# Challenges of a Junior High School MAPEH Teacher in the K to 12 Curriculum

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# Abstract

The Department of Education (DepEd) implemented K to 12 curriculum in the country- adding of two more years to the existing curriculum. This shift brought out changes on the educational setting (Sergio, 2011). School, teacher and learner preparedness are some of major issues that surfaced, not to mention issues which manifested after full swing implementation. Hence, there is a need for assessing what instructional materials (IMs) are most available and deemed important to teachers, yet not accessible. This study sought to investigate the concerns of junior high school Music, Arts, Physical Education and Health (MAPEH) teacher in the selected study site. The study employed Baxter's (2008) single case study design to investigate the present IMs and usage with through purposive sampling and semi-structured interviews. Using Braun and Clarke (2006) thematic analysis, themes were generated and showed that there is a dire need to provide the teachers resort to providing alternative tools to patch up the lessons and topics discussed. Thus administrative support to teachers is deemed very dire. Further studies are then advised to add more study sites and include for more participants to come up with more diverse data.

Keywords: challenges, K to 12 curriculum, instruction materials, innovations

# Introduction

Education plays an important role in most Filipino families. It is even the aim- if not all- but mostly, to have a decent education to and to get a stable job. It has been established that once a single family will be able to raise even one child and send him or her to school, the whole nation will benefit from it (Sabangan, Acas, Indong, & Ballesteros, 2017). It is considered a milestone for families to send off a child to school to finish studies.

Efforts to improve students' learning outcomes have suggested the need to embed the use of educational technology by teachers and other stakeholders alike in a learner- centered learning environment where students construct their own meanings (Gravoso, Paasa, Labra, & Mori, 2008). One study pointed out that one characteristic of a competent teacher is the teacher constantly striving to further develop a repertoire of teaching methodologies. The conventional way of teaching is definitely obsolete and the new generation of learners require more than the mundane strategy of imparting knowledge. On one end, there is direct instruction which is teacher-centered (Kellough, 2001).

One of the core components of the basic secondary education is Music, Arts, Physical education and Health (MAPEH) besides having four components, the subject focuses on the holistic development of the child. From discovering future athletes, dancers, actors and actresses, doctors and nurses, a MAPEH teacher also has to discover future singers and musicians. Hence, they have to perform multifarious functions to bring out the best among the students (Gantan, et al., 2015). Borromeo (2008) further stated that the enclosure of the subject Music is premised aesthetic (musical), and utilitarian (extra musical) contributions to general on its education and the

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national culture. It is an all-encompassing subject, the musical premise deals with the technicalities of the subject, specifically its rudiments. Whether these skills are normal or competent the teachers should be keen in spying these abilities possessed by the students (Borromeo, 2008). Hence the need to satisfy and improve the teaching practices or competencies of MAPEH teachers is deemed essential so that they themselves are able to interact better with the students becomes necessary.

In Region VIII, problems and concerns still linger among schools regarding education setting. This goes the same with Tacloban City. Though already classified as a Highly Urbanized City, there are still schools suffering from the previously mentioned struggles. Not only to mention the unaddressed issues concerning implementation of the new curriculum, little has been provided as to which aspect/s is/are lacking the most, with provision of hard evidences to support any claim thereof. With that being said, studies that aimed to assess (or reassess) the status of instructional materials development in the schools in Tacloban should be conducted. This will pave to clearer understanding of what has been done and what needs to be done.

Hence, the conduct of study which sought to answer the whats and hows of the current educational instructional development is crucial. To come up with the answer to such query, Baxter's (2008) qualitative single case design paired with Braun and Clarke's (2006) thematic analysis was used by the researchers. Single case design was chosen as the design for the study to extract qualitative data from semi-structured interviews while thematic analysis of Braun and Clarke's (2006) was chosen since themes were used to address the research or say something about the issue.

#### Literature Review

Looking into the real lens, aligning of methods of teaching to a particular instructional design is really essential. There are many models in teaching in which teachers can choose from, which should be aligned as well to what type of learners we have, the nature of the concepts and other factors. Olayinka, Jumoke, & Oyebamiji (as cited by M. Rafiq, Hashim, Melor & Pazilah, 2019) ASSURE model is one of them emphasize the need of align the media being utilized and students participating in the course.

Luistro (2010) noted that the problem of quality education is mirrored by a number of indicators, including the earlier dismal team survival rate, lack of preparedness of students to assume formal or the next level of schooling, the deficient experiences of teachers, and to further note, the sloppiness and blatant mistakes in instructional materials and textbooks. The 21stcentury educational bodies stand in dire need of a paradigm shift for a revolutionary and novel approach. The teachers are now being forced to dapt to the new age, adjusting the processes of education, in order to create the Products (i.e. new human resources) (Ricafort, 2010).

According to a report in United Nations Education, Scientific and Cultural Organization (UNESCO) in 2007, the accessibility of instructional materials specifically updated references was the most recurrent concern aside from lack of course programs and outlines (Caoli-Rodriguez, 2007) which is very evident in Music. This is where needs assessment for instructional materials comes into scene.

With the pedagogical roles of the teachers, Ozalp (as cited by Reyes & Oreste, 2017) stresses the importance of developing teachers' expertise not only on the content but also with strategies and techniques. Ensuring that instruction is designed, developed, and produced in a methodical routine that will produce effectual and effective learning. Proper instructional materials must be prepared and used for meaningful learning outcome (Reyes & Oreste, 2017). Evidence shows that instructional materials have large effects on learning. Nonetheless, little research subsists on the effectiveness of most instructional resources, and scarce systematic information has been collected on which materials are being utilized in which schools (Steinberg & Rachel, 2016).

In the process of addressing the demands of the global market, Department of Education (DepEd) adapted and implemented the K to 12 enhanced curriculum back in 2012. It envisions

2

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producing globally competitive, skills-based, and professionally equipped graduates once the learner finishes the 12-year basic curricular track (Okabe, 2013). However, just like its predecessors, K to 12 was not spared from different hurdles even in its first year of implementation. Hence, there is a need for a new vision and paradigm of education calling for major changes in policies, practices, and deliverables. To envision these, it is imperative to re-engineer the curricula using more focused and appropriate methods so as to go beyond rote memorization of courses and relate innovative instructive and didactical method, and as well the assessment of usage and availability of instructional materials (Sabangan, Acas, Indong, & Ballesteros, 2017). Highlighting the importance of examining availability, usage of instructional materials used in the classroom is really crucial since it can drastically affect the learning capacity to acquire knowledge.

#### **Theoretical Framework**

Teachers in all disciplines especially the ones teaching MAPEH is deemed fit to take rigorous considerations of not just acquired teaching skills but as well as appropriate theoretical underpinnings. Hence this study also anchored its objectives to such. Since it is given that the pressing problem is on the existing (and if lacking, the one that needs to be provided) instructional materials of MAPEH teachers, this can be deduced to constructivism approach-learning theories like Edgar Dale's Cone of Experience and Bruner's Three- Tier Model of learning are notably related to the study.

More so, as it needs to be, since MAPEH is a skills-based subject wherein students are expected to deliver the tasks asked of the subject component, Experiential Learning is connected to the study as well.

#### Experiential Learning Theory

Experiential Learning Theory (ELT) provides a holistic model of the learning process and a multilinear model of adult development, both of which are consistent with what is known about how people learn, grow, and develop. The theory

is called "Experiential Learning" to emphasize the central role that experience plays in the learning process, an emphasis that distinguishes ELT from other learning theories. (Mainemelis, 2008)

It is said that it is best if learners construct their own learning, like creating different figures and forms out of Lego blocks. Hence, proper materials should be provided by the teachers to the students to ensure quality learning.

#### Edgar Dale's Cone of Experience

Another theory to note is Edgar Dale's Cone of Experience. According to Dale's research, the least effective method at the top, involves learning from information presented through verbal symbols, i.e., listening to spoken words. The most effective methods at the bottom, involves direct, purposeful learning experiences, such as hands-on or field experience. Direct purposeful experiences represent reality or the closet things to real, everyday life. It also suggests that when choosing an instructional method, it is important to remember that involving students in the process strengthens knowledge retention. It reveals that "action-learning" techniques result in up to 90% retention. People learn best when they use perceptual learning styles. Perceptual learning styles are sensory based. The more sensory channels possible in interacting with a resource there is, the better chance that many students can learn from it.



Source: www.slideshare.net/tawsra/edgar-dalescone-of-experience *Figure 1. Edgar Dale's Cone of Experience* 

According to Dale, instructors should design instructional activities that build upon more real-life experiences (Anderson, 2012) since the more realistic learning experiences are, the more effective it is. This notion is connected to the

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standpoint of experiential theorists.

#### Jerome Bruner's Three-Tiered Model of Learning

To note further, a learning theory which deals with relevance and interconnectedness of instructional development and learning is Jerome Bruner's Three-Tiered Model of Learning. He then suggested that different ways of thinking (or representation) were important at different ages. In contrast, Piaget emphasized that children developed sequentially through different stages of development (a) The enactive mode (used in 1st 18 months) (b) The iconic mode (develops from 18 months) and (c) The symbolic mode (6-7 years onwards) (Research for Teachers, 2013).

		Third	THROUGH A SERIES OF SYBOLS	SYMBOLIC	
	Second	ICONIC			
First		THR	OUGH A SEQUENCE	ENACTIVE	

# Source: (Jerome Bruner's constructivist model, 2013) Figure2. Jerome Bruner's Three-tier model of learning

All these claims and studies led to the notion that there is a very significant role of instructional materials preparation and development to the teaching and learning process.

#### **Research Questions**

Based on the preceding statements, the researchers found that it is relevant to explore the various methods and materials used by the MAPEH teachers, and what current issues are confronting them in their delivery of teaching.

The researchers tried to examine the following terrains in the field of teaching, especially in MAPEH: (1) The available materials for the teachers in their teaching; (2) experiences of the MAPEH teachers, and (3) the recommended actions and suggestion of the teachers regarding this pressing dilemma. In an era where technology competes with education and conventional (manila paper, cartolina, etc.) instructional aids become less

4

popular, it is deemed appropriate to strengthen teaching methodologies that best suits materials available to the teachers and what can be relatable to the learners as well, hence contextualizing the learning experiences. This study investigated the needs and concerns of MAPEH teachers in a public high school in the selected site in Tacloban city and their recommendations regarding the said problem.

Specifically, the study wanted to explore to answer the following queries:

- (1) What are the challenges or struggles participant/s has/have for their class/es in terms of available resource materials?
- (2) How do they cope with/address problems and issues encountered?

## Methodology

This study followed qualitative research design to amplify its aims. Aside that this followed a case study approach (Baxter, 2008), it also aligned its data analyses on Braun and Clarke's (2006) procedure. Field observations and audio recordings were also used to gather data. Interviews were done in coordination with the school administration.

#### **Research Design**

The study employed descriptive single case study design (Baxter, 2008) focusing on the transpired interview from the participant. MAPEH teachers handling Grade 7 and 8 classes were selected as participants. To investigate the present IMs and usage in their respective classes, purposive sampling was employed. Participants were administered a semi-structured interviews to extract the data. For this study, only one teacher was included since only one teacher handled grade 7 and 8- each grade level having four sections.

The researchers made observations as well on the physical conditions of the school premises and other facilities that are used in teaching the subject.

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#### Sampling

The school selected for the study was school in Tacloban City with low performance in the National Achievement Test (NAT) last 2016. MAPEH teachers handling Grades 7 and 8 were purposively chosen as participant for the study. These were regardless of how many MAPEH teachers they are in the school and are handling the said classes.

If there was a need to, follow-up questions were asked to the participants to ensure that necessary data can be collected. Since there is only one teacher teaching MAPEH grade 7 and 8 available during the data gathering period, only one teacher was included in the study.

## **Data Collection and Analysis**

Permits were secured from the Tacloban City division office as to the conduct of the study. The school was already purposively chosen since it was recorded having the low passi ng percentage of National Achievement Test (NAT) 2016. Research guide questions were already prepared and familiarized by the researchers. Initial meeting with the school head was already done to ensure that the teachers were already pre-informed.

Field notes were used to take note of the physical conditions of the school as well as other observations that might be useful for the study. Mobile phones were used to record the interview. The teacher-participant was allowed to use his/ her comfortable language for the interview. Permission was also sought for the interview to be recorded. After the interview, the researchers asked for permission to visit her classroom. Other materials and provisions were taken photos that served as evidences as her teaching materials. After the interview, the transcript was then subjected to thematic analysis with the guide of Braun, & Clarke (2006). Braun and Clarke's (2006) procedure was chosen as the data analysis method to identify themes, i.e. patterns in the data that are important or interesting especially for collecting new information form the participants, and use these themes to address the research or say something about an issue offers such a clear and usable framework for the results.

### **Ethical Considerations**

For confidentiality, the researchers did not divulge the name of the teacher. Approval of the Department of Education, Division of Tacloban City was sought before conducting the research. The principal and the teachers were informed before the actual research visit. They were given prior consent forms as well.

# Reflexivity

The researchers are instructors in a university. Thus, they were aware of the common struggles the teachers encounter in day-to-day bases. The researchers did their best to follow the systematic process in conducting, collecting, and analyzing the data to avoid biases, following the procedure of Braun & Clarke (2006) thematic analysis.

## **Results and Discussion**

Since the researchers found it relevant to explore the various methods used by the MAPEH teachers, and what current issues are confronting them in their quest to instil knowledge to the learners, this study was conducted to address that concern. In the Figure 3, the researchers were able summarized all the data they have gathered.





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In the previous diagram, it can be shown that results from the study have three main themes: (a) Hindrances to Instruction; (b) Innovations and Alternatives and (c) Available resources. These entail different scenarios which depict the real setting of the teacher in the field especially for a MAPEH teacher.

# Theme I: Hindrances to Teaching



Figure 4. Theme 1 Hindrances to Teaching

With the fast-paced shift of technological advances, educators must use multiple media to accommodate the various learning styles encountered in classrooms (Thomas, 2018). The utilization of appropriate and ample instructional material is not manifested. Shortage of Instructional Materials and teachers who are not experts of their fields are common issues. As the participant shared,

"Ako man la liwat it baga... Uhhhm baga ako la an Music Teacher ha school". (It is like I am just the only Music teacher in the school). (P1;L180-190)

"Kun di maaram bis manla pag ihap or pag read hit rhythm. Di talaga hira maaram. Masiring ako.. Sige daw.. Nganga.. diri hira maaram kun anu it rhythm...... Maam anut rhythm kimi.. Waray talaga nira idea.... nasiring ako.. nag inanu kamu hit iyo elementary.. waray maam nag drawing la kami" (Even by just counting the rhythm, they really do not know how. So I ask them, what then did you do in your elementary grades? Nothing Ma'am.We just drew and drew) (P1;L221-224)

"Habobo an ira foundation... (when it comes to MAPEH) kay tungud nga minor subject manggud la.. drawing drawing la daw kuno hira. Puro la PE.. mulay mulay la.. Waray ngani music." [They have a low foundation...when it comes to MAPEH, since it is just considered as minor subject. They just drew and drew. Majority of the time is for PE

6

classes only.. just games, no Music] (P1;L224-226).

This result can be connected to the assumption of Ricafort's (2010) study that there is really a dire need to revisit the curriculum and look for a revolutionary and novel approach considering the perennial concern the current educational system face regarding the curriculum.

## Theme 2: Available Materials



From the data that transpired from the interview, the teachers usually have to provide their own instructional materials without support from their school administration, or if there are any, very limited, considering the number of students per class that can range up to 65 to 70. According to the participant,

(There is only one printer for several teachers; hence I am forced to use my own printer at home to print out my materials) (P1;L150-155).

(Usually I use my laptop to show students an image especially for Arts class, since we do not have projector) (P1; L140-144)

This among other researches begets the claim of Luistro (as cited by Ricafort,2010) that lack of appropriate materials is still a major concern in the educational system.

#### Theme 3: Innovations and Alternatives



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teacher-participant made ways to address the concern and be able to deliver her lessons. This is evident since the participant confided that most of the time they personally provide materials for their classes. This also paved way for the teachers, even in other subjects to come up with innovative ways just not to compromise the quality and the delivery of instruction, even if it means these will entail a cut in their budget. The participant then confided,

"Nagamit akon hin Tarp-papel..iton ginpriprint tas papadakun an pictures ha iba-iba nga papel" (I usually use tarp-paper.. pictures which are printed enlarged in different sheets of bond paper(P1;L156-158).

"bagat amu man la ito tak kuan...Usually parehas tak basketball waray man kami bola di aanhun ko man ito pag.. kuan nala.. groupings nala tapos ahh anu nla bagat bali by anu nala by group nala paggamit..kumbaga diri titrigda" (What I do is that, for example, in basketball, we lack balls, I allow them to have groupings, the balls are used by groups, like not everyone will play all together ) (P1;L156-158). It can be related to Gravoso's (2008) study that students construct their own meanings, hence letting them perform on their own increases the chance of retention of learning.

# Conclusion

After transcribing the interview with the participant and following the procedure of Braun and Clarke's (2006) thematic analysis, it is very apparent that (a) Hindrances to Instruction; (b) Innovations and Alternatives and (c) Available resources surfaced as major themes of concern and are deemed affecting the development and use of instructional materials. Claims of Luistro (as cited by Ricafort,2010) that deficiency of appropriate materials as major concern is very much evident. Further, a innovative and fresh approach for teaching is highly needed considering, the current problems we face regarding the teaching-learning process (Ricafort, 2010).

As one MAPEH teacher coming from a single school has been interviewed for the study; this consisted of her testimonies of her experiences in the classroom. According to her, there should be availability of audio-visual materials and print-text based materials which has ratio equal between the teachers and students. It is important to take note that without such materials learning experiences will be restricted. Even with the efforts made by teacher, it is but evident that they still encounter such problems.

As per data, it can be gleaned that in its absence of administrative support, teachers resort in using conventional instructional materials (IMs) and other means to supplement instruction. Apparently, it is then necessary that teachers should be equipped with different materials which will enable them to sustain and continue the delivery of instruction. With the testimonial experiences of the participant, it was shown that there are lapses like lack of materials for instruction and lack of support from the school administration that entail administrative concern. This will lead to poor transfer of learning. Unavailability of materials for production is a big disadvantage to teachers' development of instructional materials. It would be a burden for less creative teachers. These are evident with the transcribed interview from the teacher-participant. This could imply lack of coordination of teacher to school administration.

Furthermore, it can be noted that despite the situation, the participant did not compromise the quality of education and instead devised her own ways to settle the issues on her own. This manifested how innovative teacher can be, which in the ideal world, is what really is needed.

It is then noted that there are a lot of things left to be improved for the development of instruction to be at par with the ever-growing demands of teaching, especially to contextualize MAPEH teaching in the curriculum. The participant may speak only for her on behalf but the results can also have great implications and can be used as viable inputs for addressing this concern. Hence the following recommendation transpired.

Firstly, it is noted that there was only one participant for the Grade 7 and 8 MAPEH since she is the one in charge of the classes. It can be advised for further researchers to add more participants and to venture on adding more schools to be chosen as study sites. This will give more comprehensive and diverse results, hence

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giving more emphasis to this concern.

Secondly, exploring the daily struggle of teachers can be considered as another concern. Thus, a phenomenological type of study can be employed. Lastly, the school administrators together with the Department of Education should create varied instructional materials aligned with the conceptual framework of the curriculum.

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8

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# The Relationship of Mathematics Inventory Test Scores and English Proficiency of Mathematics Teachers at Parañaque National High School-Main, Parañaque City

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# Abstract

It may be difficult for Mathematics teachers to teach their subject if they are not proficient in the English language. Likewise, Mathematics teachers who have difficulties understanding Mathematics problems may not be able to solve it. Most of the research studies linked Mathematics to English language which led this study to investigate further the relationship of Mathematics score and English proficiency. The sample (n = 12) of this study was taken from the population (N = 48) of Mathematics teachers in Parañaque National High School-Main, Parañaque City. The subjects' scores in the Mathematics inventory and English proficiency test were analyzed using Pearson r correlation coefficient. ANOVA was used to test the significance of the relationship of Mathematics score and English proficiency. The results revealed that there is a weak positive correlation (r = 0.20) between the Mathematics score and English proficiency of Mathematics teachers of Parañaque National High School-Main, Parañaque City, however this relationship is not statistically significant ( $\rho > 0.05$ , 0.53). The result of this study indicated insufficient evidence to confirm the relationship between Mathematics scores with the English proficiency of Mathematics teachers at Parañaque National High School-Main, Parañaque City.

