understanding of how effective and creative teachers function. There is an existing research has recognized that successful and creative people in any discipline use creative avocations to enhance their professional thinking. Root-Bernstein demonstrated a strong connection between the professional and personal-life creativity of highly accomplished scientists, which has been applied to other disciplines. However, until now, this phenomenon has not been applied to exemplary teachers. The qualitative study of Henriksen & Mishra (2015) focuses on a broader picture of how exceptional teachers use creativity in the classroom. Findings reveal how excellent teachers actively cultivate a creative mindset. Results show how excellent teachers are highly creative in their personal and professional lives, and that they actively transfer creative tendencies from their outside avocations/interests into their teaching practices. This study describes the different common themes in creative teaching, including intellectual risk taking, real-world learning approaches, and cross-disciplinary teaching practices.

The role and significance of Mathematics in human life is very important and holds a special place in development of contemporary society. Creativity in Mathematics teaching largely depends on Mathematics teacher. Teacher is the one who creates emotional environment in the classroom and it is expected from him/her to create with the students a relationship of trust and mutual responsibility for the success of conducting the teaching process. According to Gainsburg (2008), the mathematics-education community stresses the importance of real-world connections in teaching. The result of the study suggests the importance of the use of real-world connections to students in their process of learning. Students need to be interested and activated to individually solve tasks and find solutions to set Mathematical problems, to solve tasks in different ways using various methods, so that everybody can find a way of coming to a solution.

Research has shown that examinees (teachers of class and subject teaching in elementary and secondary schools) believe that they did not receive a good background during their university studies for strengthening teaching creativity. It transpired that creativity, as opposed to student and teacher, is appreciated less at the school and education system levels. Teachers (of all levels) have shown high level of agreement regarding the need for turnover in relation to creativity in Mathematics teaching, which would guarantee increase of interest of students for Mathematics (Agic & Resic, 2015).

Make your teaching and their learning fun, fast-paced and functional (Caroselli, 2006). You need to get creative ways on how to deal with reluctant learners, making the subject matter relevant and encourage participant-learning using different creative classroom techniques to be used by teachers. Creative teachers are often committed to personalizing teaching and model the process of sense-making through making multiple imaginative connections in whole-class and small-group contexts (Ali, 2014). That personalized way of teaching magnetized the interests of the students, which is significant in their learning process.

According to Sir Ken Robinson, creativity is the crucial 21st century skill that we will need to solve today's pressing problems. Thus, this must be possessed by the teachers in all institution. Since creativity is a process of having original ideas that have value (Azzam, 2009). A big part of being creative is the teachers need to look for new ways of doing things in every activity they have in the classroom.

In the study of Schacter, Thum & Zifkin (1996), they found out that teachers who integrate creativity into their daily lessons had a positive impact on student's learning. The students demonstrated a major increase in their academic achievement due to having more opportunities to develop problem-solving skills. This study has important implications to the educational system that the teacher should have different creative approaches in teaching to increase the academic performance of the students. Teaching creatively is vital to the learning process. Students need to learn how to develop original thinking and problem solving skills that are essential in personal and professional relationships. Different creative exercises and activities make learning relevant and foster an environment that promotes a life-long love for knowledge and learning. There is a major need to emotionally engage students in their educational experiences and encourage active participation in daily work (Wilhelm, 2008).

Creative teaching reflects teachers who are able to use "...imaginative approaches to make learning more interesting, engaging, exciting and effective (Morris, 2006, p. 4)." One aspect of creative teaching involves implementing instructional strategies for students to help them identify their creative abilities and help them develop the confidence to express novel ideas in order to produce original work. Creative teaching represents a vital part of good teaching including "...all the characteristics of good teaching including high motivation, high expectations, the ability to communicate and listen and the ability to interest, engage and inspire (Morris, 2006, p.5).

Creative teachers are willing to experience a degree of uncertainty because some of their ideas might not work and this is viewed as a learning experience for both the teacher and student (Morris, 2006). This approach has a major difference from the common classroom where teachers are not inclined to depart from their daily routines. Unfortunately, teachers struggle with consistently implementing techniques and practices that support creativity (Schacter, Thum and Zifkin, 2006). Even though it is hard for the teachers to depart from their comfort zone, still they find ways how to be a creative teacher in their teaching and learning process in the school.

