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A Comparison of English Reading Comprehension Skill by Using Graphic Organizer and Traditional Teaching Model of Grade 10 of Watraikhing Wittaya School

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ABSTRACT

The purposes of this study were 1) to compare of English reading comprehension skill by using graphic organizer and traditional teaching model for grade 10 students of Watraikhing Wittaya School and 2) to study student's opinion on using graphic organizer to develop English reading comprehension skill. The sample groups were divided into 2 groups include 30 students (class 9) of experimental group and 30 students (class 6) of control group. The instruments used in this study were 6 lesson plans, 30 items of English reading comprehension post-test and questionnaires on using graphic organizer to develop English reading comprehension. The data statically analyzed were average, standard deviation and t-test independent.

The findings of this study revealed that:

1.The students' English reading comprehension skill by using graphic organizer was higher than using traditional teaching model with statistical significance at .05 level.

2.The student's opinion on using graphic organizer to develop English reading comprehension skill were at a high level of satisfaction with the mean of 3.80

KEYWORD : reading comprehension, graphic organizer, traditional teaching model

1 INTRODUCTION

English language becomes the important thing of people daily life because it us used as international language. Moreover, English language is used to communicate with other in direct way and indirect way for example, interpersonal communication, listening and reading from various media, reading from passages, writing for communication. So English language is the language that people around the world concern.

English reading skill is the one of important skill for people. [1] Aungwattanakul S. (2006) said that reading can increase the consciousness, develop reader's thinking and knowledge, and the truth. It can adapt with the education and development so the person who have a reading ability can acquire widely information. And that person can understand anything better. Reading is the important skill for the students especially high school students because reading skill is the skill of knowledge acquisition. Therefore English reading skill will become a tool to improve the student's knowledge. The English reading skill for high school students have to be concerned. [2] Mongkolchaiyasit J. (2005) said that reading skill for media such as news or passages in English is the problem for high school students because they do not understand that passages completely. [3] Srisongmuang C. (2003) said that Thai high school students are concerned about their reading skills which are passage misunderstanding, reading for main idea, reading for analysis, and reading for synthesis.

From the observation in grade 10 students at Watraikhing Wittaya School, Nakhon Pathom province, Thailand. It is found that the students have had problem in English reading skills including reading for main idea, reading for analysis, reading for synthesis especially reading comprehension. The reading comprehension skill is the obvious problem for grade 10 students because they did not understand passages. Thus they will not have the other reading skill enough.

After consider the cause of the English reading comprehension skill problem, it is shown that learning method and learning technique is not support the students to analyse and to synthesize passages. As a result, they did not understand the content completely. Students did not rearranges, separate the text, understand the relative, draft the overview, and detail the text information. Moreover, the English comprehension skill problem is from in appreciated teacher's teaching method that attend to the content and grammatical more than skills practicing. Then students may bored or ignorant English lessons. Thus teacher has to use the interesting method to activate students.

A graphic organizer is a chart or diagram which represents a relationship of the content in the passage and it sequences of a series of boxes connected by arrows or lines that shows the event of one box leading to the event of another box [4] Hibbard, K. M., & Wagner, E. A. (2003). Graphic organizers are representations, pictures or models used for processing textual information. The graphic organizers facilitate the users to understand of knowledge [5] Ciascai, L. (2009). [6] Moolkum S.(2004) supports that there are thirteen types which can use in learning activities comfortably and usefully. There are Concept Map, Mind Mapping, Web Diagram (Spider Map), Tree Structure, Venn Diagram, Time Ladder Map, Flowchart Diagram, Matrix Diagram, Fishbone Map, Interval(Time Line), Order Graph(Event Chain), and Classification Map. In this study, the Concept Map. The Interval Graph (Time Line), and Order Graph (Event Chain) were used. The learning process include 3 process which are pre-reading, while-reading, and post-reading. Pre-reading which describes the usage of each graphic organizer and demonstrate the usage of that graphic organizer. The second is while-reading which students read and understand the passage and then discuss with their group. The last one is post-rading which students brainstorm their read passage and the important information of that passage. Then they have to create their own graphic organizer. After that they have to answer about passage by using the information from their graphic organizer.

Therefore, this study is going to study about a comparison of English reading comprehension skill by using graphic organizer and traditional teaching model for grade 10 students of Watraikhing Wittaya School and to study student's opinion on using graphic organizer to develop English reading comprehension skill.

2 OBJECTIVES

1) To compare of English reading comprehension skill by using graphic organizer and traditional teaching model for grade 10 students of Watraikhing Wittaya School

2) To study student's opinion on using graphic organizer to develop English reading comprehension skill.

3 RESEARCH METHODOLOGY

3.1 Participants

The participants of this study were grade 10 students in the first semester, the academic year 2019 of Watraikhing Wittaya School in Sam Phran district, Nakhon Pathom province, Thailand

The sample groups were divided into 2 groups include 30 students (class 9) of experimental group and 30 students (class 6) of control group.

3.2 Research Instrument

1 Lesson plans

The lesson plans included 2 sections for 2 students groups. The first was English reading comprehension skill by using graphic organizer 6 lesson plans. And the other section was English reading comprehension skill by using traditional teaching model 6 lesson plans. The content of each lesson plan was from grade 10 student books which were New World 4, Eyes open 1 and Inspired. Using 1 lesson plan per 1 period (50 minutes) so they was used 6 periods per one student group.

2 Post test

The test included 30 items; 6 reading passages. The test was used as the assessment tool in posttest of English reading comprehension skill by using graphic organizer in experimental student group and English reading comprehension skill by using traditional teaching model in control student group. The passages were from grade 10 students books which were New World 4, Eyes open 1 and Inspired.

3 Questionnaire

The questionnaire consisted of 10 items; each of which has five scales of student's opinion toward the use of English reading comprehension skill by using graphic organizer. The questionnaire were consisted of 3 sections. The first section was about the reading content which included 3 questions. The second section was about learning management of graphic organizers teaching which included 5 questions. The third section was about utilization which included 2 questions.

4 DATA COLLECTION

4.1 Result of English reading comprehension skill by using graphic organizer and traditional teaching model

Collect the results of English reading comprehension skill by using graphic organizer and traditional teaching model after used 6 lesson plans in each student group. Collecting the reading skill by used posttest of English reading comprehension skill by using graphic organizer in experimental student group and English reading comprehension skill by using traditional teaching model in control student group of grade 10 students for 30 items.

4.2 Result of student's opinion on using graphic organizer to develop English reading comprehension skill

Collect the results of student's opinion on using graphic organizer to develop English reading comprehension skill after learning graphic organizer. Collect the result by used the 10 items questionnaire with the experimental group.

5 DATA ANALYSIS

The study was randomized posttest-only control group design. So there were 2 parts of the result to analyse; 1) a comparison of English reading comprehension skill by using graphic organizer and traditional teaching model 2) the study student's opinion on using graphic organizer to develop English reading comprehension skill.

Both quantitive and qualitive data were analysed as follow:

5.1 Quantitive Data

To compare the reading comprehension skill by using graphic organizer and traditional teaching model after the learning management by the posttest. The score were analyzed by mean ($\bar{x}$), standard deviation (S.D.) and t-test (independent)

5.2 Qualitive Data

To study student's opinion on using graphic organizer to develop English reading comprehension skill by the questionnaire. The questionnaire were analyzed by mean ($\bar{x}$) and standard deviation (S.D.)