Keywords: Mathematics inventory test, English proficiency test, Mathematics teacher

# Introduction

Mathematics is an essential subject in the school curriculum and is regarded important in the study of other subjects. However, Gafoor and Kurukkan (2015) study showed that majority of the students dislike Mathematics and their reasons were related to difficulty in understanding the subject matter and teacher or instructional related factors. According to Gafoor and Kurukkan (2015), students dislike math because they perceive it as a difficult subject. Furthermore, Suan (2014) pointed out students' attitude towards Mathematics as the main reason why students fail the subject. In fact, the international test result such as 2003 TIMSS, Philippines ranked 34th out of 38 countries in HS II Math. Moreover, during the 11th National

Convention on Statistics, Ogena, Laña and Sasota (2010) presented the performance of Philippine high schools with special curriculum in the 2008 Trends in International Mathematics and Science Study (TIMSS-Advanced) and according to them, even with only science high school participating in the Advanced Mathematics Category, Philippines performed least among the ten (10) participating schools. These problems motivated education leaders to create educational reforms aiming to improve students' performance in Mathematics.

Students' underachievement in Mathematics is affected by several factors. Suan (2014) identified three factors (student factors, teacherrelated factors, and environmental factors) which may affect underachievement in Mathematics. Teacher-related factors include communication

skills. His findings showed that teacher factor is not significantly related to Mathematics performance. However, he suggested that other possible contributors must be taken into considerations.

Mathematics is associated to English in some ways. According to Fuentes (1998), solving Mathematics problems involves reading comprehension. Students need to improve their reading comprehension skills to improve their Mathematics performance. That is why Mathematics teachers must be at least proficient in the English language to create more chances for the students to learn.

Research studies like that of Rambely, Ahmad, Majid, and Jaaman (2013), Racca and Lasaten (2016), Henry, Nistor and Baltes (2014), Hafidz Omar and Yushau (2015), Grant, Gary Cook and Phakiti (2011), and Bagceci, Kutlar, and Cinkara (2014) confirmed the significant relationship between Mathematics performance and English language, thus triggered this study to further investigate the said relationship.

This study primarily aimed to determine the relationship between the Mathematics inventory and English proficiency test scores of the Mathematics teachers in Parañaque National High School-Main, Parañaque City. Likewise, this study attempted to determine and describe the performance in the Mathematics inventory and English proficiency tests of the Mathematics teachers at Parañaque National High School-Main, Parañaque City.

The results of this study could provide a concrete reference for more important education services. Furthermore, it could address to problems related to teaching and learning Mathematics. Teachers, administrators, and research enthusiasts could benefit from this study.

With the result of this study, Mathematics teachers in Parañaque National High School-Main could find reference regarding their English proficiency level thus giving them an important point to focus on the English proficiency skills identified weak among them. Additionally, school administrators could use the result of this study in formulating school programs that will enhance their teachers' English proficiency as well as their Mathematics performance. Finally, research enthusiasts could get a useful data out of the results of this study for their research.

#### Literature Review

Teachers' competence in teaching the content is one of the several factors which contribute to successful teaching and learning. Krauss, Brunner, Kunter, Baumert, Blum, Neubrand, and Jordan (2008). study emphasized how very important secondary Mathematics teachers' pedagogical content knowledge is in teaching and learning. Thus, higher expertise in the Mathematics content offers greater opportunities for learning. Results of An, Kulm, and Wu (2004) comparative study indicated that mathematics teachers' pedagogical content knowledge in United States of America is significantly different from China. They explained that Chinese system relies on traditional but more rigid development of procedures while United States of America system uses variety of activities designed to promote creativity and inquiry to develop concept mastery, but often has a lack of connection between manipulative and abstract thinking, and between understanding and procedural development. Both approaches could be beneficial in teaching and learning Mathematics.

Mathematics is taught using English as the medium of instruction. Launio (2015) showed that medium of instruction used in teaching affects students' Mathematics achievement. According to her, teaching Mathematics in English supplemented by Hiligaynon is better than teaching the subject in English only, thus, students learn when taught in bilingual. However, Gerber, Engelbrecht, Harding, and Rogan (2005) study compared the Mathematics performance of first (Afrikaans) and second (English) language students in South Africa and found no significant difference between their Mathematics performance after both received the same lectures but different medium of instructions used.

Teachers must be at least proficient in the English language since most of the subjects used this language as their medium of instructions. A study conducted by Eslami and Fatahi (2008) revealed that proficiency of the language used in

11

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teaching suggests sense of self-efficacy. That is, "the higher the teachers' perceived proficiency in language skills, the more efficacious they felt" (Eslami and Fatahi, 2008, p.14). Nel and Muller (2010) studied the impact of teachers' limited English proficiency on English second language in South Africa and found out that teachers' limited English proficiency greatly affects learners' acquisition of English as their second language.

Most of the research studies showed connection between Mathematics performance and English proficiency. In fact, Nillas (2002) study indicated that there is a significant but weak relationship between students' self-concept of language and Mathematics proficiency and their achievement. Similarly, Adanur, Yagiz, and Izik (2004) studied the relation of Mathematics and language and found that Mathematics is related to language. According to them, Mathematics is a language itself because it uses symbols. Likewise, one of the findings of the study conducted by Racca and Lasaten (2016) indicated that students with high English language proficiency tend to perform well in Mathematics. This finding is consistent with Henry, Nistor, and Baltes (2014) finding which assert English language proficiency as a strong predictor of English language learners' math scores. Like these findings is Hafidz Omar and Yushau (2015) study which indicated that students' English proficiency level is a factor affecting their performance in Mathematics. Likewise, the study of Howie (2003) revealed that the pupils' proficiency of English was a strong predictor of their success in Mathematics. Additionally, Beal, Cohen, and Adams (2010) study asserted that English reading skill was significantly related to Mathematics performance. Also, study of Abedi and Lord (2001) showed how students' language backgrounds impacts on their performance on Mathematics word problems.

#### **Theoretical Framework**

This study is supported by several theories and viewpoints on the relationship of Mathematics and English language such as: (1) mental representation, (2) content literacy, and (3) cognitive process.

#### Mental Representation

Mental representation is created by the reader when reading a text. It describes how the reader understands the text. Kintsch (1998) distinguishes three components of the mental representation created when reading a text: the surface component, the text base, and the situation model.

If words and phrases are set in the mental representation together with the linguistic relations between them and not the meaning of the words and phrases, then it is the surface component of the mental representation. The text base is the meaning of the text and it consists of relations derived from the text itself. According to Kintsch (1998), to make more sense of the text, the reader uses prior knowledge to create a more complete mental representation. And the situation model is the construction of meaning that integrates the text base and the relevant aspect of the reader's knowledge.

# Content Literacy

McKenna and Robinson (1990) defined content literacy as the ability to read, understand and learn from texts from a specific subject area. McKenna and Robinson also distinguish three components of content literacy: general literacy skills, content-specific literacy skills, and prior knowledge of content.

Both the general and the content-specific literacy skills refer to some general type of knowledge that is independent on the content of a specific text. This type of knowledge is used to create a text base in the mental representation. Prior knowledge of content refers to knowledge that is connected to the content of a specific text and is used to create a situation model in the mental representation.

Mathematics needs content-specific literacy skills. While, reading comprehension in mathematics depends on general literacy skills and prior knowledge of content. However, the symbolic language used in mathematics seems to be a probable cause for the need of contentspecific literacy skills. Also, comprehension of one mathematical text not using mathematical

# Journal of Education and Society

#### **Research Article**

symbols depended on the use of general literacy skills.

### **Cognitive** Process

It is natural that one must read the problem with comprehension to understand the problem. In such case, Kintsch (1998) explained that problem is solved using mainly unconscious cognitive processes, that is, the problem is solved through pure comprehension. As a result, a mental representation is created and that is mental representation of the problem. However, students with good reading skills do not necessarily need to create a mental representation of the problem. A pure text base in the mental representation and situation model is needed in comprehension of the problem, that is, reader should not only create meaning of the text but also relate the created meaning to the reader's knowledge.





Figure 1. The research conceptual model

# **Research Questions**

This study was designed to determine the relationship between the Mathematics inventory and English proficiency test scores of the Mathematics teachers at Parañaque National High School-Main, Parañaque City.

Specifically, the study sought to answer the following questions:

1. What is the performance of Mathematics teachers of Parañaque National High

School-Main in the Mathematics inventory test?

- 2. What is the performance of Mathematics teachers of Parañaque National High School-Main in the English proficiency test?
- 3. What is the performance of Mathematics teachers of Parañaque National High School-Main in the three English skills (grammar, vocabulary, and reading comprehension) test?
- 4. Is there a significant relationship between the Mathematics inventory and English proficiency test scores of the Mathematics teachers at Parañaque National High School-Main in Parañaque City?

# Methodology

This section presents the research methods followed by the researchers before coming up with the results of this study. Most specifically this provides information about the participants of the study, the criteria for inclusion, who the participants were, and how they were sampled. Moreover, the research data collection procedures are presented in this section.

# **Research Design**

The descriptive-correlation design was used in this study. This design is most appropriate since this study deals with recording and tabulating data to come up with factual result and deals with determining the significant relationship of respondents' scores in the Mathematics inventory and English proficiency test.

# **Data Collection and Instruments**

The respondents of this study were the Mathematics teachers (N = 48) at Parañaque National High School-Main, Parañaque City represented by a sample (n = 12). This study used simple random sampling technique to identify the research participants.

Two research instruments were used in

13

the data gathering, the test instrument of the Mathematics inventory test which was developed and administered by the schools division education program supervisor in Mathematics of Parañaque City, Dr. Emma R. Cunanan, while the other instrument was an English proficiency test developed by Transparent Language, Inc. The inventory test is a yearly administered to gauge math teachers' competency on Mathematics contents. The test is composed of 50 items covering all the contents taught in Mathematics. The teachers' responses to the inventory test were scored one (1) point for correct answer and no point for incorrect answer. This gives fifty (50) as the highest possible score and zero (0) as the lowest possible score. The English proficiency test is composed of 50 items multiple-choice type of test with three (3) parts: (1) English Grammar; (2) English Vocabulary; and (3) Reading Comprehension. The scoring rubrics used in the Mathematics inventory test were also used as the scoring rubrics for the English proficiency test.

#### **Data Analysis**

Descriptive method was applied using mean and mean percentage score. Scores of the inventory and English proficiency tests were presented graphically. To determine the relationship between the Mathematics score and English proficiency, Pearson r correlation coefficient was used. The significance of the relationship was tested using Analysis of Variance (ANOVA) using

 $\alpha$  = 0.05. Both Pearson r and Analysis of Variance ANOVA were done using Microsoft Office Excel 2013.

# **Ethical Considerations**

The research participants of this study were informed clearly of what the study all about, how vital their honest responses will be, and that their responses will be treated with utmost confidentiality. Before they started answering the questionnaire, a letter of consent was given to each participant to ensure that their participations are voluntary. Personal data and private information of the participants such as name, age, address, and other data except those that can be used in the attainment of the research objectives were not asked for the participants' privacy and protection.

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#### **Results and Discussion**



Figure 2. Performance of Mathematics teachers of Parañaque National High School-Main, Parañaque City in the inventory test

As shown in Figure 2, majority of the teachers scored at least 20 points in the Mathematics inventory test. The average score of the teachers is 22 points. Consequently, at least 44% of the test items were answered correctly by the teachers. This data shows that Mathematics teachers Parañaque National High School-Main of performed least during the inventory test. This finding is supported by the findings of Toledo and Bagaforo, as cited by Diaz (2000), which asserted that teachers have average competence in their knowledge and ability in Mathematics. They emphasized that teachers need to update and upgrade their subject matter competence because according to Ragma (2017), content competence correlates pedagogical competence.



Figure 3. Performance of Mathematics teachers of Parañaque National High School-Main, Parañaque City in the English proficiency test

As shown in Figure 3, most of the teachers scored at least 40 points in the English proficiency test. Moreover, the average score of the teachers is 41 points. Consequently, at least 82 % of the test items were answered correctly by the teachers. Hence, Mathematics teachers in Parañague National High School-Main, Parañaque City are proficient of the English language. This finding is supported by the English Proficiency Index (EPI) released last November 16, 2016 by Education First (EF) Ltd., as cited in (Singapore, Malaysia edge PHL in English-proficiency ranking, 2016), out of 72 countries, Philippines ranked 13th and among 19 countries in Asia, Philippines ranked 3rd. In the latest rank published in 2017, Philippines ranked 15th out of 80 countries (EF English Proficiency Index, n.d.). These facts imply that Filipinos, in general, are proficient of the English language as this is their second language.

Teachers' effectiveness in teaching could be associated with proficiency in the English language. This is supported by the study of Digap (2016). Digap (2016) highlighted the importance of English proficiency in teaching. In fact, the Department of Education mandated to include English proficiency test in the screening of aspiring public-school teachers with the objective of ensuring that teachers are competent not only in the subject matter they are teaching but also in communication.



Journal of Education and Society

A Refereed Journal

Figure 4. English proficiency test scores of the Mathematics teachers of Parañaque National High School-Main in Parañaque City in the three English skills

As shown in Figure 4, among the three English proficiency skills, reading comprehension is the weakest skill of the teachers. Furthermore, the mean percentage score of the teachers in grammar is approximately 81%, in vocabulary is approximately 91%, and in reading comprehension is approximately 79%. Hence, most of the teachers perform better in English grammar and vocabulary than that of reading comprehension. This finding is supported by the result of National Assessment of Educational Progress (NAEP) exams. Based on the result, progress in reading comprehension is lagging the improvement in Mathematics over the past two decades (The Problem With Reading, 2015).

#### Table 1

Relationship of Math Inventory and English Proficiency Test Scores of Mathematics Teachers of Parañaque National High School-Main in Parañaque City.

Summary								
Ν	12							
df	11							
r	0.201042308							
р	0.530958634							

As shown in Table 1, there is a weak positive relationship (r = 0.20) between Mathematics score and English proficiency of Mathematics teachers in

Parañaque National High School-Main, Parañaque City. However, the relationship is not statistically significant ( $\rho > 0.05, 0.53$ ). These facts suggest that, statistically, there is not enough proof to confirm the relationship between Mathematics score and English proficiency. This result contradicts the findings of Bagceci, Kutlar, and Cinkara (2014). Bagceci, Kutlar, and Cinkara (2014) confirmed the significant relationship between Mathematics and English. Their study claimed that success in English implies success in Mathematics. Rambely, Ahmad, Majid, and Jaaman (2013) finding is similar with the finding of Bagceci, Kutlar, and Cinkara (2014). According to Rambely, Ahmad, Majid, and Jaaman (2013), mastering of English is needed to nurture and understand Mathematics subject to achieve excellent result. They also added that low English proficiency results to a shortage in Mathematics learning. Also, results of Grant, Gary Cook, and Phakiti (2011) study suggested that success in Mathematics is influenced by English language proficiency.

# Conclusion

Based on the findings, relative to the scores obtained by the Mathematics teachers at Parañaque National High School-Main, Parañaque City, this study concludes that they performed least during the Mathematics inventory test conducted by education program supervisor in Mathematics, schools division of Parañaque City. In contrary, Mathematics teachers at Parañaque National High School-Main, Parañaque City performed well in the English proficiency test.

The results of this study revealed that there is no significant relationship between the Mathematics score and English proficiency of the Mathematics teachers at Parañaque National High School-Main, Parañaque City. Although findings of this study indicated no significant relationship between Mathematics score and English proficiency of the Mathematics teachers of Parañaque National High School-Main, Parañaque City, no details emerged to conclude the same in general.

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# Filipino Students' Perceptions of Factors Affecting Their Academic Performance in School: A Qualitative Study

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# Abstract

Most of what students learn is acquired in school. However, some pupils encounter learning difficulties which are not properly addressed by the teachers. This study aims to identify and examine the factors affecting the academic performance of ten (10) Grade Five pupils in Leyte Normal University-Integrated Laboratory School. The study used qualitative single-case study design, and participants were selected through purposive sampling. The top five (5) pupils in the high performing group and five (5) pupils in the low performing group were selected in that process. Data was collected using semi-structured interviews and direct observation of the participants. As a result, six major themes were derived from the findings after data analysis was conducted, namely: Self-Driven Activities in Learning, Challenges in Learning, Styles in Learning, References used in Learning, Scaffolds in Learning and Coping Mechanisms in Learning. This study could provide ways and awareness to all stakeholders in education on how to improve pupils' academic performance in school.

**Keywords:** education, learning styles, qualitative single case study, Social Cognitive Learning Theory, academic performance

# Introduction

Acquisition of learning mostly transpires in schools. Schools impart the necessary knowledge to the young minds through the help of teachers and other stakeholders. Siemens (2005) emphasizes that learning must not be detached from the outputs of pupils. When there is learning, the academic performance of pupils is possibly high. Thus, teachers and educators must take a look at the factors that differentiate between the high and low academic performers so that an intervention in class could be made, bearing in mind that the academic performance of pupils is one of the indicators of school effectiveness (Ogunsola et. al, 2014).

Previous studies suggest that factors affecting pupils' academic performance are social,

psychological, economic, environmental, and personal. These factors have a high impact on the said performance but they also differ from person to person (Ogunsola et.al, 2014). Individual differences, then, must also be considered for its significant role in the academic performance of

the pupils (JilardiDamavandi et al., 2011). Every child has a particular way to grasp the lessons given by the teacher. Barmeyer (2005) claims that each individual has his own way to learn and to find solutions to problems encountered. This implies that children have different levels of understanding about a lesson discussed. Pashler et al. (2009) bbelieve that learning refers to individual differences in which a child decides in order to understand a certain topic of discussion.

The classroom is one of the essential settings where learning takes place. It is where the teacher-pupil interaction of learning occurs because teachers transfer their own knowledge and curriculum goals during that learning process. Teachers must have the skills to facilitate learning through the use of different strategies or approaches in the delivery of the lesson. Pupils learn in different ways and therefore teachers must be ready to deal with their difficulties and improvement (Bushanan, 1992).

There are also external factors that could limit or hinder learning. That is why classrooms must be conducive to learning, free from potential distractions such as excessive noise so that pupils will learn better and think inquisitively about the lessons during the discussions or class activities. Noise can be considered one of the factors affecting the academic performance of pupils. Hence, it must be lessened in order to maintain an atmosphere that enables learners to listen attentively and to think critically as they tackle the lessons given by the teacher.

Classmates and parents also have a great influence on the academic performance of students. They could serve as motivation for learning in the sense that they can lend a hand to pupils who have difficulty understanding a certain lesson. They can also be a source of strength every time the pupils face issues or problems in the classroom. But then again, they can also be the reason to have a low academic performance of pupils because of the lack of support given to them.

In a study conducted w in the secondary level in Pakistan, Farooq et al., (2011) found that the socio-economic status and parent's education have a significant effect to the academic performance of pupils. Similarly, a study conducted by Wenglinsky (2002) in the U.S. revealed that classroom practices, strategies and approaches used by the teachers affect pupils' academic performance. Later, Frufonga et al., (2016) conducted a study in the Philippines, and found that the academic performance of pupils is also influenced by the social and financial stability.

Society must assure the welfare of every pupil by securing a comfortable and conducive classroom environment. In the Philippines, the typical classroom setting is that, a class usually consists of more than 40 pupils or students with only one teacher to facilitate learning activities for the entire class hours. Due to the big class size, pupils experienced many challenges that hinder them in learning. Based on literature previously discussed, it is empirical to explore and understand the varied factors that influence learner's academic performance and other issues relative to the phenomenon under study.

## Literature Review

Pupils are at the center of the learning process and the most significant in any educational organization (Frufonga et al., 2016). They complete the learning environment, most especially when they achieve an exemplary academic performance which is one of the goals of the academy—to let pupils be the best of what they can be depending on the level of their knowledge. A task given to the pupils in the classroom can make them think inquisitively and sharpen their mind to make learning easier.

Learners need a healthy environment which is free from any distraction so they can have full attention to the learning process. Schneider (2002) describes successful teaching and learning is a quiet, comfortable, and safe learning environment. Learners spend longer hours in school just to learn and engaged to the different school events because learning is considered as the first step of every activity that a person does (Farooq et al., 2011), and it is an avenue to be successful in life (Battle & Lewis, 2002).