Different researchers have developed a descriptive rubric to evaluate creative teaching for students. There are five major categories in the rubric: teaching thinking strategies, opportunities of choice and discovery, intrinsic motivation, environment conducive to creativity and imagination and fantasy (Schacter, Thum and Zifkin, 2006, pp. 56-57). The categories offer guidance in developing ways to identify creative teachers, point out the need for new professional development activities on creativity and encourage creative instructors to be mentors to their colleagues. With this material, the teachers can be evaluated their creative teaching that will serve as a baseline information by the administrator in every school to come up with a faculty development program to the different activities on creativity.

Since teachers have a great influence to the learning and behaviors of the students in the classroom, it was said that different pedagogies and strategies being used by the teachers in teaching will transfer on how students learned and how they react to it as they apply the learning they got into different practical approaches. Studies have explained that creative teaching will give an engaging, interesting and exciting learning process to the students and gives a positive impact on students' learning.

METHODOLOGY

This phenomenological research study captured the experiences of the teachers in Luis Y. Ferrer Jr. Senior High School during S.Y. 2016 - 2017. The focal point for this research is to describe the meaning and the essence of the experience of teachers in teaching the students using different pedagogies and strategies they are using in the school.

The participants were informed about the purpose of the research and informed that we would be conducting the interview, do the transcribing, and write about their experience as a teacher in the senior high school. We discussed that participants have a right to privacy. We also told them that they could withdraw from the study at any time if they felt uneasy with the questions. We chose to conduct the interviews during their break time or after class hours so the participants would feel free to speak.

The participants of the research were the selected senior high school teachers of Luis Y. Ferrer Jr. Senior High School who are teaching grade 11 students. The participants of the research were from the teachers of the said school.

The primary data that was collected during the vacant or after class of the teachers teaching in Luis Y. Ferrer Jr. Senior High School during S.Y. 2016 – 2017 in order to obtain the lived experience of the teachers that came from the face to face interview with the teacher participants. Another set of interview was arranged with participants during the second semester of the school year for clarification of statements and for verification of the information contained in the transcripts. Those interviews were face to face at the school. Participants were given a printed copy of their statements to review and comment on.

The following are the guide questions used in data gathering:

1. What is your definition of creativity?
2. What is your definition of creative teaching?
3. What are the different pedagogies and strategies you are using in the classroom? From the pedagogies and strategies mentioned, what do you think can be used in creative teaching?
4. What are the practices you are using in the classroom that can be classified as creative teaching?
5. What do you think is the importance of creative teaching to the students?

After gathering the data from the different participants from the different interviews, to ensure the validity of the data and the results, identified themes and results were given to the different research participants for checking.

RESULT AND DISCUSSION

In this study, qualitative means of investigation was employed. To know the different language definitions of a creative teacher, an interview and focus group discussion with the Senior High School teachers of Luis Y. Ferrer Jr. Senior High School were made. Shared teachers' experiences, ideas and perspective showed the need for teachers to be creative.

The perspective of teachers on some questions such as "What is your definition of creativity?", "What is your definition of creative teaching?", "What are the different pedagogies and strategies you are using in the classroom? From the pedagogies and strategies mentioned, what do you think can be used in creative teaching?", "What are the practices you are using in the classroom that can be classified as creative teaching?", "What do you think is the importance of creative teaching to the students?" served as basis for the thematic analysis of data.

Creative Teacher is a Seeker of New Knowledge

Although it is not a new problem, some educators and administrators deals with the question of how to fully integrate creativity into teaching method when are under pressure and has little time for preparation. Creative thinking is increasingly necessary to accomplish goals in our complex, interconnected world, and education researchers and psychologists tout the social, emotional, cognitive, and professional benefits of possessing creative abilities (Stemberg, 2006).

Despite of increasing consciousness and awareness to creativity, we educators must admit that we still have little knowledge on how to cultivate and develop creativity in current classroom situation, particularly creative teaching. Even though we, teachers tried to develop ways to integrate creativity into classrooms and discover our role in building creative skills among students.