6 RESULTS

Group	Score	N	$\bar{x}$	S.D.	t-test	sig
Traditional Teaching Model	30	30	14.03	3.46	8.944	.05*
Graphic Organizer	30	30	22.10	3.53		

*sig ≤ .05

Table 1 the result of English reading comprehension skill by using graphic organizer and traditional teaching model from posttest

From table1, the result of English reading comprehension skill by using graphic organizer and traditional teaching model from posttest shown that the mean ($\bar{x}$) of the experimental group was 22.10 and standard deviation (S.D.) was 3.53. The mean ($\bar{x}$) of the control group was 14.03 and standard deviation (S.D.) was 3.46. Therefore the students' English reading comprehension skill by using graphic organizer was higher than using traditional teaching model with statistical significance at .05 level.

statement	$\bar{x}$	S.D.	meaning
content part			
1.The passages are appropriate with the student's level.	3.67	0.70	extremely agree
2.The number of content in passages are appropriate with time.	3.53	0.72	extremely agree
3. The content in passages are various and interesting.	3.87	0.85	extremely agree
Average of content part	**3.69**	**0.76**	extremely agree
learning management part			
4.Graphic organizer able students to be more understand the passages.	4.03	0.80	extremely agree
5. After reading, graphic organizer able students to summarize the content in the passages.	3.73	0.63	extremely agree
6. Graphic organizer able students to understand the overview reading's passages.	3.77	0.67	extremely agree
7. Graphic organizer able the learning management to be more interesting.	3.80	0.88	extremely agree
8. Graphic organizer supports student's listening speaking reading and writing skills.	3.87	0.67	extremely agree
Average of learning management part	**3.84**	**0.73**	extremely agree
utilization part			
9. Graphic organizer is the utilization technique.	3.93	0.77	extremely agree
10.Students able to use Graphic organizer with other reading passages.	3.80	0.83	extremely agree
Average of utilization part	**3.87**	**0.80**	extremely agree
Average of all parts	**3.80**	**0.75**	extremely agree

Table 2 the result of the student's opinion on using graphic organizer to develop English reading comprehension skill.

From table2, the result of the student's opinion on using graphic organizer to develop English reading comprehension skill. The mean ($\bar{x}$) and standard deviation (S.D.) of all parts were $\bar{x}$ = 3.80 and S.D. = 0.75 the opinion was extremely agreed. The other parts from the most to the least were the utilization part $\bar{x}$ = 3.87 and S.D. = 0.80 the opinion was extremely agreed. The learning management part was $\bar{x}$ = 3.84 and S.D. = 0.73 the opinion was extremely agreed. And the content part was $\bar{x}$ = 3.69 and S.D. = 0.76 the opinion was extremely agreed.

7 DISCUSSION

According to the mean of the experimental and control group of the result of English reading comprehension skill by using graphic organizer $\bar{x}$ = 22.10 and S.D. = 3.53 and traditional teaching model $\bar{x}$ = 14.03 and S.D. = 3.46. The result of experimental group was higher than control group. It is consistent with the findings of [7] Öztürk* (2012) who studied the effects of graphic organizers on reading comprehension achievement of EFL learners. The study had experimental group and control group and the mean of experimental group ($\bar{x}$ = 18.89 and S.D. = 2.35) was higher than control group ($\bar{x}$ = 12.00 and S.D. = 4.30) It shown that graphic organizer could improve English reading skill of students.

The result of student's opinion on using graphic organizer to develop English reading comprehension skill were $\bar{x}$ = 3.80 and S.D. = 0.75 and the student's opinion was extremely agreed. Thus it is consistent of the findings of [8]Kunset P.(2017) who studied on a comparison of English reading comprehension skills and learning satisfaction of grade 12 students by using graphic organizer and traditional teaching model. The result of her study shown that the reading comprehension skill after learning by using graphic was higher than the reading comprehension skill after learning by traditional teaching model with statistical significance at .05 level.

8 CONCLUSION

Using graphic organizer helped students develop their English reading comprehension skill. Moreover, they extremely agreed that they appreciated using graphic organizer with English reading comprehension skill.

9 RECCOMENDATIONS

1. The content of reading passages should be appropriate to the student's level for the effective achievement.
2. The content of reading passages should be specify the type of graphic organizer.

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A Study of the Effect of Using Storytelling Technique with English Tales on the Achievement and Retention in Learning Vocabulary of Mathayomsuksa 1 Students

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ABSTRACT

The purpose of this study is to find out the effectiveness of storytelling technique with English tales in teaching vocabulary by comparing Mathayomsuksa 1 (Grade 7) students' English vocabulary ability before and after the implementation, as well as satisfaction in learning through the storytelling technique with English tales. The sample selected for this study was 43 Mathayomsuksa 1 students learning English 1 (E21101) of Kannasootsuksalai School Suphanburi in the first semester of the academic year 2019. In this one group pre-test post-test design study, the sample group was taught through storytelling technique with English tales for six 55-minute periods. The assessments were: (1) English Vocabulary Ability test with 30 multiple-choice questions developed by the researcher with a reliability of 0.7, (2) Learning Satisfaction Questionnaire created by the researcher with a reliability of 0.86. For data analysis, the dependent samples t-test, descriptive statistics for means, standard deviation, and percentage were conducted. The result of the study indicates that the English vocabulary ability before and after employing the new technique was significantly different at the level of .01, and the students' satisfaction after learning was higher than before.

KEYWORDS: Teaching Vocabulary, Storytelling Technique, English Tales, Vocabulary Development

1 INTRODUCTION

Technological advancement has been affecting communication nowadays. The connection becomes more efficient so that without any borders, people can quickly communicate in both domestic and international level. For this reason, all languages have played an important role in communication, especially the English language. It becomes an international language and a Lingua Franca. That means people are using English in various areas such as education, tourism, and business. It has been admitted that English is a part of everyday life, noticing from texts in books to conversations on television programs. Therefore, learning English is important to all students for living their lives effectively. Thailand has also realized its necessity and importance, so the Ministry of Education (2008) has set the basic education core curriculum B.E. 2551 (A.D. 2008) to focus students on the English language for communication, livelihood, and lifelong learning.

Learning English from vocabulary is the most appropriate because vocabulary is the basis of communication. It can be said that all phrases and sentences come from the vocabulary. Also, Sektalonir and Marwanto (2018:80) state that without vocabulary, language users can be confused, and not express their feeling in listening, speaking, reading, and writing. Moreover, vocabulary can give opportunities to users. For example, by communication, they will receive new knowledge through conversations, reading, or self-learning on the internet.

From the importance above, students who have problems in the vocabulary will communicate ineloquently. They will lack the effectiveness of four language skills, which can affect long-term learning in the future. Nevertheless, learning English has still emphasized reciting and teaching from the book, not using language in the real context. Consequently, students cannot remember vocabulary in long-term memory, which makes them unable to use vocabulary to communicate. Therefore, in the 21st century, English teachers must focus more on letting students practice using vocabulary in a real situation so that they can develop their vocabulary skills.

In the Thai educational context, lacking knowledge of vocabulary seems to be the problem that most students experience. According to the Ministry of Education, there are 3,193 standardized words that students at the middle school level should know (Mongkol, 2012). Moreover, Pongphop (2009) states that most students do not know all words, and reciting 5-10 words per day is not the best way to develop a students' vocabulary. Admittedly, the main cause of this problem are teachers' teaching styles which are: (Praman, 2018) (1) Emphasizing reciting: Teachers frequently focus on the number of words that students should remember, but rarely practice English using in the real situation. Consequently, students do not retain the information. (2) Teaching based on textbooks: There are words and sentence forms on the books, which limits the various meanings and contexts of different words. (3) Students: The students are not confident when they have to speak English. As a consequence, they are always shy because they lack vocabulary. These are the primary reasons why Thai students cannot remember English words.

From the problem above, the present researcher is interested in employing the storytelling technique with English tales to develop students' vocabulary following Strand 1: Language for Communication. The storytelling technique relies upon creatively using the spoken and written language to narrate stories. Hassan and Mahkameh (2013:104-105) state that the storytelling technique is appropriate to children or students whose English is at a lower level. While teachers are telling the stories, students must comprehend the intricacies of both language and plot including characters- students have to connect all of these. Therefore, the student is practicing four language skills: listening, speaking, reading, and writing. Also, they will use their critical thinking abilities by guessing the vocabulary and story, and connecting their background knowledge to the story. Elaf (2012:21-22) states that students will be better at vocabulary memorization because when teachers tell stories, they use some techniques such as facial expressions, gestures, tones, and questioning. These techniques stimulate students and cause their attention on the meaning of words. Moreover, due to the techniques that teachers employ, students can remember vocabulary more effectively (Kate, 2010). For using English tales, it has been confirmed that they teach morals and give some instructions to children. In addition, they are always interesting to the readers because they create their imaginations. That means the content influences students' interest and motivation. Additionally, (Hassan and Mahkameh, 2013:104-105) refer to (Dolakova, 2008) who states that English tales consist of various contents that present living in real life. For this reason, they are useful to students to guess vocabulary, connect their background knowledge and imitate language using in the stories. Therefore, apart from better vocabulary memorization, students will better learn vocabulary by using it in the real context.