In the United States, teachers emphasize on assessing the pupils' performance based on the No-Child-Left-Behind (Dee & Jacob, 2011) legislation. This implies that teachers must exert much effort in making sure the pupils achieve high academic performance. This is possible if teachers can give their best during the delivery of the lessons. In a study conducted by Wenglinsky (2002), the research suggest that to improve the pupils' academic performance, teachers must be approachable and knowledgeable in the different teaching standards that can help them in learning. Goddard (2003) explains that social assistance has a vital role in achieving the goals toward pupils' academic performance at school. Social assistance

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given by their teachers, classmates, peers and parents strengthen and motivate pupils' learning styles. Classmates or peers also give support and cheers in which they provide inside or outside the classroom can influence the performance of pupils in school. One of these instances is a tap on the shoulder which it can boost their confidence that they are doing a great job.

On the other hand, negative treatments shown to students can also draw a negative response. A common scenario is bullying. Once the pupils feel that they are being bullied, their confidence diminishes so their performance in school also goes down. According to Wentzel (1998), a specific concern is when a child, who does not enjoy positive and supportive interactions with grown-ups and friends, are often at risk of having academic problems, which is also supported by the study of Goodenow (1993), Midgley et al., (1989) and Phelan et al., (1991).

The same is true when parents do not support their children academically that make them feel to be left behind and will not perform well in school. Ogunsola et al., (2004) argues that the preparation and growth of a child are logically in the hands of the parents. He further says that parents' attitudes and involvement concerning the education of their children significantly increases the level of their academic performance.

Furthermore, the pupils' learning styles can also influence their academic achievement. That achievement may even differ among countries globally. For example, JilardiDamavandi et al., (2011) in exploring cognitive styles found differences in academic achievement in countries such as the United States, Spain, Hong Kong, mainland China, Korea, Norway, Malaysia, and the Philippines.

According to P ashler et al., (2009), learning styles are the individuals' way of learning effectively, and are used in gathering, organizing, and thinking of different ideas. It was also agreed by Fleming (2012) and Felder et al., (2005) that positive and motivated cognitive, affective, and psychological behaviors are learners' indicators used so that they can recognize and solve a certain problem encountered in a school setting. The Executive Director of NASSP, Scott Thomson, has this to say: "the ability to map learning styles is the most promising development in curriculum and instruction in a generation. It is the most scientific way to know to individualize instruction" (Dunn, et.al. 2009).

Pupils, classmates, educators, and school facilities must be more flexible in effecting learning (Fleming & Baume, 2005). A study conducted by Zin, Zaman and Noah (2002) reveals that academic materials must be used to facilitate learning, and to help those low and average learners since there are individual differences in learning style. In order for pupils to get greater impact from instruction and assessment, teachers and stakeholders must have a counterpart and cater the factors affecting their academic performance in learning.

Singh et al., (2016) stated that a lot of research experts focus to the quantitative studies on the factors affecting academic performance of students, little is known about the qualitative aspect of students' perceptions with regard to factors affecting their academic performance in school. Hence, this study sought to discern the different point of views of Filipino students about the factors affecting their academic performance in school. Moreover, this study aimed to answer the following questions:

- 1. What factors contribute to the academic performance of the participants?
- 2. What issues do the participants encounter in their Academic Performance?
- 3. How do the participants deal with the issues that they encounter in their Academic Performance?

#### **Theoretical Framework**

Academic performance of students depends on multiple factors, like physical activity, social environment and their learning style preference. This study is anchored on Visual, Aural, Read/ write and Kinesthetic learning modalities and social cognitive theory. VARK learning modalities is utilized to coordinate the instructional methodologies and approaches to the student's learning styles in school. In VARK learning

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#### **Research Article**

modalities, Fleming and Mills (1992) suggested four modalities that seemed to reflect the experiences of the students and teachers. For this case, the study was focused only to the experiences of students with regard to their academic performance. VARK stands for Visual, Aural, Read/write and Kinesthetic under the category of instructional preference and sensory modalities used in discussing and gathering information.

Flemming and Mills (1992) as cited in Katsioloudis and Fantz (2012) stated that visual modality includes the representation of information in charts, graphs, and all the symbolic arrows, circles, hierarchies and other devices that teachers use to represent what might have been presented in words. Layout, whitespace, headings, patterns, designs and color are important in establishing meaning. Aural modality describes a preference for information that is spoken or heard. This modality can be supported from discussion, oral feedback, email, phone chat, discussion boards, oral presentations, classes, tutorials, and talking with others. Read/write modality is for information displayed as words either read or written. Learners place importance on the precision in language and are keen to use quotes, lists, texts, books and manuals. Many educators and learners have a strong preference for this modality. Lastly, Kinesthetic modality refers to the perceptual preference related to the use of experience and practice. This mode uses many senses (sight, touch, taste, and smell) to take in the environment to experience and learn new things. Moreover, this study is supported on social cognitive theory by Albert Bandura. Bandura (1989) as cited in Ogonsola et al., (2014) stated that the development of human focused on the psychosocial changes from childhood to adulthood of the person. Furthermore, learning is a cognitive process happening through observation or instruction even without motor reproduction or direct reinforcement. Giving vicarious reinforcement (rewards and punishments) can attain learning and the behavior of an individual is emphasized exclusively by reinforcements in engaging on the important roles of several internal processes

in learning.

#### **Research Questions**

This study aimed to answer the following questions:

- 1. What factors contribute to the academic performance of the participants?
- 2. What issues do the participants encounter in their Academic Performance?
- 3. How do the participants deal with the issues that they encounter in their Academic Performance?

#### Methodology

This study employed qualitative case study and the methodology utilized to explore Filipino students' perceptions of factors affecting their academic performance in school. Moreover, it provided information on how participants were selected, and the setting of the research. The instrument that was used for data collection was described and the procedures that were followed to carry out the study were also included.

#### **Research Design**

This study employed a qualitative case study as research design. Baxter and Jack (2008) stated that a qualitative case study is a methodical approach to research that explores certain phenomena which can be used as a framework from the different sources of data. It was used to gain the opinions and insights of the participants towards the study.

Vishnevsky and Beanlands (2004) as cited in Starman (2013) stated that a qualitative approach can be used to define the perspective, experiences, and feelings of the participants towards some given situations. Moreover, qualitative research is defined through individual interpretation of their own experiences that they give meaning to.

Moreover, this qualitative case study utilized a semi-structured interview. Richard and Morse (2012) stressed out that single-case descriptive research method was opted because the analyses

Journal of Education and Society

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of the result used a small number of participants and the interpretation of the data are on the descriptive level.

# Sampling

The researchers used the purposive sampling technique to identify and selected the ten (10) participants from the fifth graders of the Integrated Laboratory School. The inclusion criteria in choosing the participants of this study are the following:

- The participants were officially enrolled at LNU-ILS, Grade 5 Class, School Year 2018 – 2019.
- 2. The participants were selected from the top five (5) who performed well in the class, and top five (5) who needed monitoring in their academic performance.
- 3. The participants were recommended for interview and observation by the class adviser inside their class.

# **Data Collection and Instruments**

The main purpose of this study was to uncover how participants learn best, what issues they encounter in learning, and how they deal with the issues they encounter in learning.

This study engaged the following gathering tools, namely: (1) semi-structured interview which helped generate pertinent information about how pupils learn best, what issues they encounter in learning, and how they deal with the issues encountered in learning; (2) audio- recordings, which helped record the interview with accuracy; (3) semi-structured guides or questionnaire which were used to validate the responses and information given by the participants during the interview; (4) participant observation like photos taken during class observations necessary for this study. The researchers explained the purpose of the interview and their approval was sought to record the flow of the conversations. Participants were encouraged to talk and tell stories freely using their comfortable languages. The researchers likewise interviewed the class adviser for further information regarding their academic performance, and took some photos as support files for this study. Moreover, this interview was voice recorded. The purpose of the audio recording was to assist the process of transcription and ensure that what participants said were captured completely. The audio recording was sufficient as researchers were seeking for students' perceptions of factors affecting their academic performance. No video was captured because researchers did not conduct any experiment to see how students performed inside the classroom. Classroom observation was not used in this study because this study was focused only to the points of view of students with regard to factors affecting their academic performance in school.

## Data Analysis

The researchers analyzed the collected data through the use of bracketing exercise that follows the Wa-Mbaleka (2018) method of data analysis. Specifically, they followed the ten (10) steps, which are as follows:

- 1. Prepare and organize your data
- 2. Read your transcript (or go over your data) once or twice
- 3. Develop your coding manual
- 4. Code all your data
- 5. Find recurring ideas
- 6. Abstract your ideas
- 7. Write the interpretation of all your data
- 8. Write your report
- 9. Verify your finding and conclude
- 10. Make final revisions

#### **Ethical Considerations**

The researchers followed the appropriate guidelines for issues such as human rights and compliance with the law conflict of interest, safety, and health standard. The researchers personally asked permission from ten participants to have a one-on-one interview with accordance of their availability and willingness to be interviewed. Furthermore, the researchers acknowledged all the authors used in any of this study and the

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participants were aware that their answers and individuality would remain confidential. Since the participants were 5th graders, researchers had a parents' consent to allow their children to be interviewed.

## Reflexivity

The researchers are instructors in a university. Hence, they are aware of the common struggles of students as observed in in a day-to-day class setting. Moreover, researchers are teaching in an integrated laboratory school in a university. The researchers did their best to follow the systematic process in conducting, collecting, and analyzing the data to avoid biases.

## **Results and Discussion**

A descriptive analysis of the data gathered revealed six (6) major themes on understanding the factors affecting the learning of the fifth graders in the Leyte Normal University-Integrated Laboratory School. Each of the six (6) major themes was "labeled" based on their own language describing specific meanings. The six major themes are self-driven activities, challenges, learning styles, references used, scaffolds, and coping mechanisms in learning.

# Theme 1: Self-Driven Activities in Learning

In the studies of Cooper (1989) and Walberg et al., (1985), as cited in Clark (1993), the pupils' good study habit at home affects their academic performance effectively. They also emphasized that activities given at home promote learnings' retention.

Home activities and School activities are examples of Self-Driven Activities in Learning. Home activities refer to studying, self-practice of words/stories, reviewing the lessons learned in school that happens at home. While School activities refer to listening in school and listening and at the same time studying inside the classroom. Below are some examples uttered by the participants; "nag-aaram ha balay" ["studying at home"] [P1, L2, P1],(Page number 1, Line Number 2, Participant number 1),

"Ginsasanay ko tak kalugaringon pamati didto ha balay hit mga madagmit nga mga kayakan o istorya." ["I am practicing myself to listen to the fast words or stories at home."] [P9, L9, P9]

"namamati ako ha eskwelahan" ["I am listening in school."] [P1, L2, P1]

"Samtang nagtututdo hi Ma'am nag-aaram gihap ako ha sulod hit classroom." ["While our teacher is teaching, I am also studying inside the classroom."] [P1, L3, P1]

# Theme 2: Challenges in Learning

Challenges encountered in this study by the pupils in learning are in the teachers' factor, classmates' factor, and Personal factor. Thus, the performance of pupils is mostly seen in their academic grades. There are particular factors to consider in achieving higher grades such as personal, social, psychological, economic and environmental factors (Mushtaq & Khan, 2012). Teachers' factor is influenced by the delivery of the lesson and voice quality. Noise disturbances and unsatisfactory manners by the classmates are under the classmates' factors. Personal factors are inclined by their emotional instability, blocks in learning and diversion of learning preferences.

"Malaksi hi maam na nagyayakan tas magkuri it mga buruhaton na guin hahatag ni maam sanglit madagmit ako nawawarayan hin gana." ["Our teacher talks fast and gives us hard activities that's why I easily get upset."] [P2, L17, P2]

"Gutiaay it tingog hit mga maestra ngan maaringasa ha klasrum."

["The teachers' voices are soft and it's very noisy in the classroom."] [P2, L27, P2]

"It akun mga klasmet mag- aringasa, diri ako nakakabati kan teacher." ["My classmates are noisy; I can't hear our teacher."] [P2, L6, P2]

"Damo nga na-bully ha akon. Gintatawag ako nga special. Sugad ginbabanyakan ako

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tapos ginhahapilan ako hit papel hit akon mga lalaki nga mga klasmet. Danay baga ako hit nalulurong."

["I am bullied by many. They are calling me special. Like they kick me then my male classmates throw papers at me. Sometimes I feel like am crazy."] [P2, L1, P2]

"Dik nakakaintindi hit Math labi na it Multiplication ngan Division." ["I can't understand Math especially Multiplication and Division."] [P7, L13, P7]

Nakadto nala ako ha gawas hit classroom tas nagkikita nala hin mga salida diri ngani youtube." ["I just go out of the classroom to watch movies or youtube."] [P3, L10, P3]

#### Theme 3: Styles in Learning

According to Demirbas and Demirken (2007), it is necessary to have in-depth understanding of the learning styles of learners since they play a vital role in education particularly in their academic performance. The type of learning styles that the Integrated Laboratory School pupils possess are Visual, Read/Write, Kinesthetic, Aural and Read/ Write, Aural and Kinesthetic, Read/Write and Aural and Visual. The pupils uttered the following statements;

"Danay kun nagtututdo hi maam nag babasa ako hin libro mahiunong ha subject nga Science." ["Sometimes while our teacher is teaching, I am also reading the book about our Science subject."] [P7, L2, L4]

"Ginbabasa ko gihapon ha libro para makaintindi." ["I also read the book for better understanding."] [P2, L2, P2]

"Nag- iisip ako kun ano it answer tas nagdodrowing." ["I think on what the answer is then I draw."] [P1, L38, P1]

"Samtang nagtututdo hi Ma'am nag-aaram gihap ako ha sulod hit classroom." ["While our teacher is teaching, I am also studying inside the classroom."] [P1, L3, P1]

Nagdodrowing ako samtang namamati." ["I draw while listening."] [P1, L18, P1] "Nagsusurat gihap ako samtang namamati hit leksiyon ngan nakita ako ha libro." ["I am *writing also while listening to our lesson and I look at the book.*"] [P1, L26, P1]

#### Theme 4: References used in Learning

The references used in learning are in needs to motivate learners into engaging positive teachinglearning processes. As what Nsa et al., (2013) said printed materials and realia are some of the learning materials that can make learning more interesting, helping teachers impart the lessons more easily. Some of the references used by the pupils are printed materials, chalkboard and internet.

"Danay kun nagtututdo hi maam nag babasa ako hin libro mahiunong ha subject nga Science." ["Sometimes while our teacher is teaching, I am also reading the book about our Science subject."] [P4, L2, P4]

"Mas nakakaintindi ngan nababaro lugod ako kon ginsusurat ha board it gin- papaangbit nga leksiyon haam hit amon maestra kontra hit ginyayakan la." ["I can understand and learn better if the lesson is written on the board rather than just spoken to us."] [P9, L4, P9]

"Nakita ako hit iba pa nga mga buruhaton ha libro. Tapos nagsusurf gihap ako ha internet para kumita hin mga videos ngan mga ladawan mahiunong hit subject nga akon nakukurian." ["I look for the other activities in the book. Then I surf also in the internet so I can watch videos and pictures regarding difficult subjects."] [P7, L17, P7]

#### Theme 5: Scaffolds in Learning

Giving academic assistance to learners is important so the latter could achieve high performance in their education. Goos (1999) articulated that students develop their confidence in engaging more critical and self-reliant activities through the academic assistance from their friends, teachers, and parents. LNU-ILS pupils emphasized that they get help mostly from their parents, peers and teachers. This can be shown in their statements;

"Danay ginsusumat ko hira hit amon maestra tapos ginpapatukdaw hira ngan

ginpapaatubang ha bungbong hit klasrum." ["Sometimes I tell my teacher about it and

they are made to stand and face the wall of the classroom."] [P10, L17, P10]

Mag- upay la na classmate it akon gin kakaistorya." ["I am only talking to my good classmates."] [P3, L17, P3]

"Naaro ako hin bulig kan mama ha balay mahiunong hit leksiyon." ["I ask my mom's help at home about our lesson."] [P2, L5, P2]

#### Theme 6: Coping Mechanisms in Learning

Pupils have their own way of addressing the problems around them. Pearlin and Schooler (1978) emphasized that coping mechanisms are one's psychological defenses to avoid societyinflicted harms. Coping mechanisms in learning of pupils are shown by ignoring someone and selflearning.

"Waray ko ginbubuhat. Dire ako nakakabati kay it akon mga classmate mag- aringasa. Diri ako nagsasaway kay gin iisgan la ako nira." ["I just do nothing. I can't hear because my classmates are noisy. I don't reprimand them because they get mad at me."] [P2, L15, P2]

"Nakadto nala ako ha printi tas ngadto nala malingkod." ["I just go to the front and sit there."] [P3, L16, P3]

"Ginpapasagdan ko la tak mga klasmeyt nga na-bully ha akon tapos ginbabayaan ko hira. Danay." ["I just tolerate my bully classmates then I leave them sometimes."] [P10, L16, P10] "Nagpapakiana ak utro hit maestra hit ak diri nababatian na mga pulong." ["I ask my teacher again those words I didn't hear."] [P6, L16, P6]

This study was to identify the perceptions that affect the academic performance of the learners. The study focused on the fifth graders in a Laboratory school within Tacloban City, Leyte. Semi-structured guides or questionnaires were used in the study to explore qualitative approach on student's academic performance. Six major themes were derived namely Self-Driven Activities in Learning, Challenges in Learning, Styles in Learning, References used in Learning, Scaffolds in Learning and Coping Mechanisms in Learning.

Students are the mere focus in educational framework. Their capacities must be developed to grow through strengthening the Self-Activities in Learning. Selamat et al., (2012) accentuated that Self-driven Activities in learning must urge students to work freely and to find new things in their own interest. It is likewise important to recognize the students' learning styles so they can obtain the information they need in their own stage. Indeed, Kaya et al., (2009) said that styles in learning get ready students to connect new and previous learnings whether it is simple or complicated information.

Explicit factor that influence understudies' accomplishment matters in the References used in learning since students can peruse ahead of time the theme or search ambiguous words or thoughts that they experience issues in comprehension (Singh et al., 2016). Previous studies also mention some Challenges in Learning than can influence the academic performance through the accessibility of the learning facilities and inappropriate learning styles. These some Challenges in learning gives impact to the academic performance of the students (Mushtaq and Khan, 2012). Silliman et al., (2000) said that Learning assistance and attention must be given particularly those beginners from the Scaffolds in learning who are the teachers, parents and those people who surrounds them. Students who have trouble in learning must be given time to reach out to them the necessary intervention suited for them. If they can see the full support to them, students can have Coping Mechanism in learning so that they can handle all stressors they encounter in learning (Geisthardt and Munsch, 2016). All the academe must work together to cater all these themes so students will be progressively certain, basic masterminds and will adapt emphatically.

#### Conclusion

Individual learning leading to a better academic performance is being achieved with the help of the people around. However, there are things to consider such as classmates' behavior, teaching strategies, and parents' guidance, which

# Journal of Education and Society

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are so necessary to achieve positive outcomes relative to the pupils' academic performance. The distinguished elements influencing the scholastic performance in a laboratory school will provide educators to recognize interventions to improve the teacher's teaching approaches and methodologies. Thus, school must be set into a friendly spot of learning by improving classmates' conduct towards each other and reaching out those who experience issues in learning.

The following recommendations are made for pupils, parents, teachers and future researchers. First, to the pupils that they should not regard the study as a barrier to their future, but as an enjoyable and challenging venue for learning to take place. Next, for teachers to be aware that pupils have different and special academic needs, hence needing more interactions, encouraging activities, as well as learning materials to use. To the parents, to be sensitive enough and to spend more time with their children by asking what they do in school, and how they can help them with the problems encountered in school. To the researchers to use this study for academic improvement especially in finding other factors affecting the teaching performance of teachers in the laboratory school.

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29

Journal of Education and Society

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# Job Satisfaction and Turnover Intention Among Nurses and Midwives Working under DOH Deployment Program

Leah P. Brun-Salvatierra, M.D.