As of our research, we have been trying to know the different concepts of a creative teacher. We try to resolve a vital problem about creativity—that even as it is being discussed and studied, it requires stepping outside these discussions. In other words, creative teachers have the ability to maintain a cultured knowledge of their field of expertise and yet explore outside the limits of that field to come up with new and fresh ideas.

From the discussion conducted, participants shared their insights on creative teacher as seeker of new knowledge. Their responses and perceptions will enlighten us on drawing an outside interest and creative ways of thinking to improve professional practice. Ms. Mecadio, one of the interviewees noted, "Creative teacher must have limitless resources. We don't have to be contented on what we have inside the classroom, we have to innovate our own resources, as teacher, we have to share all our talents and knowledge for the benefit of our students." As a TVL teacher particularly in Food and Beverages, she encountered difficulties like insufficient materials or unavailability of ingredients so she needs to seek for immediate alternative or solution to the problems. Our work goes beyond teaching generic techniques and seeks to genuinely embed creative approaches within disciplinary contexts (Mishra, Henriksen, & The Deep-Play Research Group, 2012).

Creative Teacher is a Collaborator of Learning

Teaching is a detailed task because of the challenges encountered by the teachers in trying to match the needs of their learners. Despite the curricular demands, teachers need to accept the duties and responsibilities assigned to them for the sake of the learners.

Creativity in teaching is one of the things that a teacher must employ in order for the learners to comply with the classroom activities given to them. Of course, the teachers cannot do it alone as she needs support from the school, colleagues and learners. Based on the discussions conducted, participants of this study mentioned that the willingness of a teacher to collaborate with others must also be applied in the classroom setting to prepare the students in their future career. Chan *et.al* (2014) mentioned in their study that the benefit of collaborative learning to students includes building their academic knowledge and generic skills. The findings of their study emphasize the effectiveness of collaborative learning as a means of developing students' employability skills.

Most of the participants of this study mentioned how collaborative approach helps them in teaching creatively. They said that using different activities that invite the students to cooperate and participate with one another help them develop their speaking skills as well as their confidence in expressing their own ideas. Ms. Llorente, an English teacher said "Creative teaching is using different approaches; different activities to deliver the lesson to the learners, most especially the approaches that suited the ability and coping mechanism of the learners.

The statement is supported by another teacher, Ms. Sarmiento, "Creativity is something that comes from someone's mind; the thoughts that were created and the expressions of these thoughts." In addition, Ms. Columna said "In Oral Communication subject, I usually give them real-life application activities like mock interview, then contextualization because we have to give them a task like a demonstration that is relevant to their course or field."

The statements from these Senior High School teachers convey the new meaning of a creative teacher—a collaborator of learning. They do not simply teach creatively, but also let their students be involved in the different activities that will let them express themselves in different creative ways. Kaendler et.al (2015) said in their research that effectiveness of collaborative learning largely depends on the quality of student interaction. They also focused on what a teacher can do to foster student interaction. Thus, a teacher needs to ensure the ability to plan student interaction, monitor, support, and consolidate this interaction, and finally reflect upon it.

Creative Teacher is a Motivator of Creative Problem-Solving

In our changing society, both teachers and students need to be determined in facing complex problems inside or outside the school. The task of education is to pass on different strategies for the learners' development. In his research, Owoh (2015), one of the things that he addressed is the teachers' creative practices influence students' performance in creative problem-solving. Here, he mentioned that problem solving is the process of initiating experimental interactions, based on thoughts and preconceived assumptions, with the intentions to clarify the root of a problem and possible solutions.

One of the interviewees, Mrs. Narvaez said "I think taking advantage of technology can be used in creative teaching, especially social media and internet. Since the generation of learners nowadays are more of visual learners, they pay attention more if we show them video clips and also if we incorporate social media in some of their lessons."

In support with this statement, Owoh (2015) mentioned that technology and the age of information require nations to develop generations of students who are creative and capable of solving new and complex problems. He also addressed that the person who is attempting to solve the problem will then learn more about what caused the problem and the effectiveness of their strategies. Thus, creative problem-solving is an important activity of teaching and learning.