In conclusion, the researcher expects that the storytelling techniques with English tales as an aid in developing vocabulary ability in Mathayomsuksa 1 students at Kannasootsuksalai School Suphanburi, Suphanburi. This technique will help students improve their word-memorizations as a consequence enhances their effectiveness at communication in the four above-mentioned areas. However, the researcher aims that the research would be useful for vocabulary teaching in the future.

2 OBJECTIVE

The objectives of the study were: (1) to identify Mathayomsuksa 1 students' English vocabulary ability before and after learning through storytelling technique with English tales, (2) to compare Mathayomsuksa 1 students' English vocabulary ability before and after learning through storytelling technique with English tales, (3) to study Mathayomsuksa 1 students' satisfaction on learning after learning through storytelling technique with English tales.

3 HYPOTHESIS

The hypotheses of the research were: (1) the students' English vocabulary ability after the implementation was not as same as before the implementation, (2) the students' English vocabulary ability after the implementation was higher than before the implementation, (3) the students' satisfaction on learning after the implementation was higher than before the implementation.

4 POPULATION AND SAMPLE

4.1 Population

The population of this research was 520 Mathayomsuksa 1 students at Kannasootsuksalai School Suphanburi, Mueang, Suphanburi, Thailand.

4.2 Sample

The participants of this research were 43 Mathayomsuksa 1 students at Kannasootsuksalai School Suphanburi, Mueang, Suphanburi, Thailand. All the participants were studying English 1 (E21101) in the first semester of the academic year 2019. They were selected purposively based on their poor scores in the first unit test in the first semester.

5 VARIABLE SCOPE

5.1 Independent Variable

Storytelling technique with English tales

5.2 Dependent Variable

Students' English vocabulary ability

6 CONTENT

There were 6 English tale lessons which were suitably adapted to English grade-level indicators and English 1 (E21101) by the researcher. In addition, the researcher created 6 English tales which were appropriately adapted to English 1 (E21101), and each tale was told in 1 period. The English tales were Helen

Keller, Pinocchio's Adventure, The Cat Family, Chuchu and The Angel, Emily is a forgetful girl, and The Poor Man Dream.

7 METHODOLOGY

In this one group pre-test post-test design study, the sample group was taught through storytelling technique with English tales for three weeks. There were two 55-minute periods in each week and six 55-minute periods in total.

7.1 Data Collection Tools

There were two data collection tools used in this research.

The first data collection tool was the English Vocabulary Ability test that the students completed before and after the implementation of the storytelling technique with English tales. For the pre-test, the students were required to answer thirty multiple-choice questions, each of which was worth one point. For the post-test, the students completed the same test. The test consists of four directions: (1) Choose the word that matches the picture, (2) Choose the correct answer, (3) Complete the passage, (4) Complete the dialogue. The test was approved by three English teachers. Their collective experience in teaching English exceeds 10 years. The Index of Item-Objective Congruence (IOC) of the test was 1.00, and the reliability of it calculated by the Kuder-Richardson Method was 0.7.

The second data collection tool was Learning Satisfaction Questionnaire. After the implementation of the storytelling technique with English tales, the students completed the Questionnaire with ten questions. The questions consisted of five parts which are: (1) Content, (2) Activity, (3) Instructional Media, (4) Assessment and Evaluation, and (5) Applying Knowledge. The questionnaire was also evaluated by the three English teachers. The Content Validity Index (CVI) of the questionnaire was 3.33, and the reliability of it calculated by Cronbach's Alpha Method was 0.86.

7.2 Procedures

First, the researcher selected 43 Mathayomsuksa 1 students, who were studying English 1 (E21101) in the first semester of the academic year 2019 at Kannasootsuksalai School Suphanburi.

Second, prior to the implementation, the students were required to complete the English Vocabulary Ability test with thirty multiple-choice questions developed by the researcher.

Third, the researcher taught English vocabulary to the students by using the storytelling technique with English tales in six 55-minute periods in three weeks.

Fourth, the students were asked to complete the same test. Also, the students were told to complete the Learning Satisfaction Questionnaire.

Fifth, the test and the questionnaire were collected and checked by the researcher. For the test, the final scores from the pre-test and the post-test were prepared to be analysed by using dependent samples t-test and percentage. For the questionnaire, the scores were prepared to be analysed by using descriptive statistics for means, and standard deviation.

Last, the results from data analysis were summarized and discussed.

7.3 Data Analysis

Every score from the pre-test, post-test and questionnaire were analysed by using descriptive statistics for means, and standard deviation. For comparing the average scores of the pre-test and post-test, the dependent samples t-test and percentage were calculated.

8 RESULTS

The purpose of this study was to study Mathayomsuksa 1 students' English vocabulary ability before and after learning through the storytelling technique with English tales. The data from the pre-tests and post-tests were analyzed to determine whether the pre-test and post-test scores on the participants' English vocabulary ability were different or not.

Table 1 The Results of Percentage Comparing the Pre-Test and Post-Test of The Participants

No.	Pre-test score	Post-test score	The result of increased score explained in percentage
1	13	24	36.67
2	10	21	36.67
3	9	26	56.67
4	10	21	36.67
5	12	17	16.67
6	11	15	13.33
7	12	17	16.67
8	12	25	43.33
9	19	26	23.33
10	11	19	26.67
11	21	28	23.33
12	12	18	20
13	12	19	23.33
14	9	19	33.33
15	4	24	66.67
16	15	19	13.33
17	13	18	16.67
18	5	16	36.67
19	13	29	53.33
20	11	26	50
21	5	17	40
22	8	24	53.33
23	7	22	50
24	10	29	63.33
25	14	26	40
26	28	30	6.67
27	8	26	60
28	14	26	40
29	6	24	60
30	15	26	36.67
31	16	26	33.33
32	12	26	46.67
33	13	29	53.33
34	10	20	33.33
35	8	22	46.67
36	8	20	40
37	9	25	53.33
38	18	28	33.33
39	13	30	56.67
40	12	23	36.67
41	17	26	30
42	12	27	50
43	19	28	30

From Table 1, the data shows that the post-test score was higher than the pre-test score. There is also the result of increased score explained in percentage (% = 6.67-66.67). Therefore, it can be concluded that the students' English vocabulary ability before and after learning was different.

Table 2 The Results of t-test Dependent samples Comparing the Pre-Test and Post-Test of The Participants

Result		N	Total Score	$\bar{X}$	S.D.	t	Sig.
The result of the students' English vocabulary ability by using storytelling technique with English tales	Pre-test	43	30	12.00	4.57	16.54	**.00
	Post-test	43	30	23.42	4.24		

**p ≤0.01

To compare Mathayomsuksa 1 students' English vocabulary ability before and after learning, the data were analyzed to answer whether the scores on the English Vocabulary Ability test were different significantly. From Table 2, the data shows that the average score of the pre-test is 12.00 from a total of 30 and the average score of the post-test is 23.42. The result of dependent samples t-test shows that there is a statistically significant difference between the pre-test and post-test average scores of the participants ($t = 16.54$; $p < 0.05$). To conclude, the storytelling technique with English tales had a significant effect on the participants' English vocabulary ability at .01 level.