# Abstract

Maldistribution of health workforce in the country's health system threatened the quality of health care services and delivery. The deployment program of the DOH is key to address the issue. Studying work characteristics among nurses and midwives as the heart of health care system is essential. This study aimed to determine nurses and midwives job satisfaction, its predictors and relationship to turnover intention who were working in Samar, Philippines. Employing correlational survey design, thirty-seven nurses and ten midwives participated the study through purposive sampling. Chi-square test was used to determine relationship between variables. Cramer's V was applied to examine the strength of relationship. Findings revealed that majority of them were satisfied with their current work. Sex characteristic is a significant factor to job satisfaction. More than half claimed they have no intention to leave their work. Job satisfaction is inversely correlated to turnover intention. Nurses and midwives working in rural areas have high level of job satisfaction and low turnover intention. Job satisfaction plays an important role to turnover intention. This study has significant implications to the DOH and local government units in maintaining a high level of job satisfaction and low turnover intention.

*Keywords:* Nurse, midwife, job satisfaction, turnover intention, DOH deployment programacademic performance

# Introduction

Maldistribution of health manpower remains a challenging issue within the realm of health care in the country for many years. The deployment program of the Department of Health (DOH) was formulated as one of the strategies to address this - providing health human resources (HRH) to unserved and underserved areas for a better health service delivery (Dayrit et al., 2018). Specific of this program to the midwives and nurses include the Rural Health Midwife Placement Program (RHMPP) and Nurse Deployment Project (NDP). These also give employment opportunities among unemployed midwives and nurses for a long time. However, there is a need to explore their work outcomes such as the relationship between level of job satisfaction and turnover intention in this kind of work environment. Work outcomes reflect the kind of health workers' practice environment (Falguera et al., 2020). Although there are substantial evidence showing and explaining the relationship between job satisfaction and turnover intention among health workers abroad, few studies have been conducted in the locality. Moreover, most of the existing studies were conducted in the hospitals and health institutions. The deployment programs of the Department of Health seem to be a distinct avenue and context in describing the employment and work characteristics of nurses and midwives. Findings of this study may therefore be different from the existing literature. With the emerging threats in our healthcare system, results of this study could provide information about nurses and midwives' current job satisfaction and turnover intention.

Journal of Education and Society

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The government's lead agency – the Department of Health, local government units, policymakers, and professional organizations may be guided with the results of this study in formulating or modifying policies and guidelines in further improving Nurse Deployment Project (NDP) and Rural Health Midwife Practice Program (RHMPP) which will eventually help develop a more efficient and effective healthcare system in the country.

#### Literature Review

It is essential, that while the government's deployment programs are implemented, work characteristics are being studied and evaluated. Job satisfaction is one of the work characteristics that has been an important focus of HRH research (Lu et al., 2012). This is because it has inclination to affect the behaviors and professional wellbeing among workers. Job satisfaction has been defined in the literature as the positive emotional orientation of the employee towards employment in the organization (Price, 2001). Work conditions, work environment, job stress, and role conflicts are some of the factors that may affect job satisfaction (Atefi et al., 2015; Lu et al., 2012). A plethora of foreign empirical evidence across health professions explained the influencing factor of job satisfaction to turnover intention. A clearer concept of various factors that support the health workers' commitment to their workplaces or their inclination to leave could provide information to the government and practice environment so that nursing or midwifery could attract dedicated and committed employees. In Senegal, midwives were inclined to look for other job if dissatisfied with job security and they are most likely to leave their work if found to have poor opportunities for continuing education (Rouleau et al., 2012). A study conducted among Iraqi doctors claimed that a low job satisfaction level was significantly associated with turnover intention (Jadoo et al., 2015). Another study involving nurses in the United States revealed a negative correlation between high level of job satisfaction and their intention to quit and turnover (Han et al., 2015; Poghosyan et al., 2017). A recent study in China showed that rural health workers with high job

satisfaction coupled with reward, organizational management, and occupation was equated to a decreased turnover intention (Liu et al., 2019). Literature has also defined intentions for turnover as the tendency of an employee to leave from their post in certain period (Labrague et al., 2018; Lu et al., 2017; Chao et al., 2015). However, it is essential to determine the difference between nonvoluntary turnover (i.e. being fired) and voluntary (i.e. intentional leaving to look for other job) (WHO, 2006). Turnover may seem to be a normal part in work life, and could be advantageous in some situations, it becomes alarming when it occurs speedily and during cases of manpower shortages or maldistribution.

## **Conceptual Framework**

The present study aims to investigate the relations between personal or demographic characteristics, job satisfaction and turnover intention among midwives and nurses working in the Nurse Deployment Project (NDP) and Rural Health Midwife Placement Program (RHMPP). The demographic characteristics involved in this study include sex, age, marital status, profession, post graduate study, work experience, number of workplaces, monthly salary, and place of origin. The dimensions of job satisfaction include work, pay, promotion, supervision, and colleagues. Job satisfaction is negatively correlated to turnover intention. The schematic model of this study is shown in Figure 1 below.



Figure 1. Hypothetical model of the research

#### **Research Questions**

This study aimed to determine job satisfaction and its relationship to turnover intention among NDP and RHMPP health workers in the municipalities of Paranas, Hinabangan, Motiong and San Jose de Buan, Western Samar.

Specifically, the study was undertaken to answer

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the following research questions:

- 1. What are the demographic characteristics of the respondents according to:
  - 1.1 Sex;
  - 1.2 Age;
  - 1.3 Marital status;
  - 1.4 Profession;
  - 1.5 Post graduate studies;
  - 1.6 Length of work experience;
  - 1.7 Number of workplaces work;
  - 1.8 Monthly Salary; and
  - 1.9 Place of Origin?
- 2. What are the nurses and midwives' level of job satisfaction based on the following dimensions: work, pay, promotion, supervision, and colleagues?
- 3. What is the degree of leaving from work of the respondents?
- 4. What are their reasons of plan to stay or not to stay with current job?
- 5. Is there a significant relationship between the demographic characteristics of the respondents and their level of job satisfaction?
- 6. Is there a significant relationship between respondent's level of job satisfaction and turnover intention?

According to the above-mentioned information, the following research hypotheses were formulated:

- 1. There is no significant relationship between demographic characteristics and level of job satisfaction among NDP and RHMPP employees.
- 2. There is no significant relationship between level of job satisfaction and turnover intention.

# Methodology

This section presents the research design used, the sampling techniques employed to select the respondents, the instruments formulated to gather the needed data, various statistical tools to analyze the data, and the ethical considerations that guided the researcher throughout the study.

## **Research Design**

This study employed descriptive correlational survey design. Paler-Calmorin & Calmorin-Piedad (2008), explained that determining the relationship between the two variables will be obtained through descriptive correlational. In this study, the level of job satisfaction among nurses and midwives working through the deployment programs was examined to correlated with their turnover intentions.

# Sampling

Purposive sampling method was utilized because sampling for proportionality is not the main concern of the researcher. Also, the respondents have one or more shared characteristics. One of which is that they are assigned in the municipalities with geographically isolated and disadvantaged barangays. The study was conducted in Samar Island. This island occupies the northernmost section of Eastern Visayas or Region VIII. The San Juanico Bridge connects Samar to the province of Leyte on the southeast across the San Juanico Strait. The province of Western Samar is divided into six (6) Inter-local Health Zones. The PaHiMosan Interlocal Health Zone (ILHZ) is comprised of the municipalities of Paranas, Hinabangan, Motiong and San Jose de Buan. This is where the study was conducted.

The respondents were 37 nurses and 10 midwives employed under NDP and RHMPP program of the DOH who are assigned in the Rural Health Unit in the municipalities of Paranas, Hinabangan, Motiong and San Jose de Buan, Western Samar.

# **Data Collection and Instruments**

The questionnaire included three parts. The first part described the characteristics of the respondents according to age, sex, marital status, profession, postgraduate study, work experience, number of workplaces, monthly salary, and place of origin.

The second part was a modified validated

questionnaire that measures the perceived level of job satisfaction of the respondents, the Job Satisfaction Scale by Warr, Cook, and Wall (1979). The scale focused on 16 items representing various dimensions of satisfaction such as work condition, pay, promotion, supervision, and colleagues, with each item rated on a three-point Likert scale (1=dissatisfied to 3=satisfied). A higher overall mean score indicates higher job satisfaction. The internal consistency reliability of the scale has been demonstrated by various studies conducted in Asian countries with a Cronbach alpha ranging from 0.88 to 0.902 (Samarasooriya et al., 2019; Maharani et al., 2019).

The third part of the questionnaire examined nurses and midwives perceived turnover intention using a pretested self-structured tool. This is composed of four questions which assessed nurses and midwives plan of staying or leaving current work, reason of staying or leaving the work, and preference of workplace.

Administrative letter was secured through the Provincial Health Officer of the Province of Samar and the respective mayors of the municipalities. Potential respondents were selected by the researcher and trained research assistant and informed consent was made for every respondent. Distribution of questionnaires which were sealed in envelopes was made through personal meetings with the respondents in their respective workplaces at the RHUs by the researcher and/or research assistant. They were instructed to read each statement and indicate their response by putting on tick mark ( $\sqrt{}$ ) on the appropriate space. Accomplishing the instrument took about ten minutes to accomplish. After the questionnaire was answered by the respondent, it was collected and checked for consistency and completeness. The data collection period was from July to August 2017.

# **Data Analysis**

The study employed both descriptive and inferential statistics to address the specific questions and hypotheses. Descriptive statistics are useful for describing the basic features of data. Descriptive statistics included frequency, percentage and median. Frequency and percentage were used to summarize the demographic profile of the respondents. Median was used in the job satisfaction level to indicate the most values in a distribution fall. Chi – square test was used to examine relationship between dimension of job satisfaction to the turnover intention of the health worker respondents and to determine the strength of relationship, Cramer's V was applied. Significance level is set at <0.05.

## **Ethical Considerations**

Voluntary participation was emphasized to the respondents based on the informed consent signed by them before answering the questionnaire. Enough information was given about the study including the purposes, possible benefits, risks, and harm as well as the implications in participating the study. They were ensured that confidentiality, privacy, and anonymity were observed throughout the study. They were not paid for participation. The researcher had no authority over the respondents, hence, there is no conflict of interest involved.

#### **Results and Discussion**

This section presents the answers to the specific research questions. The tables show the demographic profiles of the respondents, level of job satisfaction, turnover intentions, the relationship of their demographic profile to their level of job satisfaction, and the relationship between their level of job satisfaction to turnover intentions.

# Journal of Education and Society

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Variable	Frequency	%
Age		
21 – 25 years old	25	53.2
26 – 30 years old	14	29.8
31 – 35 years old	8	17
Total	47	100.0
Sex		
Male	11	23.4
Female	36	76.6
Total	47	100.0
Marital Status		
Single	34	72.3
Married	13	27.7
Total	47	100.0
Profession		
Midwife	10	21.3
Nurse	37	78.7
Total	47	100.0
Work Experience		
Less than 1 year	4	8.5
1 - 3 years	18	38.3
4 years or more	25	53.2
Total	47	100.0
Monthly Salary		
Less than 10,000	1	2.1
10,000 - 20,000	15	31.9
more than 20,000	31	66
Total	47	100.0
Place of Origin		
City	12	25.5
Barangay	14	29.8
Municipality	21	44.7
Total	47	100.0

Table 1. Demographic Profile of the Respondents (N=47)

A total of 47 respondents participated in the study. The majority were female (76.6%), aged 21-25 years (53.2%), single (72.3%), and nurses (78.7%).Most had work experience of 4 years or more (53.2%), with monthly salary of more than P20,000.00 (66%), and were living in municipality (44.7%). Table 1 summarizes the descriptive statistics of the health worker characteristics.

# Table 2. Relationship Between DemographicFactors and Job Satisfaction of the Health

Demographic Factor by Job	Corre	Significance	
Satisfaction (Percent Satisfied)	Measure	Interpretation	p-value
Age 21 – 25 years old: 17/25 or 68% 26 years and above: 15/22 or 68.2%	Phi = .002	Negligible	.989
Sex			
Male: 4/11 or 36.4% Female: 28/36 or 77.8%	Phi = .38	Weak	.001*
Marital Status			
Single: 23/34 or 67.6% Married: 9/13 or 69.2%	Phi = .02	Negligible	.917
Profession			
Nurse: 24/37 or 64.9% Midwife:8/10 or 80.0%	Phi = .13	Negligible	.362
Post Graduate Study			
Doctoral: 1/1 or 100% Master's: 5/10 or 50%	(Fisher Exa	act Test)	.545
Work Experience			
3 years & Below: 15/22 or 68.2% 4 years & Above: 17/25 or 68.0%	Phi = .002	Negligible	.989
Number of Workplaces			
1 – 2: 17/28 or 60.7% 3 or more: 15/19 or 78.9%	Phi = .19	Negligible	.188
Monthly Salary			
20,000 or less: 12/16 or 75.0% More than 20,000: 20/31 or 64.5%	Phi = .11	Negligible	.465
Place of Origin			
City/Municipality: 25/33 or 75.8% Barangay: 7/14 or 50%	Phi = .25	Weak	.083

Workers of PaHiMoSan ILHZ, 2nd District of Samar, October 2016

The results on job satisfaction was recoded into "satisfied" (S) and "not satisfied" (NS). All factors were likewise recoded to include only two categories because of violations of assumptions on the use of Chi-square test. (data that are higher in form – at least interval – were categorized resulting in data which are all categorical; e.g.: age, number of years of work experience; number of work places; and monthly income.)

From the socio-demographic factors, the researchers found out that only sex is significantly associated to job satisfaction wherein significantly more female than male respondents are satisfied with their jobs ( $x^2 = 6.65$ ; p < 0.05) and the strength of correlation is weak (Phi = 0.38). The rest of the demographic factors (age, sex, marital status, profession, post graduate study, years of work experience, number of workplaces, monthly salary and place of origin) are not significantly correlated with job satisfaction.

Table 3. Job Satisfaction of Health WorkerRespondents in terms of Work

Dissatisfied		No	t Sure	Sat	isfied	Modal	
f	%	f	%	f	%	Response	
1	2.1	7	14.9	39	83.0	Satisfied	
1	2.1	6	12.8	40	85.1	Satisfied	
3	6.4	6	12.8	38	80.9	Satisfied	
1	2.1	6	12.8	40	85.1	Satisfied	
2	4.3	6	12.8	39	83.0	Satisfied	
3	6.4	9	19.1	35	74.5	Satisfied	
10	21.3	5	10.6	32	68.1	Satisfied	
	f     1       1     3       1     2       3     3	f     %       1     2.1       1     2.1       3     6.4       1     2.1       2     4.3       3     6.4       10     21.3	f     %     f       1     2.1     7       1     2.1     6       3     6.4     6       1     2.1     6       2     4.3     6       3     6.4     9       10     21.3     5	f     %     f     %       1     2.1     7     14.9       1     2.1     6     12.8       3     6.4     6     12.8       1     2.1     6     12.8       2     4.3     6     12.8       3     6.4     9     19.1       10     21.3     5     10.6	f     %     f     %     f       1     2.1     7     14.9     39       1     2.1     6     12.8     40       3     6.4     6     12.8     38       1     2.1     6     12.8     38       1     2.1     6     12.8     39       3     6.4     6     12.8     39       3     6.4     9     19.1     35       10     21.3     5     10.6     32	f     %     f     %     f     %       1     2.1     7     14.9     39     83.0       1     2.1     6     12.8     40     85.1       3     6.4     6     12.8     38     80.9       1     2.1     6     12.8     40     85.1       2     4.3     6     12.8     39     83.0       3     6.4     9     19.1     35     74.5       10     21.3     5     10.6     32     68.1	

The most satisfying aspect in work subscale of the respondents are on the amount of responsibility they are given and the opportunities to use their capabilities with 40 or 85.1%, followed by their work condition and work hours with 39 or 83%. In contrast, the most dissatisfying aspect is in the distance of workplace from home wherein 10 or 21.3% of the respondents are dissatisfied. These findings reflect that sense of involvement in the health program, patient care and authority given to the health worker enhances their satisfaction. Furthermore, based on the result of median, all work subscale obtained 3 which is equivalent to scale of satisfied. It means that even though there are some health worker respondents are not sure and dissatisfied in terms of work, still majority of them are satisfied in work condition,

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responsibility, work management, opportunities, work hours, job variety, and distance.

# Table 4. Job Satisfaction of Health WorkerRespondents in terms of Pay

<b>%</b> 10.6	<b>f</b> 37	<b>%</b> 78.7	Response Satisfied
10.6	37	78.7	Satisfied
17.0	23	48.9	Satisfied
25.5	3	6.4	Dissatisfied
	25.5	25.5 3	25.5 3 6.4

On this subscale, the aspect on rate of pay is the most satisfying wherein majority of the respondents were satisfied with 37 or 78.7% because based on their response on the monthly salary, 66% of them have monthly salary of more than 20,000, followed by LGU stipend received with 23 or 48.9%. On the contrary, the most dissatisfying aspect of pay is on employees' benefits received wherein majority of them were dissatisfied with 32 or 68.1%.

Table 5. Job Satisfaction of Health WorkerRespondents in terms of Promotion

Promotion	Dissatisfied		Not Sure		Satisfied		Modal
Fromotion	f	%	f	%	f	%	Response
Security	30	63.8	11	23.4	6	12.8	Dissatisfied
Promotion	25	53.2	20	42.6	2	4.3	Dissatisfied
Professional Growth	19	40.4	13	27.7	15	31.9	Dissatisfied
Recognition	6	12.8	22	46.8	19	40.4	Not Sure

Based on the result, most of the respondents are not sure if they are satisfied of the recognition, they get for good work with 22 or 46.8%. While the most dissatisfying aspect is noted in job security wherein 63.8% (30) are dissatisfied. While in the employee's promotion they are dissatisfied as well with 25 or 53.2% and in their professional growth they are not sure if they are satisfied with 27.7%. This finding indicates that uncertainty of tenure on the job creates worries and promotes dissatisfaction of the health workers.

# Table 6. Job Satisfaction of Health WorkerRespondents in terms of Supervision

Supervision	Dissatisfied		Not	Sure	Sat	isfied	Modal		
Supervision	f	%	f	%	f	%	Response		
Freedom	2	4.3	15	31.9	30	63.8	Satisfied		
Job performance	3	6.4	13	27.7	31	66.0	Satisfied		
Suggestions	6	12.8	15	31.9	26	55.3	Satisfied		
*(f – Frequency, % - Percentage)									

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With the supervision subscale, the job performance evaluations done by supervisor earns the highest respondents' satisfaction of 31 or 66%, followed by freedom to do the work with 30 or 63.8%. On the other hand, the attention paid to suggestions made earns the highest dissatisfaction of 6 or 12.8%. This finding depicts that the fair and rational evaluation done by supervisors is a key factor in health worker satisfactions. Based on the result of median, all supervisor subscale obtained 3 which is equivalent to scale of satisfied. It means that even though there are some health worker respondents are not sure and dissatisfied in terms of supervision, still majority of them are satisfied in employee's freedom, job performance, and suggestions.

# Table 7. Job Satisfaction of Health WorkerRespondents in terms of Colleagues

Callerance	Dissatisfied		Not Sure		Satisfied		Modal
Colleagues	f	%	f	%	f	%	Response
Fellow worker Relationship	0	0.0	2	4.3	45	95.7	Satisfied
Boss Relationship	2	4.3	3	6.4	42	89.4	Satisfied
Management and Workers relations	3	6.4	7	14.9	37	78.7	Satisfied

\*(f – Frequency, % - Percentage)

On the colleague subscale of job satisfaction, the most satisfying aspect is on working relationship with fellow workers comprising of 95.7%, followed by building a great working relationship with your boss with 42 or 89.4%. While most of dissatisfaction is noted on working relations between management and workers in their health center with only 3 or 6.4% of the respondents. This finding indicates that respect and giving importance with colleagues enhance satisfaction. Based on the result of median, all colleagues subscale obtained 3 which is equivalent to scale of satisfied. It means that even though there are some health worker respondents who are not sure and dissatisfied in terms of colleagues, still majority of them are satisfied in fellow worker relationship, boss relationship, and management and workers relations.

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# Table 8: Overall Job Satisfaction of HealthWorker Respondents

<b>Overall Job Satisfaction</b>	Diss	atisfied	Not	Sure	Sat	isfied	Modal
Overall Job Satisfaction	f	%	f	%	f	%	Response
Job as a whole	4	8.5	11	23.4	32	68.1	Satisfied

It shows that overall, the health workers are satisfied in their job in terms of the different dimension of job satisfaction. The findings on job satisfaction is positive. The percentage of respondents who were overall satisfied with their job is 68.1%. Several noteworthy points emerged from the results. A person cannot be relatively satisfied in all aspect of his or her job. Some of its aspect fail to fulfil his or her needs and values or because they do not meet his or her expectations.