While the mentioned participant focused on the things that technology can give to students in solving problems in the most creative ways, Ms. Columna addressed the importance of being a patient motivator in catching the interest of the students while trying to solve problems. According to her, "You should catch the interest of the students and make them follow you. You should make ways even for the laziest students."

With the help of the teacher, the students must be motivated to solve any problems in the classroom. In his paper, Cho *et.al* (2005), it was hypothesized that preference for complicated and challenging tasks, creative tendency in problem solving problem, and intrinsic motivation will directly influence students' creativity.He also mentioned that if a student believes that ability can be improved with efforts, the student will work harder and try to solve even difficult problems. Therefore, even after failures, instead of giving them negative feedbacks and punishments, as a motivator of creative problem-solving, the teacher should think of every possible way to make the students notice the importance of finishing the tasks; make them realize the feeling of fulfilment in solving challenging activities in class.

Mr. Montoya said "Creative teaching is the process of discovering ideas. There should be a learner-centered classroom that produce critical thinkers, who are at the same time deeply engaged in the subject at hand and enjoy the process and learning experiences."

As stated by Sir Ken Robinson, creativity is the crucial 21st century skill that we will need to solve today's pressing problems. Thus, this must be possessed by the teachers in all institution. Since creativity is a process of having original ideas that have value (Azzam, 2009). In this manner, the teacher's ways of making the classroom challenging yet exciting place to learn are significant.

Creative Teacher is a Giver of Inspiration

Of all the gifts, identifying someone as a giver can be the most challenging. Givers tend to be decisive, adaptable and flexible, and because we don't fit into nice, neat pigeonholes, it can be difficult to identify someone with this gift. Becoming an inspiration to the students is really a great feeling. Sometime we tend to hear words or praises that express their gratitude towards teacher's effort. Reading and reflecting on some inspirational teachings and others' wisdom literature is important to develop our own capacity for inner growth and development.

Teacher education should be concerned with the formation of the whole person. Teacher education is not just about the acquisition of knowledge, skills and dispositions (qualifications) or just about doing as other teachers do (socialization) but starts form the formation and transformation of the person (Biesta 2014 p. 135)

Based on the response of the interviewee, Ms. Mecadio noted, "It is important for us educator to evaluate the needs of our students so that we can provide appropriate solutions to their problems. We have to set aside our interest over theirs. It is our responsibility to give the best for our students. For me I am not only a teacher to them but a mother who are always willing to sacrifice and understand each of them." As a teacher, we have to model "Practical love" by showing love and respect: "Children learn most profoundly from who their parents, care-giver and teachers are as people as wholeness and rightness of these adults' qualities and action" (Marshak 1997).

Another interviewee, Ms. Pegollo said "as a teacher we have to make sure that all the learning and ideas will retain to the minds of students. Letting them share their knowledge among other students and learn from them as well." As an educator, showing unconditional love and long-term commitment will personalize the learning environment. Teachers who are enacting responsible love and critical reverence will understand that the teacher's task is to help, guide and nurture the young people in their care (Biesta 2014;Marshak 1997).

Creative Teacher is an Originator of Excitement

Teaching is not always as difficult as it seems. Imparting knowledge to others is one exciting task. It may look challenging and complicated, but the positive result of it gives an excitement on the part of the teacher and student. In teaching Science subject, according to the study of Harlow (2012), through participating in designing and facilitating informal science experiences, pre-service teachers can experience a different type of joy—that of seeing they have been instrumental in opening a child's eyes to the excitement and wonder that is science.

One of the participants of this study mentioned the same excitement as seen in the different activities and practices he does in the classroom. Mr. Montoya said, "Since creativity means the ability to make new things or to think of new ideas, I use imaginary play or drama, stories and puppets, poems, songs, drawings in delivering the lesson to the students." He also added, "I consider the multiple intelligences of the learners in asking them to present their outputs." This initiative of trying new things makes teaching and learning exciting for both teachers and learners.

In an article, Johns (2008) stated "I think it's the excitement and the spark that you see happens in students that are learning. Their excitement and their quest and their journey into wanting to know how things work, and wanting to learn in-depth what they're studying. I'd like to say that I've touched their lives, but I think they've also touched mine." It is evident in her statement that teachers and students can both play exciting roles as they both receive the satisfaction of what they do.