Table 3 The Results of Learning Satisfaction

Item	List	$\bar{X}$	S.D.	Meaning
Content				
1	The content is clear and easy to understand.	4.65	0.48	Most
2	The content is appropriate to students.	4.74	0.44	Most
Activity				
3	The activity is appropriate to the content.	4.79	0.47	Most
4	The activity encourages students to improve their vocabulary abilities.	4.60	0.58	Most
Instructional Media				
5	The instructional media is colorful and not fragile.	4.23	0.75	More
6	The instructional media encourages students understand and remember the content easier.	4.44	0.63	More
Assessment and Evaluation				
7	The test is relevant to the content.	4.65	0.48	Most
8	The language in the test is clear and appropriate to students' level.	4.70	0.60	Most
Applying Knowledge				
9	After learning, students have confident in using vocabulary to communicate.	4.53	0.70	Most
10	After learning, students can apply their knowledge in their daily lives.	4.58	0.70	Most

To describe how Mathayomsuksa 1 students' satisfaction in learning is, the data from the questionnaire were analyzed to explain the participants' satisfaction after learning English vocabulary through the storytelling technique with English tales. From Table 3, the data shows that there were the first three lists that students were satisfied the most. (1) Activity: The activity is appropriate to the content ($\bar{X}$= 4.79, S.D. = 0.47). (2) Content: The content is appropriate to students ($\bar{X}$= 4.74, S.D. = 0.44). (3) Assessment and Evaluation: The language in the test is clear and appropriate to students' level ($\bar{X}$= 4.70, S.D. = 0.60). In conclusion, the data shows that most of the students are most satisfied with the storytelling technique with English tales. Therefore, it is confirmed that using the storytelling technique with English tales in learning can improve students' vocabulary ability. The students will remember vocabulary better, know the meaning of the vocabulary and use the vocabulary in various contexts appropriately.

9 DISCUSSION

The research aimed to study the development of Mathayomsuksa 1 students' English vocabulary ability before and after learning through the storytelling technique with English tales and in this section, each research hypothesis will be discussed.

1. To study and compare Mathayomsuksa 1 students' English vocabulary ability before and after learning through storytelling technique with English tales

It was found that the students' English vocabulary ability before and after the implementation was different significantly at .01, which relevant to the research hypothesis. Moreover, the students' English vocabulary ability after the implementation was higher than before the implementation. The data states that the average score of the pre-test is 12.00 from a total of 30 and the average score of the post-test is 23.42.

Consequently, the importance which may affect the development of students' English vocabulary ability are discussed here:

First, the storytelling technique is a learning management tool that combines storytelling with teaching. While the teacher is telling the story, he/she also uses pictures and gestures to explain the story. Those techniques help students to memorize and acquire the language, which is relevant to the argument about the storytelling technique with English tales made by Tharita and Kamol (2018: 280) who said that seeing those pictures and letters, and hearing the sounds that the teacher makes can increase students' understanding of the lesson because they motivate students to think and comprehend what they see or hear. For all that, the storytelling technique is an important teaching tool because it can stimulate student's attention which makes them remember the lesson easier.

Second, there are 3 steps when it comes to the storytelling technique with English tales: (1) Pre-storytelling, (2) While-storytelling, and (3) Post-storytelling. For the pre-storytelling, the teacher explains the background of the story and teaches the students vocabulary. In this step, the teacher must make sure that students have the background knowledge and are ready for the class. For the while-storytelling, the teacher uses some storytelling techniques to teach the students vocabulary. For the post-storytelling, the teacher reviews the lesson and the vocabulary with the students. These steps are relevant to the statement about the storytelling technique with English tales made by Suphada (2017) who said that before telling the story, the teacher must talk with the students about the story and the vocabulary so that the students will have background knowledge before learning. Moreover, she states that preparation before learning is important for the students who don't have much background knowledge because it makes students understand the story and the lesson more.

Third, for the while-storytelling technique, the teacher is described as the main organizer. According to the Ministry of Education (2015: 9-14), it is said that the teacher must use some techniques for telling the story such as correct pronunciation, appropriate voice, gestures, eye-contact, understanding the characters in the story, rhythm, intonation, and stress. These techniques can stimulate students' attention, make students feel relax and fun. Moreover, these make students can remember the lesson or the vocabulary from the story. The statement is also related to Thorndike's theory, the law of effect which means that when students are satisfied with learning, they will be interested in the lesson and want to learn more (Mantara, 2011).

Forth, for teaching vocabulary, emphasizing and reviewing the vocabulary is the most important. It means that students must learn the same vocabulary at least 1-2 periods to remember the vocabulary better. The statement is relevant to Thorndike's theory, the law of exercise which argues that when students are learning something many times, it makes them acquire the knowledge easier. (Mantara, 2011) Moreover, it is also relevant to Two – Process Theory of Memory [Samnao (2004) referred to Atkinson and Shiffrin (1997)]. The theory stated that

> "The information is detected by the sense organs and enters the sensory memory. Then, the information from the short-term memory is transferred to the long-term memory only if that information is repeated. If repetition does not occur, then information is forgotten, and lost from short term memory through the processes of displacement or decay."

To conclude, the storytelling technique with English tales is learning management that creates a positive classroom atmosphere. While listening to the teacher, the attention, thinking process, and learning acquisition were built. Moreover, reviewing the lesson to the students helps students improve their remembering skills.

2. To study Mathayomsuksa 1 students' satisfaction on learning before and after learning through storytelling technique with English tales

It was found that most of the students are most satisfied by the storytelling technique with English tales ($\bar{X}$= 4.59), which related with the research hypothesis. Consequently, the potential points which may affect the students' satisfaction on learning are discussed here:

The storytelling technique is the learning management that highly emphasizes on the students and lesson. It is said that the content must be appropriate to the students and the activity must be appropriate to the content as well. According to Language Learning and Teaching Unit (2015: 9-14), the researcher as a teacher has carefully prepared for teaching. To illustrate, the teacher created the lesson plans that were suitably adapted to students' English level and English learning context in the class. (The example lesson plan is at the appendix.)

In conclusion, the students are satisfied with learning because the storytelling technique with English tales is the teaching technique that focuses more on the students and the lesson.

10 RECOMMENDATION

10.1 Suggestions for teaching vocabulary class

First, for learning through the storytelling technique with English tales, the teacher is the most important part of the teaching. Before teaching, the teacher should prepare himself/herself for the storytelling and the lesson plan. Therefore, the learning process will be on the correct steps.

Second, instructional media is also important. Before teaching, the teacher should learn how to use the instructional media or check the media that it's safe and can be used. Therefore, students can use it without any danger.

Third, for telling the story, the researcher created Storytelling notes. (See more at the appendix.) It will be more helpful for the teacher because it makes the teacher knows the gestures that he/she is going to use in teaching. Additionally, he/she will know which sentence he/she is going to use this gesture. This makes storytelling more natural.

Fourth, the story should be appropriate to the students' English level. It should be interesting, similar to the students' background knowledge and related to the Basic Education Core Curriculum.

Fifth, the activity should be appropriate to the story or the content. It should enhance students' vocabulary ability and review students' vocabulary. Moreover, the classroom's size and the number of students should be appropriate. The teacher should consider them carefully, so that students can do the activity smoothly.

Sixth, the students' vocabulary skill and the students' attitude towards learning should be recorded every period. Therefore, we will know that the students' vocabulary skill and the students' attitude towards learning are relevant to the learning objective in the lesson plans or not. (See the records more at the appendix.)

Last, more time is needed since it takes much time to teach students in the while-storytelling step. It should have at least 2 periods, so that all activities are done completely.

10.2 Suggestions for further research

First, the research can be adapted to other subjects such as Thai, Japanese and Korean for teaching vocabulary through the storytelling technique with English tales.

Second, it should have more time for researching because it needs more time to develop vocabulary ability.