#### Figure 2. Overall Job Satisfaction of Health Workers of NDPs and RHMPPS



#### Turnover Intention of Ndps and Rhmpps

# Table 9. Frequency and Percentage Distributionof the Respondents in terms of Plan of Staying inCurrent Work

Plan of Staying in Current Work	Frequency	Percentage (%)
Yes	27	57.0
No	20	43.0
Total	47	100.0

In terms of plan of staying in current work, majority of the health workers responded yes with 27 or 57%, while 20 health workers responded no with 43%. This percentage indicate that the frequencies of those health workers who plan to stay and those do not plan to stay do not have much difference but there are more health workers who plan to stay in their current work.

#### Reasons of Staying or not Staying with Current Job

Table10.FrequencyandPercentageDistribution of the Respondent in terms of Reasonto Stay

Reason to Stay	Frequency	Percentage (%)
I can apply my professional skills	11	40.7
I like public health work	16	59.3
Total	27	100.0

In terms of reason to stay of the 27 respondents, over half of health worker respondents indicates that their reason is they can apply their professional skills, while 11 responded that their reason is that they like public health work with 40.7%. This result indicates that the priority of the health workers is to apply their professional skills in their job than to just like the public health work.

#### Table 11. Frequency and Percentage Distribution of the Respondents in terms of Reason of not Staying

Reason of Not Staying	Frequency	Percentage (%)
Lack of Professional Growth	7	35.0
No Job Security	12	60.1
No response	1	5.0
Total	20	100.0

Among the 20 respondents who did not stay in their respective work, majority responded that it is because of absence of job security with 12 or 60% while 7 responded that it is because of lack of professional growth with 35%. Only 1 or 5% of health worker did not specify their reason of not staying. The result indicates the respondents' reason of not staying is primarily because of absence of job security.

#### Table 12. Frequency and Percentage Distribution of the Respondents in terms of Place to Work

Place to Work	Frequency	Percentage (%)
Urban	11	55.0
Rural	1	5.0
Overseas	8	40.0
Total	20	100.0

In terms of place to work, majority of the respondents prefer working in the urban places

with 11 or 55% while 8 respondents prefer working overseas with 40% and only 1 respondent prefer working in rural places with 5%. This indicates that more health workers do not prefer going overseas but prefer to work in urbanized places.

#### Table 13. Frequency and Percentage Distribution of the Respondents in terms of Job Intention

<b>Job Intention</b>	Frequency	Percentage (%)
Yes	13	65.0
No	7	35.0
Total	20	100.0

If the respondents are actively looking for job in other institution, majority responded yes with 13 or 65% while 7 responded no with 35%. This result indicates that those who does not plan to stay in their current work are actively looking for opportunities in other institutions.

#### Relationship of job satisfaction and Turnover Intention of Health Worker Respondents

#### Table 14. Relationship of Job Satisfaction and Turnover Intention in terms of Work

Work	Corre	lation	n value	Decision	
WORK	Cramer's V	Strength	p-value	Decision	
Physical work conditions	0.31	Moderate	0.108	Retain Ho	
The amount of responsibility you are given	0.26	Moderate	0.213	Retain Ho	
The way your work place is managed	0.14	Moderate	0.630	Retain Ho	
<b>Opportunities to use your capabilities</b>	0.49	Strong	0.004**	Reject Ho	
Your hours of work	0.26	Moderate	0.212	Retain Ho	
The amount of variety in your job	0.41	Strong	0.019*	Reject Ho	
Distance of work place from home	0.29	Moderate	0.137	Retain Ho	
*Significant: **Highly Significant					

icant; \*\*Highly Significan

38

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Table 14 presents the correlation between job satisfaction and turnover intention in terms of work among NDP and RHMPP health workers. Results show that there is a strong and significant correlation between satisfaction and job "opportunities to use capabilities" (Cramer's V = .49; p < .01) as well as job satisfaction and "the amount of variety in the job" (Cramer's V = .41; p < .05). Meanwhile, the physical work condition, the amount of responsibility given, the way the work place is managed, the hours of work, and the distance of work place from home were found to have moderate correlation with the turnover intentions of health workers but are found to be not statistically significant at 5% level. Hence the null hypothesis is rejected on two counts of the

eight dimensions of turnover intention in terms of work. Providing skill variety in job helps sustain job satisfaction. Based on the findings there is a strong implication that the workers are satisfied with their jobs if there is an amount of variety in the job.

#### Table 15. Relationship of Job Satisfaction and Turnover Intention in terms of Pay

Corre	lation	p value	Decision
Cramer's V	Strength		
0.12	Moderate	0.706	Retain Ho
0.39	Strong	0.028*	Reject Ho
0.33	Moderate	0.074	Retain Ho
	Cramer's V 0.12 0.39	0.12 Moderate   0.39 Strong	Cramer's V Strength   0.12 Moderate 0.706   0.39 Strong 0.028*

The dimension "monthly stipend from LGU" of turnover intention in terms of pay had a strong and significant correlation with job satisfaction (Cramer's V = .39; p < .05). However, the dimensions "rate of pay" and "benefits received" were found not significantly correlated with job satisfaction at the 0.05 level of significance.

#### Table 16. Relationship of Job Satisfaction and **Turnover Intention in terms of Promotion**

	Corr	elation	p value	Decision
Promotion	Cramer's V	Strength		
Job security	0.30	Moderate	0.116	Retain Ho
Your chance of promotion	0.31	Moderate	0.099	Retain Ho
<b>Opportunity for professional growth</b>	0.43	Strong	0.012*	Reject Ho
Recognition you get for good work	0.36	Strong	0.045*	Reject Ho

Two dimensions of turnover intention in terms of promotion among the NDP and RHMPP health workers were found to be significantly correlated with job satisfaction, namely, "opportunity for professional growth" (Cramer's V = .43; p < .05) and "recognition you get for good work" (Cramer's V = .36; p < .05). Hence, the corresponding null hypothesis are both rejected. The other dimensions "job security" and "chances of promotion" were found not significantly correlated with job satisfaction at 0.05 level of significance. Weng and McElroy in 2012 stated in their research that employees who report more career growth opportunities are more committed to their jobs and are most unlikely to leave and search for other work.

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Table 17. Relationship of Job Satisfaction andTurnover Intention in terms of Supervision

	Corre	lation	p value	Decision
Promotion	Cramer's V	Strength		
Freedom to choose your own method of working	0.25	Moderate	0.228	Retain Ho
Job performance evaluations done by supervisor	0.40	Strong	0.048*	Reject Ho
Attention paid to suggestions you make	0.18	Moderate	0.468	Retain Ho

As borne out in Table 17, the turnover intentions in terms of supervision yielded a strong and significant correlation between the dimension "job performance evaluations done by supervisor" and job satisfaction (Cramer's V = .40; p < .05). Gaining skills to supervise effectively benefits not just the supervisor but the employee as well. The other dimensions of turnover intentions in terms of supervision bears no relationship with job satisfaction at the 0.05 level of significance.

# Table 18. Relationship of Job Satisfaction andTurnover Intention in terms of Colleagues

	Corre	elation	p value	Decision
Promotion	Cramer's V	Strength		
Working relationship with fellow workers	0.18	Moderate	0.214	Retain Ho
Working relationship with your immediate boss	0.13	Moderate	0.659	Retain Ho
Working relations between management and workers in your health center	0.19	Moderate	0.436	Retain Ho

Table 18 shows that no dimension of turnover intention in terms of colleague among NDP and RHMPP health workers was shown to be significantly correlated with job satisfaction since all p-values were greater than  $\alpha = 0.05$ . This result is not consistent with the report of Kebriaei. et al (2009) that good relations among colleagues and having the support of superiors and subordinates generally create a feeling of satisfaction among workers.

The combined set of indicators for turnover intention among NDP and RHMPP health workers, on the whole, bears no significant correlation with job satisfaction (Cramer's V = .34; p > .05).

This study shown some significant relationship between health worker's demographic characteristics and level of job satisfaction, as well as the relationship between job satisfaction and turnover intention. Thus, overall, the hypotheses of this study were partially confirmed. Specifically, the first hypothesis that considered demographic characteristics as the variable with influence on job satisfaction was partially confirmed with sex as the significant factor. This finding is consistent also with previous studies (Malliarou et al., 2010; Asegid et al., 2014).

The second hypothesis, regarding the relationship between job satisfaction and turnover intention was also partially confirmed. Although our setting is in the community, the result is nonetheless in congruent with many studies (Rouleau et al., 2012; Jadoo et al., 2015; Labrague et al., 2018; Lu et al., 2017). Health workers tend to leave their team when they experience high level of stress and were not satisfied. Factors such as poor working conditions, low opportunity for professional growth, dissatisfied with renumeration, lack of recognition from managers, and were not given autonomy to execute their skills at various tasks may predict job dissatisfaction. To deal this, managers need to recognize these factors and determine specific strategies to reverse the intention (Jaboo et al., 2015). An increasing rate of turnover intention has a possibility of shortage of health workers in the coming years especially when the tend to leave the country (Labrague et al., 2020).

#### Conclusion

Nurses and midwives working in rural settings under NDP and RHMPP programs are generally satisfied with their work. This study is the first attempt to determine job satisfaction and its predictive factors (demographic characteristics) as well as its relationship to turnover intention among midwives and nurses in a deployment program of the Department of Health. As a contributory evidence to existing literature, it can be inferred that Filipino nurses and midwives working in rural settings were associated with personal characteristic, job satisfaction and turnover intention.

Job satisfaction plays a mediating role to turnover intention. An increasing turnover intention is a contributory factor of gradual loss

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of skilled workforce in the Philippine healthcare especially if there is an unrelenting migration of nurses and midwives abroad for "greener pasteur". This poses a challenge of the Department of Health and the local government units of various municipalities as their employers on identifying how to maintain an acceptable level of job satisfaction of the committed nursing and midwifery workforce, thus preventing turnover and its significant consequence in the delivery of health care and services in the rural areas, and for nurses and midwives to design a more positive practice environment. The employers and policymakers should consider revisiting and reviewing relevant and existing policies and procedures related to work, pay, promotion, supervision, and colleague relations to establish a work environment where job satisfaction is maximized. Personal and professional development must be considered as a strategy of boosting morale and motivating health workers.

Moreover, this study recognizes some limitations which could be overcome with further research. Primarily, the sample size and voluntary participation among nurses and midwives do not provide us information to determine how the findings can be generalized. This study could be replicated by expanding the sample size at a national level. Second, this study generated the data through a survey which are self-reported. The findings may cover the actual work outcomes and predictors of job satisfaction and turnover intention. Third, the researcher employed a correlational design that inhibited discerning the causal relationships between variables. Nonetheless, the findings from this study added significant implications to the relevant government units and agencies as this is one of the preliminary studies examining the job characteristics among nurses and midwives in our country working under a special deployment program.

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# Lived Experiences of Junior High School Specialized Science Teachers Teaching Science Using the Spiral Progression Approach

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### Abstract

This study aimed to describe the lived experiences of the junior high school specialized science teachers teaching science in spiral progression approach under the Department of Education (DepEd) K to 12 curriculum. A descriptive phenomenological research approach was used in the study with five specialized science teachers with different science specializations who were purposively selected using snowball sampling. A face-to-face interview with in-depth questioning in a local dialect (Cebuano) were employed for data gathering that allowed further probing. The responses were transcribed and analyzed. Findings suggested that majority of specialized science teachers encountered such as unavailability of learning resources and struggle in preparation on their non-specialize science topics. However, they learned to become flexible and resourceful in improving their accustomed science teaching practices. They also learned to communicate and collaborate with fellow science teachers still preferred the old curriculum in teaching science concepts. Results of the study will provide DepEd policy makers and stakeholders in assessing the capability of secondary science teachers in improving their science classroom instruction through timely and relevant training programs.

Keywords: Spiral Progression, Curriculum, Teaching, Science Teachers, Science Specialization

#### Introduction

Science is one of the subjects that underwent major revisions and innovations in the course of the implementation of the new K-12 curriculum in the Philippines. One of these changes is the decongestion of the competencies and arrangement where science concepts and applications are given in a spiral progression approach. Under the K to 12 science curriculum, concepts and skills in Biology, Physics, Chemistry and Earth Science are presented with an increasing levels of complexity from grade 7 to grade 10, wherein the four major areas are being taught per grading period.

In Philippine setting, DepEd perceives the spiral progression approach as a solution to the education problem. The new curriculum requires every specialized science teacher to have a mastery of subject matter and teaching strategies in all of the four areas at a sufficient level (Duze, 2012). Montebon (2014) stated that the spiraling of the competencies in the new science curriculum greatly affected in - service teaching efficacy science teachers who are specialized in the different branches of science, namely, Biology, Chemistry, Earth Science and Physics. If the specialized science teachers do not know the content or employ specific teaching strategies, most students will not learn from the subject (Jolly, et.al, 2004).

In terms of instruction, Resurreccion and Adanza (2015) asserted that there has been a mismatch in the teacher preparation, since present junior high school teachers teaching science subjects in secondary schools were graduated from different colleges and universities

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who prepared them to be specialized in a specific field like Integrated Science, Biology, Chemistry and Physics. However, in the K to 12 curriculum, specialized teachers in their respective science fields are required to teach science subject in a spiral progression approach. Therefore, teaching science in all of its branches or fields may be a tough job for the specialized teachers without a deep background and mastery of the subject content and skills

This study aims to describe the present lived experiences encountered by the specialized secondary science teachers in teaching science using the spiral progression approach and how they overcome the challenges from a specialist to generalist type of science teachers in the new curriculum. The results of this study are the views of specialized science teachers based from their daily experiences regarding the spiral progression approach from public secondary schools. It is very important to hear their insights and views about the SPA because teachers are the prime movers of the said curriculum. If teachers are not knowledgeable of the said curriculum they will not be able to implement it correctly and properly in their teaching methods.

#### Literature Review

The new K to 12 science curriculum is a learner-centered and inquiry-based approach that emphasizes the use of evidence in constructing explanations. Concepts and skills in Life Sciences, Physics, Chemistry and Earth Science were presented in increasing levels of complexity from one grade level to another through spiral progression (Montebon, 2014). The spiral progression approach exposed students into a wide variety of concepts, topics and disciplines by studying over and over again but with different deepening of complexity (Resurreccion & Adanza, 2015).

Braund (2008) highlighted that Spiral Progression Approach (SPA) followed a progressive type of curriculum anchored to John Dewey that engulfs the total learning experiences of the individual. He also added that spiral curriculum was a design framework which will help science teachers construct lessons, activities or projects that targeted the development of thinking skills that involves progression and continuity in learning science.

Previous findings of Snider (2004) as cited by Resurreccion and Adanza (2015) pointed out that the Spiral Progression Approach (SPA) has its advantages and disadvantages, one of which was that SPA allowed the learners to learn new topics and skills appropriate to their developmental and cognitive stages. It also strengthened the retention and mastery of topics and skills as the students were revisited and consolidated in every year. However, the problem of this approach showed on the rate of introducing the new concepts that was often either too fast or too slow to master given a same amount of time in teaching.

According to De Dios (2013) cited from the study of Resurreccion and Adanza (2015), spiral curriculum can only be devoted for only one quarter of a year in each branch of science thus exposure to the student per year in each science areas were only limited. This claim was supported by Orbe, Espinosa and Datukan (2018) that the biggest disadvantage of a teaching spiral curriculum was the lack of opportunity to cover a variety of science topics within one discipline in a year because each science topics built on top of each other and every quarter was simply not enough time to cover the aid of student in another science field.

However, the study of Almeida et al. (2013) showed that K to 12 education curriculum lessened the contact of science teachers in teaching science into four hours per week in contrast to the old curriculum, Basic Education Curriculum (BEC) which was six hours per week of lecture and laboratory, this only implies that student's exposure to science topics and related activities are limited under the new curriculum thus may affect the learning process of the students.

Dunton and Co (2018) concluded that failure in massively distributing teaching guides and learning modules to teachers, not well-planned implementation of SPA, lack of qualified teachers, incompetency of teachers due to the lack of academic conferences and seminar-workshops, and inadequate time spent for teachers training were among the top five problems that surfaced in the implementation of the SPA in teaching science among schools.

Furthermore, recent findings on the study of Valin and Janer (2019) revealed the three difficulties encountered by the teachers both from small and big schools on the implementation of the SPA such as time allotment in the use of some teaching strategies to cover the topics, time constraint in the use of differentiated instructions for evaluation and preparation of interactive activities that will cater all types of learners. Most of them agreed that enough time should be allotted so that they can effectively use strategies to finish the science concepts and to give appropriate evaluation of learning outcomes.

#### **Theoretical Framework**

The theoretical foundation of this study is anchored the theory of Spiral Progression which was proposed by Jerome Bruner with principles of Progressive Education derived from John Dewey. The progressive education as described by Dewey (1938) is a product of discontent with traditional education which imposes adult standards, subject matter, and methodologies. Dewey believed that progressive education should include socially engaging learning experiences that are developmentally appropriate for young children. Dewey thought that effective education came primarily through social interactions and that the school setting should be considered a social institution (Flinders & Thornton, 2013; Williams, 2017).

Hatuina (2013) also emphasized the idea from Bruner (1960) on which he suggested that curriculum should be designed in a way that it pursues a spiral progression that starts from simple to complex and requires revisiting prior knowledge, in short, students must continuously build concepts upon what already know and return the basic ideas until they grasped the full formal concept. Therefore, subjects would be taught at levels of gradually increasing difficulty. Bruner believed that the most effective way of constructing student's knowledge is to discover by themselves rather than being told it by the teacher. This concept of discovery learning became also known as constructivist approach which one of the characteristics of the spiral progression approach (SPA) under the K to 12 curriculum.

#### **Research Questions**

This study aimed to determine the lived experiences of specialized science teachers teaching science subject in junior high school using the spiral progression approach. Specifically, it sought to answer the following research questions:

- 1. What are the lived experiences of junior high school specialized science teachers teaching science using the spiral progression approach?
- 2. What are the challenges encountered by specialized science teachers teaching science using the spiral progression approach?
- 3. What are the coping strategies of specialized science teachers in teaching science using the spiral progression approach?

#### Methodology

This section presents the methods, participants and procedures used in this study. The presentation includes the research design, sampling used, data gathering procedures and analysis of data.

#### **Research Design**

This study used a qualitative descriptive phenomenological method by Giorgi (2012) that aims to describe the meaning, structure and essence of the lived experiences of a person or a group of people around a specific phenomenon. Thus, the study attempts to determine and understand the lived experiences of specialized secondary science teachers teaching science using the spiral progression approach (SPA) implemented under the K to 12 curriculum.

#### Sampling

The study was conducted in two public

secondary schools of the Municipality of San Isidro, Leyte namely the Muertegui National High School situated in Brgy. Daja Diot and San Isidro National High School in Brgy. Capinahan. These two public schools were the only public secondary schools in San Isidro, Leyte. Purposive sampling was used for the selection of participants since the study worked in a small samples of participants to achieve an in-depth understanding of the phenomenon and create a rapport with the participants (Hesse-Biber & Leavy, 2011).

There were five secondary science teachers, two science teachers where from Muertegui NHS and three science teachers from San Isidro NHS with different science specializations such as Biological Science, Chemistry, General Science and Physical Science who were purposively selected through a snowball sampling. These five teachers holding a Teacher I to Teacher III teaching positions were originally teaching science subjects in their major fields of expertise under the old curriculum and later shifted in teaching general science using the spiral progression approach since the implementation of the new curriculum. They were teaching a wide range of science topics in different grade levels in the junior high schools.

#### **Data Collection and Instruments**

The data were collected through a series of face-to-face interviews that provide insights in lived experiences (Englander, 2012) and to obtain an authentic in-depth information from the target participants (Hesse-Biber, 2012).

The teacher - participants were interviewed at their respective schools during their available time. An open – ended questions were asked in a random scheduled face-to-face informal interview to make sure that participants feel comfortable and ease during the duration of the interview process. The responses and details of the discussion were audio-recorded with the consent of the participants using mobile phones. The questions were asked in mother tongue (Cebuano). The interview process lasted for an average of 20 minutes.

The data collection ended until saturation point has achieved. The participants' answers were transcribed in Cebuano dialect while the English translations were verified by the teacherparticipants for appropriateness and correctness from the responses.