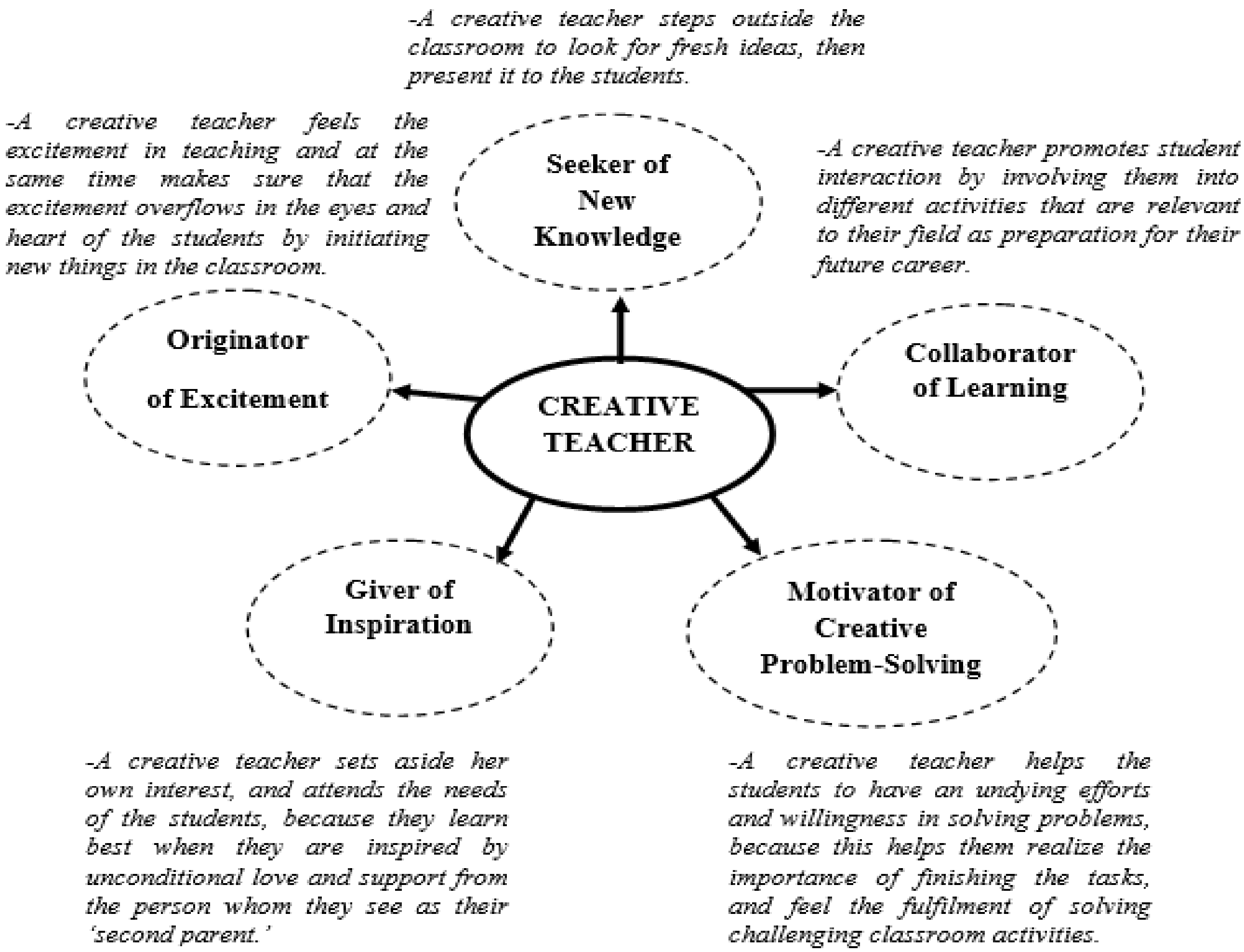
Ms. Magno said, "Unusual things that are artistically done is my definition of creativity. These things increase motivation, sustains interest and may also increase achievement level of the students." This is supported by another participant's statement. Ms. Gutierrez said, "Creativity is the result of a teacher's collective imagination. If this imagination is applied in the classroom, the result is so much excitement on the side of the teacher and learner."