11 ACKNOWLEDGEMENTS AND LEGAL RESPONSIBILITY

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13 APPHENDIX

Learning Vocabulary through Storytelling Technique with English Tales

Lesson Plan 3: The Cat Family

Course: English 1 **Foreign Language Department** **Semester:** 1/2019

Course Code: E21101 **Class level:** Mathayomsuksa 1 **Time:** 1 period

Teacher: Miss Panisa Kheharak

Standard 1: Language for Communication

Standard FL1.1: Understanding and ability in interpreting what has been heard and read from various types of media, and ability to express opinions with reasons

Grade-level Indicators

1. Act in compliance with orders, requests, instructions and simple explanations heard and read.

2. Accurately read aloud paragraphs, tales and short poems by observing the principles of reading.

3. Match the sentences and the paragraphs with the non-text information read.

Concept

For learning English, the ability of communication is the most important. When we communicate, it can be seen that all phrases and sentences that we speak come from the vocabulary. Therefore, vocabulary is the basis of communication, and learning English from vocabulary is the most appropriate. Students should start learning form the vocabulary so that they can understand all English messages that people convey.

In this lesson plan, 'The Cat Family' was suitably created and adapted to English grade-level indicators and English 1 (E21101). The English tale consists of everyday English conversations and English words for stationery. In learning process, the teacher will teach vocabulary through the storytelling technique. Therefore, students will improve their vocabulary skill. They will remember more words for stationery, know more their meanings and be able to use the everyday English conversations in this lesson.

Learning Objective (KPA)

1. **Knowledge**: Students can remember the words form 'The Cat Family' and will be able to tell their meanings correctly.
2. **Process**: Students can use the words from 'The Cat Family' to communicate correctly.
3. **Attitude**: Students actively participate in all activities and talk with a positive attitude. Moreover, students have responsibility on their tasks.

Language Component

1. The Cat Family English tale (See more at the appendix.)
2. English words for stationery:

dictionary (n.)	school bag (n.)	stapler (n.)
calculator (n.)	textbook (n.)	paper (n.)
computer (n.)	letter (n.)	box (n.)

Learners' Key Competencies

1. Communication Capacity
2. Thinking Capacity

Desired Characteristics

1. Avidity for learning
2. Dedication and commitment to work

Learning Task

1. 'True or False!' Activity

Steps of Teaching

Pre-storytelling (10 minutes)

1. The teacher greets students.
2. The teacher introduces things such as dictionary, school bag, stapler, calculator, textbook, paper, computer, letter, and box into the classroom. Then, the teacher teaches the students how to pronounce the words and lets the students speak after him/ her. After that, the teacher let students match the words and the pictures on the board.
3. The teacher introduces the characters in 'The Cat Family' by showing the pictures of them. The teacher can ask students more about these characters. For example: What does 'postman' mean?
4. The teacher reviews 'Demonstrative pronouns' and 'Possessive Adjectives' to the students. For example: the teacher says 'this' or 'my' in English, and lets students says 'this' or 'my' in Thai.
5. The teacher activates students to talk about the story. The story is about a birthday party. So, the teacher can ask some questions about the party. For example: Have you ever been to a birthday party? To stimulate students' attention, the teacher can show more about the birthday party picture.

While-storytelling (30 minutes)

1. The teacher tells the story. While telling the story, the teacher uses the storytelling technique to make students understand the story more and get the students' attention.
2. The teacher divides students into 4 groups and give 'Storytelling Note' (See more at the appendix) to them. The teacher asks students to do the role-play from the story, and says the dialogue after the teacher. The teacher should mention that all groups have to do only their parts, not all the story. The first group will do 'Baby cat' part. The second group will do 'Daddy cat' part. The third group will do 'Mummy cat' part. Last, the fourth group will do 'Brother cat' part. For the teacher, he/ she will do 'The Postman' part.

Post-storytelling (15 minutes)

1. The teacher lets students do 'True or false!' activity. The teacher gives 'True' cards and 'False' cards to all students. 1 student will get 1 'True' card and 1 'False' card. Then, the teacher explains the directions to the students.

The directions

1. The teacher shows the picture and say the sentence. For example: This is my calculator.
2. If the students think that the teacher says the correct sentence, show the 'True' card. If they think that the teacher is wrong, show the 'False' card.
3. The teacher cuts students who are wrong until there is the winner.

Learning Material

1. 'The Cat Family' content
2. Glove puppets
3. 'The Postman' picture
4. 'The Birthday Party' picture
5. Boxes in the story
6. Cakes in the story
7. 'True' and 'False' card
8. 'Stationery' pictures
9. The Storytelling Note
10. Scenes in the story
11. 'Cake' pictures

Measuring and Assessment

Learning Objective	Assessment	Assessment Tools	Criteria	Assessor
Knowledge				
Students can remember the words form 'The Cat Family' and will be able to tell their meanings correctly.	Doing 'True or False!' activity	Students' Vocabulary Skill Record	Eighty percent of students can remember the words form 'The Cat Family' and will be able to tell their meanings correctly.	Teacher
Process				
Students can use the words from 'The Cat Family' to communicate correctly.	Doing 'True or False!' activity	Students' Vocabulary Skill Record	Eighty percent of students can remember the words form 'The Cat Family' and will be able to tell their meanings correctly.	Teacher
Attitude				
- Students actively participate in all activities and talk with a positive attitude. - Students have	Observation	Students' Desired Characteristic Record	Eighty percent of students behave appropriately.	Teacher

responsibility on their tasks.				

Teaching Record

1. Learning Outcomes

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2. Problems

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3. Suggestions

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(Miss Panisa Kheharak)

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Appendix

The Storytelling Note: The Cat Family

Content	Gestures
This is a story about Baby cat and her family.	Show the 'Baby Cat' glove puppet.
In her family, there are Daddy cat, Mummy cat, brother cat and her.	Point at glove puppets.
"Meow meow. I'm Baby cat. Today is my birthday party."	Say "Meow meow" and smile. Then, move the 'Baby Cat' glove puppet in your hands.
"Meow meow. I'm very happy. You all have a party for me." Walk walk walk. Baby cat walks and sits on the couch.	Move your fingers like you're walking. Then, sit on the chair.
"These are your presents." Baby cat says. Baby cat is happy that everyone has a party for her. So, she prepares gifts for her family.	Open your hands out of your body and smile.
"This is his stapler."	Pick the stapler and point at the 'Daddy Cat' glove puppet.
"That is her calculator."	Pick the calculator and point at the 'Mummy Cat' glove puppet.
"These are his dictionaries and his school bags."	Pick dictionaries and school bags. Then, point at the 'Brother Cat' glove puppet.
"Also, those are his textbooks and his pieces of	Point at textbooks and pieces of papers." papers. Then, point at the 'Brother cat' glove puppet.
"You're very kind." Brother cat says.	Wear the 'Brother Cat' glove puppet, move it and smile.
"We also have a present for you." Daddy cat and Mummy cat say.	Wear the 'Daddy Cat' glove puppet and the 'Mummy Cat' glove puppet, move them.
"This is your computer." They say.	Open your hands at the computer.
"Oh, thank you." Baby cat says.	Wear the 'Baby Cat' glove puppet, move it and smile.

"I'm hungry now." She says.	Put your hands on your belly.
Suddenly, the postman comes to their house.	Point at 'The Postman' picture.
"These are their letters." The postman says to himself.	Pick the letters up. Show them to the students.

Content	**Gestures**
Knock knock knock. The post man knocks the door.	Close your hand and act like you're knocking the door.
"Hello." Mommy cat opens the door and says.	Show the 'Mummy Cat' glove puppet.
"Hello, these are your letters." The postman says.	Pick the letters and reach your hand to the front.
"Oh! Thank you. Today, we're having a party. Maybe You can join us. Meow meow." Baby cat is really kind.	Show the 'Mummy Cat' glove puppet and smile.
"Thank you." Walk walk walk. The postman is happy. He walks into the house.	Smile and walk around the room.
"Wow! What're those?" He's very surprised!	Move your hand to touch your mouth. Then, make a surprised face.
"Those are our boxes!" Brother cat says.	Wear the 'Brother Cat' glove puppet, and point to the boxes.
"I know, but what're those?" The postman asks again.	Make a curious face.
"You mean inside those boxes? Those are our cakes." Baby cat says.	Make a curious face. Open the boxes, pick 'Cake' pictures from the boxes and show them to the students.
"There are a lot of cakes. We cannot eat them. Can you help us?" Baby cat smiles and says.	Open your hands out, shake your head, and smile.
"It's my pleasure." The postman is very happy. He thinks that Baby cat is really kind!	Make a big smile and thumbs up!