#### **Data Analysis**

The data gathered from the recorded interviews were carefully analyzed using descriptive phenomenological analysis by Giorgi (2012). The researcher carefully read the transcripts interview in order to extract significant statements from the different experiences of the teachers. Then, researcher assigned codes and expressed these codes to meaning units and synthesized related themes on the experiences of participants on teaching spiral progression approach. Lastly, the generated themes were reviewed by the teacherparticipants and refined to ensure that synthesized themes were related to the research questions.

#### **Ethical Considerations**

The secondary teacher served as participants of the study were told that their responses will be audio - recorded and the reason for that is the experimenter to be able to recall what participants have said. They were also told that their responses will be treated anonymously and they can withdraw from the interview at any time. After completion of the interview, they were thanked for their time, they have been debriefed about the study and asked if there were any questions left unanswered.

#### Reflexivity

As a science teacher and a researcher, my most important learning is to acknowledge that research has both its power and limitation for social change and development. I saw its importance in probing the lived experiences of my fellow secondary specialized science teachers who have direct experiences of teaching science using the spiral progression approach. However, there were a number of times during the data collection when I felt I could do nothing but to empathize with the plight of the participants and assure them that the study will definitely serve as a tool

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for change if utilized accordingly by policymakers and curriculum implementers.

#### **Results and Discussion**

	summary oj Resp	oonses and Themes			
Major		<b>D</b> 2	Meaning Units		D.5
Themes	P1	P2	P3	P4	P5
	P1	P2 stated that	P3 defined	P4 gave	P5 said that spiral
	determined	spiral	spiral	definition to	progression makes
	that spiral	progression	progression as	spiral	the learning of the
	progression	makes every	an approach	progression	students more
	approach lets	year had little	that starts from	approach as	complex as school
A little bit	you know	of information	the bottom and	a continuous	years went on.
of	tidbits of	of everything	followed a	process of	
everything	information	but consistently	process its way	learning for	
	and concepts	increasing in	to the top.	the students.	
	about the	difficulty.	_		
	subject in	_			
	every year				
	level.				
	P1 felt	P2 found	P3 encountered	P4 faced	P5 disliked physics
	discouraging	difficulty on	difficulties in	challenges	as there are many
Facing a	as she always	teaching lessons	topics dealing	dealing with	formulas that
mismatch	try to repeat	not in her field	with physics.	numbers	needed to be
battle	the basic	of		and	computed.
	concepts.	specialization.		computation	
	1	1		in physics.	
	P1 just tend	P2 made the	P3 commenced	P4 scanned	P5 asked questions
	to review her	students enjoy	a paired tutorial	the books	to her colleagues
	students until	and at the same	to the fast-	and find the	that were master at
Beyond	they reached	time learn with	learning student	most	the topic that she
comfort	their dairy	her game-	to the slow-	difficult	had difficult in
zone	point.	oriented	learning	topics that	dealing the lessons.
	1	instruction.	student.	needed to be	0
				research.	
	P1	P2 stated that	P3 learned the	P4 wanted	P5 adjusted to the
	emphasized	spiral	higher science	to prove that	new things and new
_	that it gives a	progression as	field beyond her	teachers	learnings.
Openness	positive	an exciting one.	specialization.	were	10001111-Bo.
to new	outlook and		-1	flexible for	
things	open mind in			changes.	
	regard to				
	changes.				
			P3 selected old	P4 preferred	P5 picked the old
	P1 picked	P2 chose the	curriculum as it	the old	curriculum as
	new	new curriculum	only focuses on	curriculum	students learned the
Insuffiency	curriculum as	where students	a certain	as students	difficult concepts of
of time	it builds a	also learn new	science	tend to	the certain
	block that	skill and not	specialization in	focus on a	specialization in a
	consist of	only new	whole school	certain	year.
	new ideas	information.	year-round.	science	
	every year.	internation.	year-round.	topic.	
	состуусат.			topic.	

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Table 1. Summary of Responses and Themes

# Research Article *A little bit of everything*

Specialized science teachers had given different meanings but bearded with the same thoughts. The specialized teachers tend to define spiral progression as a continuous process from the first and basic up to the last and complex science concepts. Spiral progression approach also gave the students a little of informations for every quarters of what will be ahead of them in upcoming years. Science teachers emphasized that the foundation of the students since grade 7 should be strong as it will be the building block of the students throughout the student's junior high school career.

"... Unlike sa spiral progression, pag grade 7 pa lang naa nay force and motion. So, murag nindot jud siya kay tidbits of information, tidbits of concepts kay naintroduce na sa pag grade 7 pa lang". ("Unlike spiral progression, in grade 7 they tackle about force and motion. It is nice since there will be tidbits of information, tidbits of concepts that had been introduce in grade 7"). (P1)

"... Spiral Progression in teaching in which in every year level a little of everything of the subject so in spiral approach there is increasing of difficulty of subject". ("In teaching, spiral progression makes the student to learn a little of everything and there is an increasing of difficulty of the subject"). (P2)

"... Ang learning sa spiral progression kay muagi jud ug process. Ari magsugod sa ubos padong sa igbaw hangtud makadiscover ka kung unsa na siya about ato ang learning". ("The learning in spiral progression has a process. It will start from the very basic concepts until they discover the essential learning"). (P3)

Teachers teaching science in spiral progression approach often described it as a curriculum in which students' learning process occurs in a spiral way of levelling science knowledge and skills.

"... Para sa akoa ang spiral progression ok gad siya pero mura bag naay continuation ang learning sa bata kumbaga from grade 7 which is simple then nagtika complex as nag tika higher siya". ("For me, I am okay with spiral progression approach since there is a continuation on the learnings of my students. Wherein, in grade 7, the students were introduced to simple science concepts then to a more complex concept that gets higher from one level to another"). (P5)

#### Facing a mismatch battle

The SPA requires a heavy preparation since specialized science teachers must learn and teach four science major areas (Resurreccion & Adanza, 2015). Some of teachers as being a nonspecialized make it even harder to teach and grasps science lessons that were out of their expertise. Specialized science teachers also encountered a lot of challenges in terms of sharing what they learned during their undergraduate studies to their students. They experienced difficulty in teaching basic skills to complex science concepts like science teachers who specialized in Biology that presently teaches chemistry lessons were mostly hesitant to integrate their lessons and gave additional informations since their background knowledge is very limited.

"... Kay usa nako nga problems nga mameet ani nga spiral progression kay makalimot ang bata sa ilahang lesson last year". ("One of my problems in this spiral progression is that students forget their lessons from last year"). (P1)

"... Ang huna huna sa teacher is naka kuan na sa mga major. Kani nga major in a certain level gud all the subjects or major sa science naa man gud nay earth science. There is biology, chemistry and kuan pananglitan ang teacher is more on biology, chemistry, and kuan pananglitan ang teacher is more on biology inig abot niya sa physics, chemistry, mas murag mofind siya og difficulty in teaching". "The mind of the teacher focuses on its major. All of this major contains Earth Science. There is also biology and chemistry. If the teacher is more on biology or chemistry and at the time that he/she will teach physics or chemistry. He/she will find difficulty in teaching"). (P2)

"... Actually naa man koy idea sa different specialization sa science pero lisod jud kaya ng biology more on plants and living things unya karon naa nay work, force and motion karon lisod na pag adjust". ("Actually, I have a knowledge on the different specialization. Biology talks about

#### plants and living things. Then now, we have work, force and motion. It hard to adjust in our part"). (P3)

For science teachers who were specializing Biology, they often experienced difficulties in dealing with numbers, formulas, and computations that commonly involved in the field of Physics as a result they tend do not focus on the computations and skip the topics under Physics lessons.

"... Challenges? Kanang mo deal na ug mga numbers, computations lisod sir. Basta more on computations dili kayo ko maayo anang computations". ("The challenges that I encountered in teaching science were mostly dealing about numbers and computations"). (P4)

"... More on problems, kay murag naa siya'y relation sa math naa gyuy solving problem kay when we say physics nay mga formulas, which is I am not a math major". (My challenges are like more on mathematical problems since physics have a relationship to math for it has also formulas which is I am not a math major"). (P5)

This implies that there is a need for the teachers to reinforce and update their knowledge in the different teaching strategies that is in lined with the learning competencies set by the K-12 curriculum

#### Beyond comfort zone

In facing such challenges, specialized science teachers also have their own common strategies and teaching styles in order to cope up in their encountered problems as a generalist science teacher. Most of their common strategies used during classes were they review their students prior to the topic that has a connection from the last lesson. They also asked their colleagues who are expert about a certain science topic in for they hardly understand. The specialized science teachers learned to become resourceful in looking ways in the delivery of their lessons in such a way to meet standards prescribed by the curriculum and they also became creative in delivering science lessons and topics that are beyond in their field of specializations.

"... Mobalik ko or magreview ko before having the or tackling the lesson. Mointroduce na pud ka

sa basic concepts nga ilang nahebaw an or emu silang iorient or mura sad ug mag recall". ("I try to review before tackling the lesson. I orient them again to the basic concepts and also recall it to them"). (P1)

"... I always have to employ a game oriented instruction, games jud na siya students learn at the same time enjoy, learning of the students that way is lasting somewhat lasting because they enjoy then they learn". ("I always have to employ a game oriented instruction. Students learn and at the same time they enjoy. Learning of the students is somewhat lasting because they enjoy and learn"). (P2)

"... Naa koy paired tutoring for example panangnitan sa usa ka section naa koy kuanan nga dili kanang dili ka kuan ang bata so ang katong fast learners ako silang parison". ("I made a paired tutoring, for example, I let my fast-learning students to tutor the slow-learning students"). (P3)

Specialized science teachers asked for help from their colleagues whom they considered as already master in the certain science topics. They scanned their previous science textbooks and did research using internet for the topics where they find it difficult.

"... Layo layo pa gani sir akong i-scan ang akong libro niya tapos niya ug naa gani mga dili nako carry duol dayun ko kang sir james. Mangutana ko sa mga science teachers, niya mukuan sad kog libro example phoenix basa gyud basa. Mag scan ko daan ug lisod lisod ang tpic before ko mangutana". ("Earlier my discussion, I already scan my books and references for my lessons ahead of time and if I can't understand anymore the lessons, I will approach any of my co-science teachers for their help and guidance. I asked them about the lessons and scan more"). (P4)

"... Una gyud is seek help especially sa katong murag master na, dako pud ug tabang ang mga trainings ug advance reading pud mag study gyud pud". ("First, you need to seek help to those science teachers who mastered the lessons or concepts and then, trainings were indeed a great help for you to be prepared and also you must read in advance and study your lesson or topic"). (P5)

#### Openness to new things

Although specialized science teachers encountered such challenges and problems being a generalist one, they also learned new things and discovered lessons in life in the teaching profession. Life lessons that made them to adapt to sudden changes, becoming flexible in learning new topics, and accept challenges along the way. They managed to never argue with these changes currently applied to the new curriculum. The specialized science teachers eventually felt in loved other science fields science beyond their areas of specialization.

"... Aw maona, like pag accept sa consistent changes. Have a positive outlook and open mind in regards this changes kay magbagutbut gane ka nga unsa ba pud uie nga bag o naman sad ni. Naaaaahhh, it will reflect in your way of teaching and how you understand the lesson and the kung maing ana mn gane na. You cannot transfer concepts to your students kay in the first place you have negative thoughts already". ("We have to accept consistent changes. We should have a positive outlook and open mind in regard this changes. If you will consistently complain thus, it will reflect in your way of teaching and how you understand the lesson. You cannot transfer concepts to your students because in the first place, you already have negative thoughts"). (P1)

"... I find it kuan exciting at the same time for me lasting". ("I find it exciting and at the same time lasting"). (P2)

"... Kaantigo nako sa higher science like for example chemistry. Sa una makamao-mao ko pero dili man ka kayo maghuna-huna kay dili man imohang major. Sa una di man ko mo mind anang science I, physics, chem kay biology raman jud sa una. Unya karon masugatan na jud nimo sila tanan. Actually ang benifited sad kami pud kay bisan ako di ko ganahan anang chemistry ug lain pang type sa science pero karon maton-an na gyud kay sagol naman, integration naman". ("I learned the higher science fields like chemistry. Unlike before, I don't give so much attention to physics and chem because I am a biology major. Here comes the spiral progression, I encounter all the field of science and it becomes beneficial in

#### my part. Even if I dislike chemistry but I need to learn because it is now being integrated"). (P3)

"... Ana sila nga ang teacher kuno flexible unya dapat iprove sad na nato nga ingon ana jud. Maahat gyud ta ug tuon atleast kanang naa pud tay makatonan sa ba nga ah murag marefresh sa ato nga mao diay ni among giskwelahan sa una". ("When you are a teacher, you also need to be flexible so that we could improve ourselves and what's good about spiral progression, as a teacher, I need to study further and learned new science topics even if it is not my field of expertise"). (P4)

"... Feeling nako is murag imo nalang pud i-adjust imong kaugalingon kung unsa man imong malearn while nagstudy ka pabilin nalang na dihaa agad nalang ka sa curriculum guide". ("I feel that I need to adjust myself from my learning before in college to what I still need to learn"). (P5)

#### Insuffiency of time

In terms of the teaching science subject, mostly of the specialized science teachers preferred the old curriculum rather than the spiral progression because teaching within their specialization is their comfort zone. More so, the old curriculum only focused to one specific science areas per year. According to science teachers, their former students tend to master the specific field or branch of science for a whole year round unlike the spiral progression that made the students now to learn new skills in progressive and spiral way which somehow minimizes the retention of the skills.

"... Preferred ko sa Spiral Curriculum. Tungod kay every grade level. You try to build murag kung block pana. You'd try to build that block for every year and you try to cut across sa kanang murag emung gipatas an baa ng level". ("I preferred to spiral curriculum. In every grade level you try to build a block for every year and try to cut across and then increase the degree of difficulty"). (P1)

"... Mas preferred naku ang spiral kay the learning of the students is lasting and ang advantage sa k-12 kay ang skill. Students not just learn in terms of information or knowledge but also the skill". ("I likely preferred spiral progression because the learning of the students is lasting and the advantage of k-12 is that students not just

Research Article

# learn in terms of information or knowledge but also the skill"). (P2)

"... Kay kung ako gyud ganahan jud ko sa BEC kay ma focus man nako ug tudlo ang mga bata. Kanang spiral dili man pud sa ingon nga dili ma focus pero kanang mura ba ug complicated man gud". ("I really like BEC "old curriculum" because I can focus my attention on teaching the students. Unlike in spiral, the lessons are more complicated"). (P3)

"... Mas ganahan ko atong last sir kay murag mafocus ra imong hunahuna, second year, bio ra gyud na tanan murag focus ra gyud nimo. Third year, chemistry". ("But I preferred the old curriculum since students can focus to the learnings of science topics. For secondary, it is biology and chemistry for third year"). (P4)

"... Sa before nga curriculum, murag nay mastery ang bata nga that whole year murag mao ra na ilang focus". (I appreciate the old curriculum since the students learned to master the concepts whole year round and they only focus to certain field like (Biology, Chemistry, Earth Science, and Physics)"). (P5)

Based on the findings above, specialized science teachers in junior high school particularly those who were teaching science subject for a long year find it hard to easily adapt to the spiral progression approach prescribed by the new curriculum, since there is a need for them to teach science concepts whom they are not familiarize or comfortable with. This was supported on the findings of Samala (2018), teachers had the mastery of the subject matter in their own area of specialization because they are very much aware of the lessons. Furthermore, mostly of the interviewed science teachers had a difficulty on science topics that deals on numbers and calculations as a result they skipped such activities and proceed to the next lesson. They agreed that they can teach effectively to science concepts whom they are experts or specialized.

In times that they are about to teach other areas of science, the specialized teachers had to study and even ask the help of their colleagues in order to have enough knowledge on the lesson. They agreed that cooperative learning in teaching science subject is not only appropriate to their students but effective in teaching science to students and even to those fellow teachers. The result was also supported on the study of Resurrecion and Adanza (2015) that in order to cope up with the challenges, science teachers read more books, find resources such as internet, asked their colleagues and collaborate with their fellow teachers who are specialized on certain science concepts during mentoring and coaching sessions.

#### Conclusion

The study shows that specialized science teachers teaching from the old curriculum were experiencing a hard time implementing the spiral progression approach (SPA) as prescribed under the new K to 12 curriculum. Most of them who are teaching a wide range of science topics in different grade levels observed difficulties and problems during their transition period from one to two years of teaching science using the spiral progression approach.

Moreover, spiral progression approach brought an unexpected advantage to the specialized science teachers whom they learned to become a generalist type whose expertise and skills were not only limited to their major science fields. They eventually learned to adjust and adapt various method of science teaching that differs from what they used to be during the old curriculum. They learned to become resourceful in looking possible solutions and improving their ways of teaching science especially to concepts which are out of their expertise in order to meet the standards and quality of teaching that the curriculum required for them. Cooperative learning was established in the school environment as the science teachers learned to communicate and collaborate with their fellow science teachers and cooperatively shared knowledge and previous learnings such as coaching and mentoring sessions.

However, if given a choice, the five specialized secondary science teachers still preferred the old curriculum since it allows them to teach at least one major science field in a year namely Integrated Science, Biology, Chemistry and Physics rather than the spiraling approach that only limits per quarter in every school year.

Based on the findings, DepEd curriculum implementers and policy makers must conduct a relevant science training programs and workshops that caters the need of the specialized science teachers in terms of the contents and pedagogy using the spiral progression approach. The Higher Education Institutions (HEIs) offering secondary teacher-education courses should align their curriculum to the DepEd's K to 12 curriculum in order to equip their graduates with the necessary skills who will becoming future teachers in the field and able to teach basic science concepts and skills using the spiral progression approach effectively and efficiently. Future researchers should also conduct a similar study that includes private secondary science teachers as participants to compare their experiences to those who are in public secondary schools.

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## The Career Factor-Importance and Career Factor-Experience of Student Teachers of IFSU-POTIA Campus

Matronillo M. Martin Jessa M. Bimmoy

### Abstract

This study was designed to examine the insights of the education students on the career factor importance and experience in teaching industry. Descriptive research was utilized in this study at IFSU- Potia Campus during the first semester School Year 2017-2018. There were 258 respondents using Lynch formula. The exposure of the student teachers helps to master the subject matter and their field of expertise. Result revealed a highly significant difference on the mean of the responses of the students in terms of career factor experience, teaching as a career has its great implication in the development of the community, through field studies and practicum, and the practice teachers master their skills and competencies. The practice teachers have different perspective on career factor-importance. BSE student teachers' perception on career factor experience have greater impact on their exposure in the off-campus teaching, specifically, the BSE TLE, and greater awareness of the career factor experience. It is recommended that the college should introduce programs and activities related to teaching strategies to improve the abilities of the practice teachers, focus on the 21st century competencies, update the appraisal monitoring scheme about experiences of the practice teachers, and assign instructors related to their field of specialization.

Keywords: career-experience, career-factor, career, practice teachers, specialization

#### Introduction

Effective career experiences and giving importance of career is essential for creating an environment where students are ready to learn and able to work towards mastery of the skills they need to be ready for the job or a meaningful career when they graduate from college. Unfailing teaching experiences positively affects the student's performance in the field (Mordberg, 2011). The higher education performance depends upon the experiences that may affect the student's output during their on-job training.

According to Rakesh Ranjan (2013), practice teaching is an important component towards becoming a teacher. It provides experiences to student teachers in the actual teaching and learning environment. During teaching practice, a student-teacher is given the opportunity to try the art of teaching before actually getting into the real world of the teaching profession. Studentteachers also know the value of teaching practice and they perceive it as the important aspect of their preparation for the teaching profession since it provides for the real interface between student hood and membership of the profession.

This study attempted to identify the value of the experiences and factors in the chosen career in teaching. It used to advance the knowledge about the career factor importance and career factor experience among the college instructors. Moreover, it encourages college heads and subordinates to give high emphasis on the value of the career experiences during the undergraduate level of the education graduates; and understand and share culture of career factor importance

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and career factor experience among education students towards teaching industry.

This study would serve as baseline information to school administrators who are concerned with the improvement of the quality of instructions in their respective school assignments. It would indeed serve as an eye-opener to school administrators of Ifugao State University- Potia Campus specifically at College of Education to maintain or improve their leadership styles in pursuit to achieve the national goals of the present educational system in our country. Moreover, to the students who are dreaming and aspiring would-be teachers, this study would help them reflect on what is really an important to prioritize, if it is career factor experience or the career factor importance. Furthermore, this study would be useful for the supervising instructors and mentors of Ifugao State University. It would be effective to all the incoming pre-service teachers to know the essential effect of experience and importance in their career. Additionally, this study would give an entry point in the curriculum to integrate the level of importance and experience in the teaching field.