Another participant shared a statement about the importance of excitement in class. Ms. Sarmiento said, "I used interactive approach in teaching. This is how I can see my students get excited—when they start to interact with one another. In this approach, students are brainstorming and discussing about their tasks. I usually tell them to present their work in creative ways after they talk about it." She also added, "Having an exciting class discussion is important to the students because you won't be able to catch their attention if you are not creative enough in terms of how you deliver your topic." The things that the participant mentioned show that students become active when the teacher gives them the opportunity to have an exciting classroom environment.

These statements from Senior High School teachers prove that as teachers, the initiative to create an exciting environment must begin from us. As Richardson (1992) stated in his study about *Guide to Education: Knowledge, excitement help make a good teacher*, the most important qualities of a teacher are: thorough knowledge of the discipline and interest in teaching itself. He also mentioned that students will be frustrated and unhappy if either of these is lacking. It helps to be excited about the subject. Excitement may not manifest itself in a publicly entertaining performance, but students know when you are thrilled by the subject and your excitement can draw them in.

CONCLUSION

As a result of the study, the researchers formulated a diagram that summarizes the definition of a creative teacher and a synthesis.



Creativity in teaching is the ability of a teacher to make up things in mind and then turn this imagination in reality. It is not just focused on the visual aids or any instructional materials that we post in front before we discuss the lesson. It is more of the quality of education that we can give to our students. It also talks about the strong determination of teachers to change the traditional way of teaching, and the urge to reach higher goals. Being creative turns out to be challenging to teachers though, because it is not like how it was viewed before. Since teaching itself is a complex task, how teachers integrate creativity makes it more complicated. Sometimes, we feel like we want to surrender, because we feel week as we think of the things that we need to do to surpass the challenges in teaching. However, if we think of our students' future, we always go back in track and accept the challenges and responsibilities. We are always reminded that just like us; students are also facing the same challenges as they grow older. We should always have the willingness to help them understand the world inside and outside the classroom. We should help them learn how they should handle the stage of maturity for them to gain good confidence when they grow up. This enthusiasm of a teacher is 'creativity' itself, one thing that should always be present in the educational system nowadays.

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SEAAIR BRIEF HISTORY

Following interaction between AIR and Dr Raj Sharma (founder and Inaugural President of Australasian AIR), Raj organized a meeting on 5th September 2000,of an international group of senior academics from the region comprising Dr Zoraini Wati Abas (Director, Centre for Medical Education and Media, International Medical University (IMU), Malaysia), Prof Somwung Pitiyanuwat (then Vice President, Chulalongkorn University, Thailand), Prof Nirwan Idrus (the then Executive Director, The Indonesian Institute for Management Development, Indonesia), Prof Ken Heskin (then Deputy Vice-Chancellor and CEO, Swinburne Sarawak Institute of Technology) and Raj at the IMU in Kuala Lumpur to discuss the possibility of forming a regional association for institutional research.

The group decided that the time was appropriate for the formation of such an organization and undertook to become the Interim Management Committee (IMC) for the organization and (ii) to organize a conference in late 2001 that would herald the birth of the organization and would attract participants from education, government, public service and industry. Dr Zoraini Wati Abas agreed to be the Chair of the IMC and Raj was elected Interim Hon. Secretary. It was decided

that the inaugural conference would be held in Kuching and Professor Ken Heskin, Deputy Vice-Chancellor and CEO of Swinburne Sarawak Institute of Technology agreed to be the Conference Chair. It was agreed that delegates to the conference would automatically become members of SEAAIR and that the SEAAIR Executive Committee (SEC) would be elected at the inaugural General Meeting to be held at the conference. At that point, the Interim Management Committee would cease to exist.