Glove puppets

Baby cat Mummy cat Brother cat Daddy cat

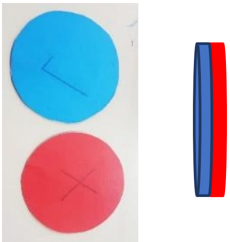
'The Postman' picture

'The Birthday Party' picture

Boxes in the story

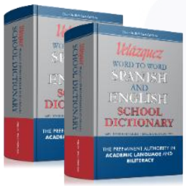
Cakes in the story

'True' and 'False' card



‘Stationary’ in the story

dictionaries

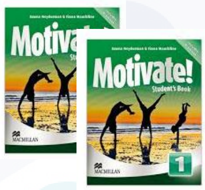


school bags

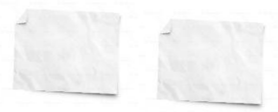
stapler

calculator

textbooks



pieces of papers



computer

letter

box

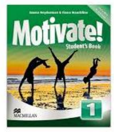
‘Stationary’ pictures (Front)


dictionary


school bag


stapler


calculator


textbook

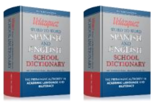

paper


computer


letter


box

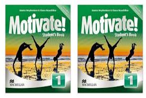
'Stationary' pictures (Back)


dictionaries


school bags


staplers


calculators


textbooks


pieces of papers

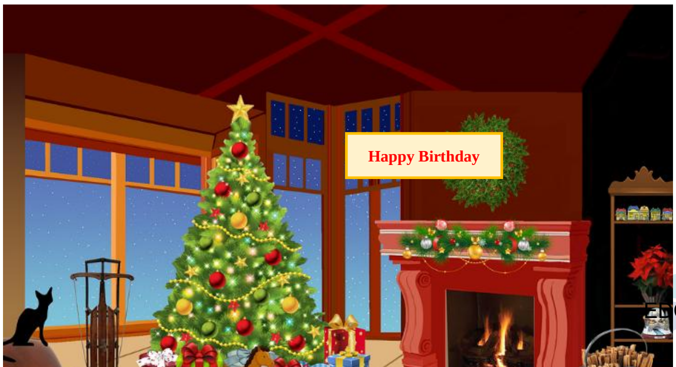

computers


letters


boxes

Scenes in the story

Birthday Party



In front of the house

'Cake' pictures

Students' Vocabulary Skill Record

No.	Points Name-Surname	Vocabulary Skill	Knowing the meaning of the words	Total Points
		5	5	10
1				
2				
3				
4				
5				
6				
7				
8				
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24				
25				

No.	Points Name-Surname	Vocabulary Skill	Knowing the meaning of the words	Total Points
		5	5	10
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

41				
42				
43				
44				
45				
21				
22				
23				
24				
25				

……………………………………...
(The Assessor's Name)
……/……………………../………..

Criteria

Items	Criteria					Importance	Total Points
	5	4	3	2	1		
Vocabulary Skill	Students can answer all questions and write all words of stationery correctly. (100%)	Students can answer the questions and write the words of stationery correctly. (75%)	Students can answer the questions and write the words of stationery correctly. (50%)	Students can answer the questions and write the words of stationery correctly. (25%)	Students can answer the questions and write the words of stationery correctly. (less than 25%)	1	5

Knowing the meaning of the words	Students can tell the meaning of the words of stationary correctly. (100%)	Students can tell the meaning of the words of stationary correctly. (75%)	Students can tell the meaning of the words of stationary correctly. (50%)	Students can tell the meaning of the words of stationary correctly. (25%)	Students can tell the meaning of the words of stationary correctly. (less than 25%)	1	5
Total Points						**2**	**10**

*% = the number of the words

Students' Desired Characteristic Record

No.	Points / Name-Surname	Avidity for learning	Dedication and commitment to work	Total Points
		4	**4**	**8**
1				
2				
3				
4				
5				
6				
7				
8				

9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
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25				

No.	**Points** **Name-Surname**	**Avidity for learning**	**Dedication and commitment to work**	**Total Points**
		4	**4**	**8**
26				
27				
28				
29				
30				
31				
32				
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(The Assessor's Name)

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Criteria

Items	**Criteria**				**Importance**	**Total Points**
	4	**3**	**2**	**1**		

Avidity for learning	Students actively participate in all activities and talk with a positive attitude. Their presence makes a positive impact on getting tasks done.	Students show interest in activities and participate, though sometimes passively rather than actively. Their presence generally makes a positive impact on getting tasks done.	Students' participations during class activities are usually minimal. They show little interest during class activities.	Students seldom put forth any effort during activities. Their presence in class has little or no impact on accomplishing tasks.	1	4
Dedication and commitment to work	Students are always on task during pair and group activities the entire time.	Students complete most group and pair activities in allotted time.	Students sometimes need to be reminded to stay on task during group or pair activities. OR they carelessly rush through activities.	Students give minimum effort during pair and group activities, and they are often off task.	1	4
Total Points					**2**	**8**

Adoption of Entrepreneurship Education in Technology Teacher Education: A Conceptual Framework

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ABSTRACT

Entrepreneurship education is a phenomenon gaining popularity and attention in developing countries around the world, as a measure for improving employability of graduates. This paper seeks to explore the practicability of espousing entrepreneurship education in Technology Teacher Education curriculum as a mechanism to enhance employability of preservice Technology teachers. In South African context, Technology teacher training refers to students specialising in technical subjects to teach at secondary school level.

The researcher is of the view that some of the Technology Education student teachers found themselves in the programme because they could not be admitted into the programmes of their choice due to matric (Grade 12) end of year results. Given the opportunity to explore other avenues with relevant skills, would be a breakthrough for them. The afore mentioned researcher's perception on Technology Education student teachers, emanates from registration period at the beginning of each year where most first-year students would just ask to enrol for any course that they may qualify to do based on their National Senior Certificate (NSC) results.

The study will employ case study design since it will be done at a university of technology (UoT) with second year, third year and fourth year Technology Education student teachers, as well as the lecturers in the department of Technology Education. Questionnaires with closed-ended and open-ended questions will be administered to abovementioned student teachers majoring in Technology Education. Face-to-face interviews will be done with respective lecturers and focus group interviews with student teachers as follow up from their questionnaire responses. The results obtained will be analysed using thematical approach.

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KEYWORDS: Employability, Entrepreneurship Education, Student Teachers, Technology Education,

1 INTRODUCTION

The purpose of this paper is to revise existing research in advocation for inclusion of Entrepreneurship Education within the curriculum of Technology Teacher Education programme. Teacher education in the institution comprises of various fields of specialisation clustered according to content subjects' relationships. In the education degree curriculum that has been faced out in 2018, the specialisation fields included B.Ed. (FET) in Computer Sciences whereby students would specialise with Information Technology and Computer Application Technology with an addition of either Mathematics or Accounting as majors for teaching at high school within the Further Education and Training Phase. The second education degree was B.Ed. (FET) in Economic and Management Sciences where students would choose to specialise in any two subjects of the enlisted: Economics, Accounting, Business Management, Mathematics or Computer Applications Technology. Thirdly, B.Ed. (FET) in Languages whereby English First Additional was compulsory and students would then choose a Home Language and a special language from Afrikaans, Sesotho, Setswana and isiXhosa. Followed by B.Ed. (FET) in Natural Sciences, and students would then specialise in any two of the following subjects: Mathematics, Biology, Physics or Chemistry. And lastly, B.Ed. (FET) Technology where students would choose to specialise in any two of the listed subjects, Technology, Mechanical Technology, Electrical Technology, Civil Technology, Graphics and Mathematics.