The result of this study would greatly help the mentors and supervisors in assisting the future teachers in the field of pre-service teaching. It will also be beneficial to the education students of Ifugao State University to identify the career factor experience and career factor importance. Finally, this study would help to reduce the anxiety of the pre-service teachers and would provide basis in identifying the value of career experiences and career importance in the teaching industry.

#### Literature Review

Moreover, Darling-Hammond (1997), stressed out that teachers in a society are thought to be agents of change as they are central to the delivery of quality education. Quality teachers are the greatest determinant of student achievement and their impact are greater than any other social factors, including class size, parent education, and income and language.

Teachers play an important role in shaping the future of individuals as well as of entire generations.

They can also influence the economic dynamism of the country by imparting skills that translate into innovation and productivity in the workplace Goldhaber and Anthony, (2003). Because of the current changing and challenging world, teachers should be provided with a range of skills, knowledge, attitudes and relevant educational experience that enable them to cope up with the challenge. Education is expected to play several key roles in an effort of developing country socioeconomic and cultural status. However, it is impossible to think of quality education without having academically qualifies and professionally responsible teachers on the schools. Thus, for teachers to play their role effectively in schools there must be a well-designed and successfully implemented teaching practice program for student teachers that aims at producing teachers who are academically qualified, professionally skilled, and attitudinally and ethically committed to their profession. The teacher's character and quality competence are the most significant factors which influence the education quality and its contribution to national development (Kumar & Ratnalikar, 2003).

According to Tomporowski, et al. (2012) lot of studies have been conducted in the area of career factor and career experiences and these studies identify and analyze the number of styles and teaching management systems that affect the performances, experiences, and value of their chosen career at school, college, and even at university level. Previous researchers have examined education students within the teaching industry and education arena for many reasons. Students from specific higher education institutions and current students' perceptions and expectations of careers in education and teaching upon graduation definitely affects the performance of the education students.

Moreover, in an attempt to cope with the new needs in the teaching and learning process, teacher education has tried to adjust itself. Marais and Meir (2004) observed that despite the fact that university lecturers value teaching practice as the bridge between theory and practice, student teachers sometimes found it difficult to relate course content to everyday classroom practice.

### Journal of Education and Society

#### **Research Article**

A Refereed Journal

However, the nature of the practicum has also been found to matter when teacher competencies are the desired outcome. In a study by Beck, Kosnik, and Rowsell (2007), researchers identified the need for more focus in the practicum on practical issues related to the daily tasks of functioning in a classroom. In this study, teacher candidates identified six characteristics or skills needed to be provided and developed in their preparation programs to prepare them to teach, including: theoretical understanding, practical knowledge and skills, comprehensive program planning ability, knowledge of what must be done in the first few weeks of school, understanding and skill in assessment and evaluation, and knowledge of how to implement effective group work. It is interesting to note that five of these six characteristics relate to implementation practices that might be expected to develop in teacher candidates during their practicum placements, even though the participants in the study also identified the need to have theoretical understanding.

#### **Theoretical Framework**

Motivational theory is very essential in the career factors that influence students when choosing a particular career. If hospitality graduates are entering the industry without an accurate understanding of its peculiarities, they will soon leave it as they do not manifest any internal drive to love and to be with it. On the other hand, differences between pre- and post-entry job expectations of hospitality management students in the hospitality industry are not congruent in the sense that the experiences and factors are not really the same in the actual field.

Frederick Taylor developed the "scientific management theory" which espoused this careful specification and measurement of all organizational tasks. Tasks were standardized as much as possible. Workers were rewarded and punished. This approach appeared to work well for organizations with assembly lines and other mechanistic, routinized activities. Taylor wanted to create a mental revolution among the workers and management by defining clear guidelines for improving production efficiency. He defined four principles of management which are: (1) Develop a science for each element of an individual's work, which replaces the old rule of thumb method; (2) Scientifically select and the train, teach, and develop the worker; (3) Heartily cooperate with the workers so as to ensure that all work is done according to the principles of the science that has been developed; and (4) Divide work and responsibility almost equally between management and workers. Management takes over all work for which it is better fitted than the workers (Camphbell, et al., 2013).

Firstly, the Theory of Planned Behavior (TPB) predicts deliberate behavior. It suggests that a person's behavior is determined by one's intention to perform the behavior and that this intention is, in turn, a function of his/her attitude towards the behavior and his/her subjective norms. The best predictor of behavior is intention. Intention is the cognitive representation of a person's readiness to perform a given behavior, and it is considered to be immediate antecedent of behavior. This behavior is determined by 3 things: their attitude towards specific behavior, their subjective norms, and their perceived behavioral control. The theory of planned behavior holds that only specific attitudes towards behavior in question can be expected to predict that behavior. In addition, measuring attitudes towards behavior is imperative to measuring people's subjective norms - their beliefs on how people care about behaviors in question. To predict a person's intentions requires knowledge on the person's attitude. Finally, perceived behavioral control refers to people's perceptions of their ability to perform a given behavior (Ajze, 1991). These predictors lead to an intention. As a general rule, the more favorable the attitude and the subjective norm is, the greater the perceived control on the person's intention to perform the behavior in question.

Secondly, the Theory of Reasoned Action (TRA) explicates how inner drives, as motivation, affects the action and intention of an individual. This further affects one's performance and work-related behavior. This theory states that (1) the more favorable the attitude of an individual toward a behavior, the stronger will be the intention of the

## Journal of Education and Society

A Refereed Journal

individual to engage in the behavior; (2) the greater the subjective norm, the stronger the intention of the individual to perform the behavior; and (3) the stronger the intention of the individual to engage in a behavior, the more likely the individual will be to perform it. TRA has been successfully applied in many research studies in social psychology, knowledge management, medical studies, and IT adoption (Fishbein & Ajzen, 1975).

Knowing the usefulness and importance of Outcome-Based Education (OBE) greatly affects the extent of its implementation in an institution. If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in achieving those outcomes (Bialobrzeska, 2006).

In international arena, Outcome-Based Education is applied to create a competitive advantage among other countries as early as 1980's. It is a process that involves reporting reaction in education to reflect the achievement of high order learning and mastery rather than the accumulation of course credits (Lee, 2007). This means that pre-service teachers should be focused on the practicum and field studies because their experiences in the field are genuine and firsthand experiences. To be able to cope with the international standards of foreign universities and colleges, higher education in the Philippines are seeking new ways of designing education to improve the existing educational system of the country as well as to prepare students in facing the challenges of the 21st century.

#### **Research Questions**

This study was designed to examine the insights of the Bachelor of Elementary and Secondary Education students on the career factor-importance and career factor-experience in the teaching during the First Semester School Year 2018-2019 at Ifugao State University-Potia Campus.

Specifically, it aimed to answer the following questions: (1) What is the profile of the respondents in terms of age, course, gender, area of residence, and field of specialization? (2) What is the

perception of student-respondents on the career factor-importance and career factor-experience in teaching industry? (3) Is there a significant difference on the perceptions of the respondents on the career factor importance and career factor experience of the teaching industry when grouped according to course and field of specialization?

#### **Research Methodology**

This section presents the research design, sampling, data collection and instrument, data analysis, and ethical considerations.

#### **Research Design**

The descriptive research design was utilized in this study as it tried to gather data on the perceptions of education students on the career factor importance and experience of their future career. This research design fits best in studies which aimed to describe the nature of situations as it existed at the time of the study and to explore the cause of a particular phenomenon. Quantitative was utilized to determine the insights of the BEE and BSE students about career factor-importance and career factor-experience in the teaching.

#### Sampling

The respondents of this study were the 110 BEE and 148 BSE students of College of Education, Ifugao State University- Potia Campus using the Lynch formula. This study was conducted at the College of Education, Ifugao State University-Potia Campus, Alfonso Lista, Ifugao during the first semester School Year 2018-2019.

#### **Data Collection and Instrument**

The instrument used in this study was an adapted questionnaire from the study of Brown (2011). Reliability of the instrument was established using Cronbach's alpha:  $\alpha = .993$ Eminent researchers claimed that an alpha value that exceeds 0.6 signifies acceptable reliability. Hence, it was a valid and reliable instrument. Data were collected among the BEE and BSE students

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of College of Education, IFSU-Potia Campus through a channeled internal communication to the college officials. This effort would be endeavored for academic purposes, so the respondents' identity had to be kept confidential. Approval was sought from the college dean. Data were tallied, treated, and analyzed to give shed on the formulated research problems.

#### **Data Analysis**

The frequency count and percentage were used to determine the profile of the respondents. The t-test and one- way ANOVA were used to determine the significant difference between the perceptions of the respondents on the career factor importance and career factor experience of the teaching industry when grouped according to their course and field of specialization.

#### **Results and Discussion**

#### **Profile of the Respondents**

Table 1 presents the profile of the respondents in terms of age, gender, and course of the students of College of Education. It shows that most of the students were 22 years old and above. It means that senior students dominated the enrollees of the CoE of IFSU Potia Campus. It further implies that the students were at age during their studies in the basic education.

As to gender, female dominated the enrollees with 230 or 89.15% while male obtained the frequency of 28 or 10.85%. This means that most female are interested in the teaching profession. In terms of the course, BSE obtained 148 Or 57.36% while BEE obtained 110 or 42.64%. This means that the chosen courses under the College of Education obtained minimal difference. This implies that there is a slight difference between the enrollees of BEE and BSE.

Table 1.Profile of the respondents in terms of	
age, gender and courses	

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Journal of Education and Society

Age	Frequency	Percentage	Rank
below 18 years old	6	2.33	5
19 years old	56	21.71	4
20 years old	54	20.93	3
21 years old	60	23.26	2
22 years and above	82	31.78	1
Total	258	100.00	
Gender			
Female	230	89.15	1
Male	28	10.85	2
Total	258	100.00	
Course			
BEEd	110	42.64	2
BSED	148	57.36	1
Total	258	100.00	

Table 2 presents the profile of the respondents in terms of area of residence and area of specialization. It shows that most of the students were living in the rural area with 244 or 94.57% while urban obtained 14 or 5.43%. It means that the students dwell in the urban areas. It implies that the students were staying in the municipalities. In terms of area of specialization, most of the BSED are taking English as their area of specialization. On one hand, TLE obtained 35 or 13.57%, PSED obtained 22 or 8.53% and Filipino obtained 21 or 8.14% frequency and percentage and obtained second, third and fourth rank respectively. On the other hand, mathematics and Science obtained 15 or 5.81% frequency and percentage and both obtained 5.5 rank, correspondingly.

# Table 2.Profile of the respondents in terms ofarea of residence and area of specialization

Area of Residence	Frequency	Percentage	Rank
Rural	244	94.57	1
Urban	14	5.43	2
Total	258	100.00	
Area of Specialization			
PSED	22	8.53	3
English	40	15.50	1
Mathematics	15	5.81	5.5
Continuation of Table 2			
Filipino	21	8.14	4
TLE	35	13.57	2
Science	15	5.81	5.5
Total	258	100.00	

#### **Career Factor Importance in Teaching**

Table 3 presents the perceptions of the students in terms of career factor importance. The grand weighted is 4.15 which means "agree." Item 5, "A career that provides intellectual challenge obtained the highest mean of 4.51 while item 20, "A career that offers opportunities for further training,"

obtained the lowest mean of 4.01. This means that, in teaching as a career, it is very necessary that teaching provides a great challenge. It shows that through teaching, it needs a challenging task that need to motivate students to learn. All the indicators are relatively the same in terms of career importance.

On one hand, the respondents agreed that teaching career is secured, gives responsibility, respected, can use as a degree, with high quality resources and equipment, enjoyable, and has a good starting salary. Besides, teaching as career agreed by the respondents that it has a pleasant working environment, get along with colleagues, has good promotion prospects, can contribute in the society, gains transferable skills, has reasonable workload, opportunity to travel abroad and can easily be combined with parenthood. This means that teaching as a career has its multi-faceted tasks and varied roles for development and foster harmonious relationship in the community.

The result of the study coincided to the study of Parsa, et al. (2009) that examined the traditional method of measuring employee turnover and argued it does not take into account important factors, such as employee performance, tenure, and knowledge. This implies that in teaching, in terms of pre service training among the students, they should be exposed to the progressivist approaches not a traditional method.

Moreover, pre-service teacher preparation programs, also called initial teacher training or initial teacher education, vary greatly across countries. The structure, coursework, and field experiences of pre-service programs are important to consider when designing or reforming teacher training because they all contribute to the level of preparation. High-quality teachers need highquality training, but many countries may need to consider cost-effectiveness in deciding on the specific combination of pre-service and in-service training experiences needed in order to deploy enough teachers for growing education systems (UNESCO, International Capacity Building, 2015). This means that career factor importance is very necessary to be developed during the preservice training of the BEE and BSE students.

Table 3. The Weighted Mean of the Career FactorImportance in Teaching

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A ca	reer	Mean	Description	Rank
1	that I find enjoyable.	4.12	Agree	7.5
2	with colleagues that I can get along with.	4.10	Agree	10.5
3	with a pleasant working environment.	4.03	Agree	18.5
	Continuation of Table 3			
4	that is secure.	4.50	Agree	2.5
5	that provides intellectual challenge.	4.51	Agree	1
6	that has good promotion prospects	4.08	Agree	13.5
7	which gives me responsibility	4.50	Agree	2.5
8	with high earnings over length of the career.	4.08	Agree	13.5
9	where I contribute to society	4.10	Agree	10.5
10	where I can use my degree.	4.15	Agree	5
11	where I gain transferable skills.	4.10	Agree	10.5
12	that is respected.	4.16	Agree	4
13	that has a reasonable workload.	4.10	Agree	10.5
14	with high quality resources and equipment.	4.13	Agree	6
15	with the opportunity to travel abroad.	4.03	Agree	18.5
16	with career mobility - easy to get a career anywhere	4.06	Agree	15
17	that can easily be combined with parenthood.	4.02	Agree	19
18	that has a good starting salary.	4.12	Agree	7.5
19	where I can care for others.	4.06	Agree	16
20	that offers opportunities for further training.	4.01	Agree	20
	Grand Weighted Mean	4.15	Agree	

#### **Teaching Career Experience Factor**

Table 4 shows the grand weighted mean of the perception of the education students in terms of teaching career experience factor. It presents that the weighted mean is 4.23 which means "agree." It reveals that through experience in pre-service teaching, teacher demonstrates mastery of subject matter which obtained the highest mean of 4.58. On the other hand, through pre-service teaching, "A student teaching experience helps me to teach considering that learning is different kinds "obtained the lowest mean of 4.02. This means that the exposure of the student teachers helps them to master the subject matter. Moreover, through field studies, the students could probably help them master their nature of work in the future. Besides, the students can master their field of specialization.

While internships will give the students the experiences they need, there are only a certain number of jobs they can experience. Bujisic, et al. (2014) argued having specific topic-based courses, such as event management, club management, or casino management, would allow students to get a more rounded education and be able to experience portions of the hospitality industry they do not during their internships. These statements supported the result of the study that through preservice training, the students will obtain authentic knowledge and specific skills related to their

chosen career. This also implies that topics will be mastered through pre-service training.

Similarly, most restaurant owners may lack the necessary prior business experience to manage their restaurants. Lack of prior experience in a related field makes new restaurateurs more vulnerable to failures (King, 2002). This implies that even with the other institution and industry experiences play a significant role in order to avoid failure. Truly, experiences among the trainees must be completed in the practice teaching of the education students with the full support and proper monitoring of the supervising instructors.

Table 4. Weighted mean of the perception of the education students in terms of

A st	udent teaching experience helps me to	Mean	Descriptio n	Rank
1	demonstrate values for lifelong learning.	4.02	Agree	20
2	teach considering that learning is of different kinds.	4.05	Agree	17
3	create an environment that is safe and conducive for learning	4.05	Agree	17
4	communicate higher learning expectations to teach learners.	4.03	Agree	19
5	accept learners' diverse knowledge and experiences.	4.11	Agree	13
6	Demonstrate mastery of the subject matter.	4.58	Agree	1
7	make use of allotted instructional time.	4.51	Agree	3
8	recognize that each learner is unique.	4.52	Agree	2
9	demonstrate skills in the use of technology.	4.05	Agree	17
10	develop and use appropriate instructional plan.	4.50	Agree	4
11	develop and use variety of instructional and support material	4.48	Agree	5
12	develop and use a variety of appropriate assessment strategies	4.47	Agree	6
13	communicate promptly to learners, parents and superiors about learners' progress.	4.06	Agree	15
14	take pride in the nobility of the profession	4.10	Agree	14
15	enhance myself through developing my chosen profession	4.13	Agree	12
16	develop my skills in teaching.	4.24	Agree	8
17	work harmoniously with my co-interns	4.16	Agree	11
18	enrich my knowledge about the nature of work as a teacher.	4.26	Agree	7
19	develop my potential in engaging community activities.	4.18	Agree	9
20	decide an appropriate decision if problems may arise.	4.17	Agree	10
	Grand Weighted Mean	4.23	Agree	

#### Significance Difference on Perception of Respondents on career factor importance when Grouped according to Course

Table 5 shows the result of analysis using t-test on the perception of the respondents about the career factor importance when group according to their course. Result reveals a non-significant outcome when tested at 5% level of significance. This implies that the perception of BEED is not significantly different with that of the BSED group with -0.75 computed t-value. Thus, findings affirm the null hypothesis. The result is coincided with the study of Watt (2011) that there was no difference by course. It is quite that out of the total respondents investigated for this study, an overwhelming majority (79.5%) of them were BEED whereas about 20% were found to be BSED.

Likewise, regardless of the preferred course,

experienced teachers are on average more effective in raising student achievement than their less experienced counterparts. This happens not just because experienced teachers are more likely to work in schools and classrooms with more advantaged students (Ladd, 2013). This implies that more experienced teachers are, on average, more effective than teachers with fewer years of classroom experience.

# Table 5.Significance Difference on Perception ofRespondents on career factor importance whenGrouped according to Course

Areas	PSED	English	Math	Filipino	TLE	Science	F- Comp	F- Tab
Career Factor Importance	4.87 Moderately Agree	4.36 Agree	4.33 Agree	4.39 Agree	4.36 Agree	4.47 Agree	4.83*	2.32

#### Significance Difference on Perception of Respondents on career factor importance when Grouped according to Field of Specialization

Table 6 presents the comparison among the BSE and BEE when grouped according to their field of specialization on their perception on the career factor importance. The PSED with weighted mean of 4.37 is far below the means of the other field of specialization. Analysis of Variance at 5% level of significance shows significant differences among the mean responses of the BEE and BSE students on their awareness on career factor importance in terms of their field of specialization. Thus, the research hypothesis is rejected at 5% level of significance.

The results suggest that supervising instructors and critic teachers should find new methods to increase education students' awareness on career factor importance and develop work context parallel to field of specialization. Education is one of the most important characteristics that might affect the person's attitudes and the way of looking and understanding any particular social phenomena. In a way, the response of an individual is likely to be determined by his field of specialization or expertise and therefore it becomes imperative to know the field of specialization of the respondents. The findings of the study proven by the study of Gurbuz (2007)

that there is a positive difference that was found between job satisfaction and career importance.

Table 6.Significance Difference on Perception ofRespondents on career factor importance whenGrouped according to Field of Specialization

Areas	PSED	English	Math	Filipino	TLE	Science	F- Comp	F- Tab
Career Factor Importance	4.87 Moderately Agree	4.36 Agree	4.33 Agree	4.39 Agree	4.36 Agree	4.47 Agree	4.83*	2.32

#### Significance Difference on Perception of Respondents on career factor-experience when Grouped according to Course

Table 7 presents the significance difference on the perception of the respondents on career factor experience when grouped according to their course. Findings disclosed that the course affects the perception of the respondents' perception on career factor experience.

BEE students have a significantly deeper awareness on career factor experience because they are more eager, high-spirited, idealistic, and ambitious. In this way, mingle with preschoolers and elementary grade pupils, thus, they work hard to be updated on their job and duties that includes career factor experience. According to Sagpaey (2012), BEE teachers or those who are new in the service are high-spirited and idealistic individuals.