The Interim SEAAIR Management Committee made a few other important decisions that shaped its future as follows:

- Attempts were made to involve other countries in the region in order to promote the establishment of SEAAIR (all IMC members were to initiate action on this issue).
- Prof Idrus was requested to establish a web site for SEAAIR.
- The Committee decided to establish an electronic Journal of the Association and charged Raj to action this matter with the assistance of other interested members (critical to this was the joint effort of Dr Gan Che Ng who later became the Editor of the SEAAIR Journal-JIRSEA).
- Regional meetings of SEAAIR were to be promoted by the IMC in their own countries (it is noted that Prof Idrus organized some of the earliest meetings of such a group in Indonesia and Raj came to Jakarta to present a Seminar on IR). Assistance was to be sought from other sister IR organizations, particularly from AIR where the IR movement had originated some fifty years earlier; indeed SEAAIR was affiliated to the AIR and received some very necessary grants in developing its conferences, the Journal etc. A SEAAIR logo was to be developed and coordinated by Prof Ken Heskin (indeed it was Ken's daughter, Vicky Fitzgerald, a graphic designer, who designed the current SEAAIR logo). The interim objectives of SEAAIR were endorsed by the IMC

Due to the relatively large geographical size of the region, the IMC decided to use electronic means of communication for its meetings as far as possible. Two groups of face-to-face meetings were to be held using the opportunities presented by the conference organization (one face to face meeting with the Local Conference Organizing Committee) and others (including the AGM) at the time of the conference.

The inaugural conference of SEAAIR was a great success with around 100 delegates attending the conference in Kuching, Sarawak, Malaysia. The Local Conference organization represented a unique partnership between the host institution (Swinburne Sarawak Institute of Technology), the Sarawak Government and the Sarawak Development Institute. It has also provided a useful institutional host model of SEAAIR conference organization in the future with the SEAAIR Executive Committee taking the primary responsibility for academic aspects of the conference and the local host(s) taking care of the operational and financial dimensions of the conference.

The first AGM of SEAAIR was held on 24 October 2001 at 12 noon in the Sarawak Chambers, Crowne Plaza Hotel, Kuching, the Conference Venue. The inaugural AGM made two important decisions:

1. It approved the Association's constitution
2. It elected the SEAAIR Executive Committee comprising Dr Zoraini Wati Abas (President), Prof Somwung (Vice President), Prof Idrus (Hon Secretary), Prof Heskin (Treasurer) and Dr Sharma (member-at-large) to serve until September 2004.

The SEAAIR Executive Committee has been conscious of the fact that its membership has been drawn from a wide region and hence has deliberately rotated the conference host country/sub-region including peninsular part of Malaysia-Kuala Lumpur (2002), Bangkok, Thailand (2003) and Wenzhou, P.R.China (2004). Future conferences are expected to be held in Bali, Indonesia (2005), Tagaytay city or Subic Bay, Philippines (2006), Langkawi, Malaysia (2007) and either Chiangmai or Songkhla, Thailand (2008).

At its AGM during the 2004 SEAAIR Conference, the organization elected the following office bearers (namely, the SEAAIR Executive Committee or SEC) for a term concluding at the 2007 SEAAIR conference: Assoc Prof Zoraini Wati Abas (as President, now of Open University Malaysia), Asst Prof Teay Shawyun (as Vice President, of Assumption University, Thailand), Dr Raj Sharma (as Hon Secretary, of Swinburne University of Technology, Australia), Prof Nirwan Idrus (as Treasurer, now a Quality Assurance consultant),and Dr Jean Tayag (Philippines) and Dr Dyah Kusumastuti (Indonesia) as members-at-large. As provided by the SEAAIR Constitution, the President co-opted Ms Dai Jing of the International Affairs Office at Wenzhou University, China as the third member-at-large and thus forming the full compliments of the SEC.

The major purposes of the South East Asian Association for Institutional Research are to benefit, assist and advance research leading to improved understanding, planning and operations of institutions of post-secondary education in the region. Research focused on a single institution and also research that is concerned with groups of Institutions both fall within these purposes. In keeping with the dynamic nature of institutions of post-secondary education and the rapidly changing global environment in which they operate, the Association will encourage the application of appropriate methodologies and techniques from many disciplines. It will encourage comparative research into national higher education systems in South East Asia. It will publish and exchange information with respect to institutions of post- secondary education with a view to illuminating current and developing issues of common concern and raising the standard of post-secondary educational management, planning and policy development at all levels. Its aims include:

1. The advancement of research leading to improved understanding, planning, and operation of institutions of post-secondary education;
2. The dissemination of information and interchange of ideas on problems of common interest in the field of institutional research;
3. The continued professional development of individuals engaging in institutional research, institutional management and post-secondary planning and policy development;
4. The fostering of unity and cooperation among persons having interests and activities related to institutional research, management, policy and planning;

5. The advancement of post-secondary education and the improvement of the quality of post- secondary educational outcomes.