Currently, the teacher education degrees are inclusive of Senior Phase and FET Phase modules which students may specialise in. For the purpose of this study, the researcher will focus on Technology Teacher Education sector. In the current combined SP & FET education degrees, student teachers may have one Senior Phase specialisation subject and two FET subjects. In the case of Technology specialisation field, student teachers should take Technology Education as specialisation subject for Senior Phase and may then choose any two from among the following: Civil Technology, Mechanical Technology, Electrical Technology and Engineering Graphics and Design for FET specialisation. In all these subjects, student teachers are expected to acquire technical/technological skills that could be convertible into entrepreneurial adventures, should the student feel it's a route he or she wants to pursue.

SETTING A SCENE FOR CURRENT TECHNICAL (TECHNOLOGY) EDUCATION IN SOUTH AFRICAN BASIC EDUCATION

Technology education in South African schools starts from Senior Phase Band encompassing Grades 7-9, which could be referred to as junior high school in other countries. Technology education further continues in the Further Education and Training (FET) Phase including Grades 10-12, with more specialised technology (technical) subjects.

In the Senior Phase, the purpose of Technology education is recognising the need to produce engineers, technicians and artisans needed in modern society and the need to develop a technologically literate population for the modern world (DBE, 2011a). This policy document is silent on producing engineers, technicians and artisans with entrepreneurial qualities for the 21st century society. Although, problem-solving and creativity are also mentioned among the skills learners expected to acquire from technology education – it is not stimulating learners to strive solving societal problems and using their acquired creativity to make a living.

The researcher is of the opinion that the design process taught in technology education would be more meaningful to learners when coupled with entrepreneurial education, not as a monotonous routine but profitable one.

In the FET Phase, Civil Technology is said to focus on concepts and principles of Built environment with practical application (DBE, 2011b). The aim of this subject is to equip students with skills that make them ready for employment in construction or embark on entrepreneurial venture (DBE, 2011b), or further studies in civil engineering at the institutions of higher learning. While Mechanical Technology focuses on concepts and principles of mechanical environment, by imparting relevant skills for employment, starting new ventures or progressing to institutions of higher learning (DBE, 2011c). Electrical Technology teaches concepts and principles in electrical, electronic and digital systems with workshop skills training for work purposes, entrepreneurial intents or progression into higher learning institutions (DBE, 2011d). Lastly, Engineering Graphics and Design emphasises basic knowledge and drawing techniques and skills for various contexts such as mechanical technology, electrical technology and civil technology (DBE, 2011e). This policy speaks of interpreting and producing of drawings in the mentioned contexts without including entrepreneurial adventure.

Therefore, student teachers at the university of technology specialising in Technology Education are supposed to be trained and equipped to teach learners at secondary schools and give them expected practical skills with some entrepreneurial insight. Since the four policy documents indicated preparation of learners in becoming entrepreneurs or working with/under other entrepreneurs. Hence this paper is seeking to advocate for inclusion of entrepreneurship education within the curriculum of the degree for Technology teacher education at the UoT. Moreover, the third institutional graduate attribute states that, graduates should be entrepreneurially orientated to be able to seize and grasp opportunities which could be transformed into enterprise ideas. Meaning it is recommended that students should acquire business insight and skills. Furthermore, graduates are expected to display "depth of specialised disciplinary knowledge and skills and be able to apply them in different contexts to solve problems" (CUT, 2013). As the institution is aiming at gradually transforming teaching and learning environment to be fair and just in enhancing competency, care, responsibility and productive citizenship (CUT, 2016).

Conceptual framework

The paper is underpinned by responsive curriculum as a concept for aligning the current technology teacher education curriculum towards responding and reflecting the institutional policy requirements and employability demands of student teachers specialising in Technology Education. University of Pretoria (2016) alluded that curriculum needs to be transformed into a contributing factor toward sustainable future of the institution and the students – at the same time acknowledging local socio-economic context and embracing analytical citizenry among graduates (CHE, 2015). Therefore, a responsive education is intentionally developed to intervene and implement curriculum that liberates students' and lecturers' way of thinking, especially in teacher education sector. I think a teacher's purpose is not to reiterate the content knowledge but be innovative to application of the consumed knowledge for other profitable ventures, which might be outside the four walls of a classroom. Moreover, institutional policies are developed to respond to changing global and societal demands, and these policies need to be practiced through a reconstruction of responsive curriculum (Maphosa, Mudzielwana & Netshifhefhe, 2014). Ensor (2004) further contends that higher education division ought to accurately react to the global and local developments and expectations by embracing acceptable citizenry among university graduates. However, (Lange, 2017; Moll, 2004) argue that debates on transformation and curriculum responsiveness in South African context have not yet gone beyond the past societal inequalities and cultural diversity. Focus should be diverted into core characteristics of knowledge, skills and pedagogy to be incorporated in the curriculum - to respond to current regional and global economic needs, including youth employability demands and participation in the economy. In addition (Wedekind & Mutereko, 2016) argue that Technical Education should be responsive to evolving society and technologies influencing current economic direction locally and globally.

Therefore, this paper takes the lens of curriculum responsiveness to the questions of **world of work**, **entrepreneurial venturing** and **innovation** (Moll, 2004). Since Technology Teacher Education is for training prospective teachers to impart technical knowledge and skills at FET Phase in formal schooling under the Department of Basic Education (DBE). The paper will also investigate the responsiveness of Technical/Technology Education at school level to employability, self-employability and innovativeness of learners beyond Grade 12 after obtaining National Senior Certificate (NSC).

World of work

In simple terms, world of work could be defined as a place or industry where graduates and or learners are prepared by their respective institutions to be employed at as their role and manner of participation in the local and global economy. It is a general warrant given to various educational institutions to train students enrolled with them to become competent and employable to participate in the socio-economic space for the betterment of the country (Maringe & Osman, 2016). Technology Teacher Education students are therefore prepared to be knowledgeable, competent and skilled to offer Technology subjects from Senior Phase to Further Education and Training Phase. Thus, the anticipated workplace would be at primary schools, intermediate schools and secondary schools. However, the focus of this paper will be on the Technology teacher at FET Phase in the secondary school sector. In South African Basic Education, FET Phase comprises of 16 years to 19 years old learners. With relevant knowledge and skills at the end of secondary school career, some learners may opt to have start-ups in their communities to generate income and enhance their families' socio-economic status (Munishi, 2016). It is therefore crucial that Technology Education students graduates with knowledge, skills and values that would prompt them to continue learning and improving within their workplaces to benefit both prospective teachers and their learners at schools. Therefore, the employer who is the DBE needs to involve institutions of higher learning regarding planned curriculum adjustments well in advance in order to be able to supply the department with novice teachers possessing required knowledge and skills.

Furthermore, with knowledge and technical skills they expect to acquire at the UoT during their studies, the Technology Education students would also be in a better position diverge into entrepreneurial ventures on completion of their studies. This paper therefore advocates for inclusion of entrepreneurship education within the Technology Education programme. This would empower students to have knowledge and courage to start-up and develop entrepreneurial undertakings and also to have more options with their future choices.

Entrepreneurship Education and Entrepreneurial skills

Entrepreneurship a common phenomenon in most of the developing countries as an exercise to adapt to changing economic and societal needs of improving employment among youth. O'Connor (2012) reports that there is an influx among governments around the world for developing policies on entrepreneurship activity due to its economic benefits to the states. O'Connor (2012) further argued that, when it comes to supporting the influence or impact of Entrepreneurship Education appears to be a problematic phenomenon to interrogate. This could have been due to multi-facets nature of entrepreneurship definitions (O'Connor, 2012).