On the other hand, BSE students are very much aware but at a lower regard as shown by their mean response of 4.32 compared to the BEE with a 4.52 weighted mean. This could be attributed to the ideas that they know already their job leaving the trainings and seminars to the high school students who are being more equipped and updated on their awareness to work that classroom management, teaching styles and other related works because they mingled with mature students compared to the elementary pupils.

Statistical analysis shows that BEE students are significantly more aware than BSED students thus the null hypothesis is not affirmed. Table 7.Significance Difference on Perception ofRespondents on career factor-experience whenGrouped according to Course

Areas	BEE	BSE	t-comp	t-tab	Interpretation
career factor	4.52 (VMA)	4.32 (VMA)	2.08	1.76	Significant
experience					

#### Significance Difference on Perception of Respondents on career factor experience when Grouped according to Field of Specialization

Table 8 presents the Analysis of Variance of the respondents' perception on career factor experience when grouped according to field of specialization. Result reveals a highly significant difference on the mean of the responses of the BEED and BSED students. It implies that BSED TLE students have a higher awareness on the career factor experience than those BEED-PSED, English, Math, Science and Filipino major. This could be attributed to the level of field of specialization that is directly associated to understanding duties and responsibilities in in the different areas. Since, BSE TLE majors have wide scope specialization compared to other field of specialization.

The result of the study is similar with the study of Masagca (2009) that there is a significant difference on field of specialization. Certain provisions for building upon the hard-earned achievement of these teachers teaching TLE through budget allocation for annual programs, trainings, exposure to the different field of teaching Technology and Livelihood Education are also suggested to enhance their skills and competencies.

Table 8.Significance Difference on Perception ofRespondents on career factor experience whenGrouped according to Field of Specialization

AREAS	PSED	English	Math	Filipino	TLE	Science	F-	F-
							Comp	Tab
career	3.95	4.16	4.29	4.21	4.76	4.17	18.45 <sup>8</sup>	2.45
factor experience	(MA)	(MA)	(VMA)	(VMA)	(VMA)	(VMA)		

#### Conclusion

Most female are interested in the teaching profession compared to the male. Therefore, males are inclined to work in the industry rather than work in the teaching arena. Teaching as a career has its great implication in the development of the community. Also, teaching as a career has its multifaceted tasks and varied roles for development and foster harmonious relationship in the community. In terms of career factor experience, the exposure of the student teachers helps them to master the subject matter and their field of expertise. Therefore, through field studies and practicum the BSE and BEE pre-service teachers master their skills and competencies in teaching. BEE and BSE pre-service teachers show significance difference on their awareness on career factor importance in terms of their field of specialization. Therefore, the pre-service teachers both BEE and BSE preservice teachers have different perspective on career factor importance. They chose teaching as a profession for many reasons. Result reveals a highly significant difference on the mean of the responses of the BEE and BSE students in terms of career factor experience. Therefore, BSE student teachers' perception on career factor experience have greater impact on their exposure in the field study and off-campus teaching specifically the BSE TLE majors. BSE TLE students have a higher awareness on the career factor experience than those BEE-PSED, English, Math, Science, and Filipino majors. Therefore, the more scope of the

field of specialization the greater awareness of the career factor experience.

In the light of the findings and conclusions, the following are recommended: The College of Education (CoE) shall include technological specialization electronic, courses with in technology and other technical courses to encourage males to enter the teaching career and present in the academic council; The university shall introduce programs and activities related to teaching strategies, techniques and styles to improve the abilities and skills of the pre-service teachers in teaching. Likewise, the college should focus the 21st century competencies needed in teaching; The college should give an ample time the student teachers for field study and off-campus teaching. Moreover, the pre-service teachers must be deployed for practicum in the private schools to compare the teaching experiences in the public schools; The college should initiate action plans and monitoring scheme to determine the development of the pre-service teachers in the field of practice teaching. Additionally, the college should inform the pre-service teachers about the career factor importance; The College of Education should update the evaluation sheet and appraisal monitoring scheme about the experiences of the pre-service teachers during their off-campus preservice teaching; and in order to increase the BSE major in TLE students about their field of specialization, the college should assign instructor related to technology, and livelihood education.

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## Facebook as a Learning Management System for Filipino Tourism Students

Raul John H. De los Reyes Jr.

### Abstract

Faculty members are already utilizing learning management systems to facilitate learning in class. Facebook, although not a learning management system, is utilized by instructors to disseminate academic related information and to communicate to their students. This paper looks at the perceived effects of Facebook as a learning management system; additionally, it aims to determine the self-reported Facebook usage of tourism students in a state-owned university in Leyte. This study employed a simple descriptive research design and used a self-made questionnaire. The determined sample size in this study is 81 at 95% confidence level and  $\pm 5\%$  margin of error. The population consists of Bachelor of Science in Tourism, Hotel and Restaurant Management students who were enrolled in the Entrepreneurship and Project Feasibility Study course on the second semester of the school year 2017-2018 in a state-owned university in Leyte. This research revealed that Facebook does not help collaboration between peers and academic related activities of Filipino tourism students. Furthermore, it shows that 98% of the students have daily access to their Facebook accounts. Hence, the presence of high internet penetration level.

Keywords: Tourism Students, Facebook, Learning Management System

#### Introduction

College instructors are already utilizing social networking sites (SNS) for academic purposes. College students are active in social media; thus, instructors take advantage of the technology for handing out instructional materials and for announcing class-related activities and other academic-related matters. Students also use SNS to communicate with their classmates and friends in the academe. Free access to these SNS further attracts students and instructors to use these SNS for academic purposes. Social networking sites allow users to create personal profile online and share it with other users. Moreover, users share photos and communicate with others on the platform (Boyd & Ellison, 2008).

Phu & Gow (2019) stated that Facebook is the most famous SNS. Like the rest of the SNS, Facebook's main purpose is to connect users on the internet (Bailey & Green, 2010). Previous works found out that there is an increasing level of Facebok usage among college students (Madje et al., 2009; Selwyn, 2009; Prescott et al., 2015). Additionally, Facebook is also the most popular SNS to undergraduate students (Arteaga Sanchez et al., 2014; Cheung, Chiu, & Lee, 2011; Moreno et al., 2011) and college students are the majority of Facebook users (Smith & Caruso, 2010). Hence, Facebook is where instructors and students would most probably meet online.

#### Literature Review

Facebook is a social tool, not an educational tool nor a learning platform (Prescott et al., 2013). However, students and instructors have been creative with the different features of Facebook, applying it for academic and learning purposes. Facebook is a popular tool in the academe that can facilitate learning (Hewitt & Forte, 2006; Irwin, Ball, & Desbrow, 2012). Students use Facebook to

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connect with their instructors and classmates to discuss course content (Madje et al., 2009; Prescott et al., 2013). Additionally, students reported that they can collaborate well with their classmates through Facebook (Mazman & Usluel, 2010). In his study, Selwyn (2009) revealed that students assist each other by sharing journal articles, books, and results from bibliographic database searches. It is clear that the communication gap between students and their lecturer is significantly reduced using Facebook. Moreover, students are also able to communicate with their peers.

There are scholars who already conducted researches about Facebook and its probable functions to enhance the academic performance of students. The research of Bosch (2009) found out that instructors can easily reach out to students in Facebook than in the classroom; furthermore, students are also more confident in asking questions in Facebook than during class hours. Prescott, Stodart, Becket, & Wilson's study (2015) showed that lecturers, who use Facebook as a learning platform, felt that there was an increase in class performance and students are sharing information and course related resources. Michikyan, Subrahmanyam, & Dennis (2015) emphasized that college is a time of transition for students, especially for freshmen, and students may use Facebook for academic and adjustment concerns.

The previous findings about the different advantages of Facebook to the academic performance of students, however, do not conclude only positive effects. There are scholarly works that reveal negative impacts of Facebook to academic performance. Karpinski & Duberstein (2009) emphasized that students who spend more time on Facebook spend lesser time in studying. Along the same line, Morallo (2014) concludes that the established effects of SNS decrease study time and increase leisure time; moreover, students mainly use SNS like Facebook for entertainment purposes and not for academic purposes.

Different problems are also encountered by instructors and students in using Facebook for academic purposes. According to Meishar-Tal et al. (2012), in cases where instructors use Facebook as a communication tool, students need to regularly access their Facebook accounts; otherwise, they will miss important updates and notifications from instructors. Hewitt & Forte (2006) explained that students raised privacy & identity management issues when they answered the question "Do you think faculty should be on Facebook?". In the study of Prescott et al. (2012), 51% of their respondents reported that their colleagues display unprofessional behavior in Facebook. This result has led to a recommendation that pharmacy students need to follow more guidelines to behave professionally online. Along the same line, instructors must also behave professionally online. Teacher disclosure has positive effects to class environment; however, instructors must be careful in sharing information to maintain credibility (Mazer, Murphy, & Simonds, 2007).

The shift from an input-based education to an outcomes-based education in the Philippines will definitely create changes to facilitate learning. The adoption of Facebook as a learning platform or communication tool is possible for it is free and popular among instructors and students. However, there are many uncertainties in using this SNS for academic purposes. Conclusions extracted from this research will help instructors on how to effectively use Facebook and other SNS as a learning platform. Furthermore, Facebook usage profile is a significant data in this research and it may be considered as a benchmark for further researches that may recommend an institutionalized learning management system for instructors and students.

#### **Conceptual Framework**



The study starts with identifying the random

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BSTHRM participants that will answer an adopted survey questionnaire. Participants must read a consent form and must affix their signature if they agree to the study. After answering the survey, three variables will be measured. These variables are work related use of Facebook (WR), perceived usefulness on communication (PUoC), and collaboration (C). Demographics are also captured to illustrate the characteristics of the participants. Measuring these variables will lead to the identification of the academic-related usage of Facebook among tourism student, understanding the reliability of Facebook as a means of communication and collaboration between instructor and students. Furthermore, the study may direct to the adoption of a learning management system.

#### **Research Questions**

The researcher aims to answer the following research questions in this study:

- 1.) What are the academic related usage of Facebook of BSTHRM students?
- 2.) What are the perceived effects of Facebook to communication among instructors and students when used as a learning management system?
- 3.) What are the perceived usefulness of Facebook in collaborating and sharing resource materials when used as a learning management system?

#### Methodology

The researcher conscientiously followed ethical procedures for the entire duration of the study. Consent forms were handed out together with the survey questionnaire to assure that data collected is confidentially stored. The researcher consulted Dr. Evangeline V. Sanchez for the instrument design. Moreover, Dr. Ariel B. Lunzaga was sought for the appropriate use of the gathered data. The researcher completed the research with integrity.

#### Research Design

The study uses a simple descriptive research design. The descriptive design describes the status of four variables: demographic profile, work related usage of Facebook, perceived effects in communication, and collaboration of students.

#### Sampling

The population of this study consists of incoming fourth year BSTHRM students of a state-owned university in Leyte who have enrolled in Entrep\_101: Entrepreneurship and Feasibility study. Furthermore, the researcher decided to only include Entrep\_101 classes that utilized Facebook as a learning platform in the study. The researcher determined that only three out of six Entrep\_101 sections utilized Facebook as an academic tool. The respondents came from section T31 with 35 students, T32 with 35 students, and T34 with 31 students. Finally, there were 101 students in the three Entrep\_101 sections.

$$n = \frac{Nz^2 pq}{E^2(N-1) + z^2 pq}$$

Figure 1. Sample Determination Calculator

Where:

n=required sample size N=population size P and q=population proportions z=confidence interval E=sets the accuracy of the sample (margin of error)

The researcher used the sampling calculator above to determine the number of respondents. The calculator yield 81 respondents at 95% confidence level and  $\pm$  5% margin of error. The allocation of the number of respondents were T31=28, T32=28, T34=25 and simple random sampling was employed to determine the respondents. BSHAE and BSHRM students who were enrolled in the determined subjects were removed from the total population of the study. Additionally, irregular BSTHRM students were also removed from the population. During the course of the study, some of the identified respondents declined to participate in this study. For this reason, the

researcher randomly picked students from the population. These students were not part of the initial sample.

#### **Data Collection and Instruments**

The instrument that was used in this study is a structured survey questionnaire which was adopted from the survey questionnaire used in the research "Students' perceptions of Facebook for academic purposes" (Arteaga Sanchez et al., 2014) and the research "Perceived Effects of Facebook on Academic Activities of Agricultural Students in University Of Port Harcourt" (Ifeanyiobi, Olatunji, & Akpala, 2014). A bipolar sixpoint likert scale was used instead of a five-point likert scale used by Arteaga Sanchez et al. (2014) to measure the variables. Moreover, there is no neutral option to avoid neutrality.

The first part of the questionnaire consists of the personal and academic profile of the respondents. The second part includes four questions about the respondent's Facebook usage. The third part consists of 18 questions representing the variables: Work Related (WR), Perceived Usefulness on Communication (PUoC), and Collaboration (C). The researcher employed several student representatives that were part of the participating classes to contact the respondents. The instruments were personally administered by student representatives. Respondents who cannot personally answer the instrument answered the survey on Facebook.

#### **Data Analysis**

The instrument was administered personally however online methods were sought since some of the respondents could not come to personally answer the questionnaire. As soon as the instruments were received back from the student representatives, the responses were immediately screened for validity. Raw data were recorded and stored in an Excel file to track and to preserve data. After gathering all the necessary data, the raw data were then tallied and grouped. Frequency tables and percentages were used to present the personal, academic, and facebook usage profile of the respondents. Furthermore, arithmetic mean was used to describe the answers of the respondents for each statement.

#### **Ethical Considerations**

The researcher sent a consent form together with the survey questionnaire that assures participants that they can withdraw their participation in the study at any time. The consent form was written in accordance with the reading comprehension skills of the participants. Moreover, participants were asked to affix their signature on the consent form. All data were secured in a spreadsheet file and only unique ID numbers was used instead of names to protect the identity of the participants. Research participants were not coerced and participated voluntarily.

#### **Results and Discussion**

Table 1 shows the demographic and Facebook usage profile of BSTHRM students. It is imperative to note that only 2% access their Facebook accounts once a day. This suggests that tourism students have day-long access to the internet and might probably have mobile phones that could access Facebook regardless of their location. This result is congruent with the findings of previous studies that the level Facebook usage is increasing among college students (Madge et al., 2009 and Selwyn, 2009).

# Table 1. Demographic and Facebook usageprofile of the respondents.

Item		Frequency	%
Gender	Male	15	19%
	Female	66	81%
Age	18	18	22%
U	19	48	59%
	20	11	14%
	21	4	5%
Frequency of	Once a day	2	2%
Facebook Usage	2-5 times a day	19	23%
U	6-10 times a day	16	20%
	11-15 times a day	18	22%
	16-20 times a day	11	14%
	More than 20 times a day	15	19%
Time Spent on	≤lhr	57	70%
Facebook	2-3hrs	17	21%
	4-5hrs	2	3%
	>5hrs	5	6%
Main purpose of using	Post updates and status	24	30%
Facebook	Communicate with family, friends, and instructors	17	21%
	To hear news and current events	13	16%
	Entertainment	26	32%
	Gather academic related information	13	16%
	To have more friends	12	15%
Number of friends	100-499	8	10%
in Facebook	500-999	4	5%
	1000-1499	11	14%
	1500-1999	9	11%
	2000-2499	23	28%
	2500-2999	3	4%
	3000-3499	13	16%
	More than 3500	10	12%

Accessing Facebook multiple times in a day can be disrupting to studies instead of being helpful. However, it is also important to emphasize that 70% of the students only spend a maximum of 1hr when using Facebook. The respondents disclosed their main purpose of using Facebook as well. This study found out that only 16% are gathering academic related information or checking school related updates from classmates and instructors. On the other hand, 30% of the tourism students post updates and status, 21% use Facebook to constantly keep up with friends and family, 16% use it to hear current events and news, while 32% use Facebook to entertain themselves. The mentioned result is strongly consistent with the findings of Prescott et al. (2013) that Facebook is a social tool not an academic tool.

Table 2 represents the respondents' perception of the various effects of Facebook to their academic performance. The first four statements correspond to the work related (WR) use of Facebook. The respondents slightly disagree (mean of 3.3) that using Facebook to communicate with their classmates regarding assignments and other group projects improve their scores. The respondents also slightly disagree (mean of 3.3) that Facebook is an academic resource that can improve their performance in school. Additionally, respondents slightly disagree (mean of 3.5) that Facebook does

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not provide readily available academic resources to them. The respondents slightly disagree (mean of 3.6) too that accessing Facebook helps them complete their academic requirements.

Statements 5 to 8 correspond to the perceived usefulness on communication (PUoC) of Facebook. The respondents slightly agree (mean of 4.2) that communication between classmates are improved when using Facebook as a communication tool. This also holds true (mean of 4.0) with teachers. Furthermore, respondents slightly agree that announcements and other school-related information easily reach them (mean of 4.8) in Facebook. These results are consistent with the findings of Bosch (2009) where instructors can reach out to their students without difficulty. The respondents, however, slightly disagree that Facebook improves the delivery of important course content and other learning materials.

The last four statements are linked to collaboration (C) of students in Facebook when doing academic related projects or assignments. The respondents slightly disagree (mean of 3.6) that Facebook has the right features that can share a substantial number of resources and learning materials. Moreover, respondents slightly disagree (mean of 3.9) that Facebook has features that provide a conducing and seamless learning experience the respondents also slightly disagree (mean of 3.8) that Facebook is an appropriate platform to exchange course content and other related information. The respondents, however, slightly agree (mean of 4.2) that Facebook improves group work.

Table 2. BSTHRM students' perception of the effects of Facebook to their academic performance

No.	Statement	Mean
1	Communicating with my classmates on Facebook enhances my score on homework and group projects.	3.3 (Slightly Disagree)
2	Using Facebook as a resource increases my performance in my courses.	3.3 (Slightly Disagree)
3	Using Facebook helps me with complying course requirements.	3.5 (Slightly Disagree)
4	Facebook provides resources to support students when doing their homework.	3.6 (Slightly Disagree)
5	The use of Facebook improves communication between classmates.	4.2 (Slightly Agree)
6	The use of Facebook improves communication between the teacher and the students.	4.0 (Slightly Agree)
7	The use of Facebook improves the delivery of course content and resources.	3.6 (Slightly Disagree)
8	The use of Facebook improves the communication of announcements about courses, classes or school.	4.8 (Slightly Agree)
9	Facebook is an appropriate platform to exchange course related information.	3.8 (Slightly Disagree)
10	The use of Facebook improves student group work.	4.2 (Slightly Agree)
11	Facebook provides the resources to share a wide variety of resources and learning materials.	3.6 (Slightly Disagree)
12	Facebook provides rich multimedia resources and media support to	3.9 (Slightly Disagree)

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#### Conclusion

The students slightly disagree to the work-related use of Facebook. They feel that communication between them and their classmates does not really enhance their score and performance. Facebook does not help them in complying with their course requirements too. Additionally, Facebook does not really have the features that provide readily available resources. The BSTHRM students do not believe that Facebook has any work-related usefulness to them when used as a learning management system. There could be features in Facebook that is hindering itself from being useful in terms of work-related use of students. The study concludes that Facebook does not have the features to be useful when it comes to work-related activities of the students.

The BSTHRM students slightly agree that Facebook is a useful tool on communication. Since we are in the information era, students can easily and conveniently access the internet. And the free access Facebook on any cellular network makes communication between their classmates and instructors easy. School announcements can be read anywhere at any time when it is posted on Facebook. However, Facebook does not improve the delivery of course content and other learning materials. There are factors that may constraint students and instructors to upload course materials. An example is the upload file size limit. E-books and podcasts that have huge file-size cannot be uploaded in Facebook.

Lastly, the BSTHRM students slightly disagree that Facebook improves their collaboration with their classmates. Facebook may have features where students and instructors can exchange ideas and information (i.e. group chat and Facebook groups), however, it has limitations too since Facebook's current features are designed for social purposes not for academic purposes. Students also feel that Facebook is not a proper platform to conduct lectures nor disseminate course related content and materials.

Facebook is indeed essential for students to communicate with their peers, family, classmates, and instructors. However, it is not really that helpful when it is used as a learning management system. There could be many underlying reasons as to why it is not helpful. Further exploratory research about the lacking features of Facebook that could improve work-related use of students and collaboration between students can be done. And the recommended features can be integrated with the messaging and availability feature of Facebook to create an institutionalized learning management system for instructors and students to use. The researcher found out that the internet penetration level of the BSTHRM students is already high. This suggests that an online learning management system can be easily accessed by students.

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