SEAAIR has been addressing its aims through a number of programs and activities including:

- The annual SEAAIR conference
- Pre-conference workshops on areas of interest to members
- Electronic annual publications of two editions of its journal (JIRSEA)
- Publication of SEAAIR Newsletter or other periodical bulletins to members
- Awarding of the Best Conference Paper prize that includes a subsidized presentation of the paper at a special session of the AIR Forum in the United States
- Presenting regional meetings/workshops for members from time to time
- Liaising with other IR sister organizations including participation in the International IR Network meetings
- Developing and implementing other strategies to benefit the membership as the financial position of the association strengthens in the future
- Including a good mix of keynote addresses at its annual conference representing local, regional
- and international speakers
- Instituting an international IR Panel at its conference to consider the conference theme from a global perspective

SEAAIR is still the "baby" of the international IR family with other multi-national organizations such as AIR, EAIR, AAIR and SAAIR having been formed earlier as well as such national bodies as Dutch AIR and the Canadian association (CIRPA-ACPRI). SEAAIR looks forward to working with these organizations to internationalize the cause of Institutional Research.

PROFILE OF PROGRAM ORGANIZER OVERVIEW OF CENTRE FOR FINANCIAL INCLUSION (CFI)

Founder :	Dr. Muliaman D. Hadad
Steering :	Dr. Bambang Soedaryono, ak, MBA
Chairman:	Prof. Dr. Muhammad Zilal Hamzah
Vice Chairman :	Dr. Eleonora Sofilda
Secretary :	Dr. Deasy Aseanty
Treasure :	Christina Dwi Astuti, SE, Ak, MM, CA

Centre for Financial Inclusion (CFI) is a official institute under the Faculty of Economics and Business, Trisakti University. This institution begins from a discussion about the need for an institution that is able to address the issues of inclusive finance and especially in doing research. This institution is established in 2015 and being originated from a discussion of the need for a research institute that is able to discuss issues of inclusive finance and (MSMEs). The discourse related to financial inclusion for the doer of financial services institutions, by the advice of Dr. Muliaman D. Hadad (head of financial service authority OJK Indonesia) so this institution become the Centre for Financial Inclusion or CFI. Along with the continued passing of the discourse on financial inclusion to all players in the financial services institutions, on the advice of Dr. Muliaman D. Hadad this institution called the "Centre for Financial Inclusion" or abbreviated CFI.

Until today, CFI already create many activities, such as: (1) National Seminar “Government and Corporate’s Strategic in Economic Challenges and Financial Conglomeration for Sustainability”; Malaysia Global Indonesia “Enhacing Islamic and Economic Finance Research and Education; (3) OIDA “ Sustainable Development”; (4) National Seminar “Financial Inclusion to Acheieve Sustainable in Indonesia”; (5) KOINKU “Finacial Inclusion untuk Koinku”; (6) OIDA “Sustainable Development”; (7) International Seminar “How Microfinance Encourage Economic Development”; (8) National Seminar “Tax”; (9) International “Waqaf and Economi Growth”; (10) International and National Call For Papers, Workshop and Colloquium Featuring Indonesia’s Sustainable Development Goals (SDGs): “Increasing Green Productivity and Economic Growth”; (11) Seminar Nasional “The Indonesian Energy Industry Toward Achieving The Sustainable Development Goals”; (12) Seminar Nasional “Contructing Sustainable Crude Palm Oil: How Actors Define Sustainability”; (13) Seminar Internasional “Rohingya Refugee and Migratory Movements”.

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PROCEEDINGS
(FULL PAPER)

The 18th SEAAIR Annual Conference

ASEAN@50:
Sustaining Student Competencies and Employability

Universitas Trisakti
September 26th - 28th, 2018

OTORITAS JASA KEUANGAN

PROGRAM DOCTOR PUBLIC POLICY
UNIVERSITAS TRISAKTI