However, it seems some research done in Europe advocates that entrepreneurship education could bear good investment returns as time goes (Packham, Jones, Miller, Pickernell & Thomas, 2010) and that it should be adopted in higher education curriculum to enhance the intent and entrepreneurial mindset among the graduates. Moroz and Hindle (2012) allude that the complexity of entrepreneurship education is its dual nature of theory and practical – which the researcher is a relevant nature to Technology Education as it is dual as well. Thus, Technology Education student teachers already have an understanding that theory learnt should somehow be applied in real-world environment. Moreover, the researcher is of the opinion that all students, irrespective of their academic specialisations somehow somewhere in their lives they would need entrepreneurial competences to advance their careers at workplaces. Therefore, for the purpose of this paper, the broad definition by Lackéus (2015:9) will be adopted – "*Entrepreneurship is about personal development, creativity, self-reliance, initiative taking, action orientation and value creation*." Furthermore, to support the inclusion of Entrepreneurship Education in Technology Teacher Education, Lackéus (2015:18) give the following reasons; Entrepreneurship Education is "*relevant and important for creation of jobs, economic success, globalization, innovation and renewal are common but not so effective on a wider scale. Joy, engagement, creativity and societal challenges are less common but promising*."

Innovation

Innovation is a vastly used term in different settings such as economic, industrial and social environments. When a Technology Education student teacher decides to venture into enterprise with skills he or she acquired from the university, he/she is joining a pool of alike entrepreneurial start-ups. Within no time the student will realise that running a business is a highly competitive space. Thus, he or she will need to continually rethink on revamping the venture in terms of product modification to draw various clientele to the business and stay competitive with rival establishments. According to Zawawi, Wahab, Al-Mamun, Yaacob, Kumar, Samy and Fazal (2016), by working hard to develop uniqueness amongst the competitor businesses, it is being innovative to stay abreast with various customer needs and wants. Zawawi et al. (2016) further allude that innovation is a utensil for entrepreneurs to maximize and explore improvements for diversifying enterprise offerings. As a progressive and transformative measure for business concepts and vision rejuvenation. Thus, innovation is not only dependant on technological development, but improvements in enterprise practices to meet the needs of evolving consumers (United Nations, 2012).

In social settings such as schools and universities, the concept of innovative teaching practice is also widely quoted as current way of running classroom activities. Overlooking the teacher's or lecturer's comprehension of the concept, especially in this digital era where most teaching is expected to be done electronically/technologically. Pisanu (2014) is of the opinion that institutional pedagogical reform is a necessity to innovatively employ learning technologies for triggering learners' and teachers' innovative capabilities. Not just substituting traditional talk and chalk with talk and power point slides without learners' engagement and interaction with learning technologies to stimulate their inquisitiveness to build up on known knowledge.

Factories or industries invest on research findings to apply the new knowledge to develop initial inventions and blueprints for further research testing to come up with working prototypes – once the prototype is working and has market, investments or finances are sort after for production of the innovation (United Nations, 2012).

Conceptualized framework for adoption of Entrepreneurship Education in Technology Teacher Education

In figure 1, the researcher conceptualized a framework that shows how the inclusion of Entrepreneurship Education in Technology Teacher Education could enhance the quality of graduates in this department. By merging the competencies, skills, knowledge and values (CSKV) from Entrepreneurship Education and Technology Education, Technology student teachers could be proactive members of the society that are inclined to be innovative to solve problems and challenges within their surrounding areas.

Moreover, through the synthesis of the two spheres of CSKVs could also improve the entrepreneurial intent among the Technology student teachers to start own ventures as self-employment or extra source of income, for personal enhancement of socio-economic status.

Furthermore, at the place of work Technology student teachers may become valuable members of staff when combining these CSKVs for enhancing productivity and profit for the company.

As lifelong learners beyond their university studies, Technology Education students could acquire higher CSKVs to be more innovative in terms of appealing to evolving economic markets – with their entrepreneurial ventures or at their employment places.

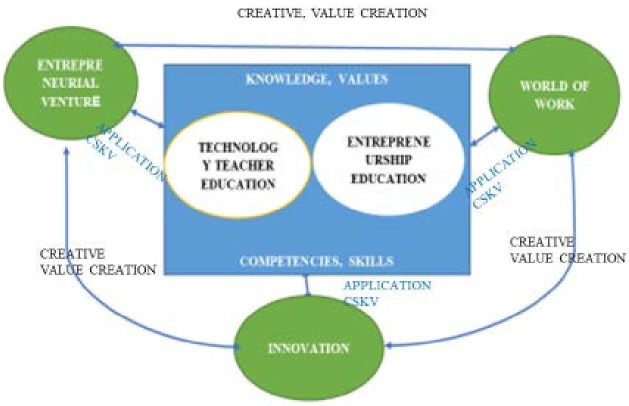

Figure 1: Framework for adoption of Entrepreneurship Education in Technology Teacher Education

Conclusions

Technology Education with its dual characteristic of theory and practice (application), seems to form a firm basis for the inclusion of Entrepreneurship Education within its curriculum. Thus, student teachers may be able to fuse the competencies, skills, knowledge and values (CSKV) obtained for Technology Education and those acquired from Entrepreneurship Education and apply this combination of CSKVs beyond classroom walls.

The researcher believes the accurate employment of the combined CSKVs outside classroom walls could be profitable to individual students or teams of students to be innovative in solving societal and economic challenges. The student teachers could further use these CSKVs to embark on entrepreneurial ventures. At workplaces, these students could become lifelong learners for the betterment of the employer or industry and enhancement of services and products.

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Benefits of Community Leader Program (CLP) Training For Improving Social Entrepreneurship of Civil Society Organizations (CSOs)

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ABSTRACT

Complementing the limitations of the government in meeting the needs and demands of society, it arises and develops in the midst of society, various civil society organizations (CSOs). Their existence and progress in providing public services and helping solution of community problems is very strategic. To support the organization and program of activities, they need funding. But on their journey, they encountered a budget shortage and reduced funding support from donors, especially foreign financial aid institutions. Overcoming this, the NAMA Foundation, through the NICE Foundation as the executor in Indonesia, does not merely provide financial support, but instead channels its assistance in the form of training programs for civil society organizations (CSOs) so as to build the independence and sustainability of the organization and its programs. One of them, in 2019, is a Community Leader Program Ttraining program for developing social entrepreneurship for 10 (ten) community social organizations (CSOs) in the provinces of DKI Jakarta, West Java and Banten. This research is an evaluation of the training program conducted by NICE Foundation Indonesia by using the Kirkpatrick 4 level training program evaluation model.

KEYWORDS: Civil Society Organizations (CSOs), Community Leader Program (CLP) Training, NAMA Foundation, Kirkpatrick 4 Level Evaluation Model

1 INTRODUCTION

The needs and demands of the society for services from the government are vast and very varied, whereas on one hand, the government has limitations to meet all these needs and demands [1]. This situation gave birth to the participation of civil society organizations (CSOs) in providing services to the community [2]. In Indonesian context, the number of these civil society organizations has doubled in the Reformation era, even triple now compared to the number that existed during the New Order era. The activities of civil society organizations in various activities are really needed by the community [3], such as handling orphans, helping to overcome disasters, teaching knowledge and skills for people who have no formal education, finding foster parents for school-age children who have no education costs, train volunteers to become leaders who are capable of driving development and empowerment in the midst of society, and so on.

In carrying out its organization and program activities, civil society organizations (CSOs) need funding support. In the beginning, most of them relied on funding obtained from donations, both individuals from community members who had excess money, fundraising from private companies in the form of CSR, and financial assistance from donor agencies from abroad. However, in its development to ensure their continuity in helping and facilitating the society, these civil society organizations (CSOs) can no longer rely solely on donations, let alone foreign aid funds. This is partly due to the lack of supporting institutions that can distribute funds to local community organizations. Flexible foreign funding sourced from international funds that are all available to CSOs to carry out their actions independently, now increasingly difficult to obtain [4] [5]

Responding to these obstacles and challenges, NAMA Foundation as one of the international CSOs provides support to foundations, associations, and communities engaged in social, education, humanitarian and religious preaching in Indonesia in the form of social entrepreneurship training called the Community Leader Program (CLP). The purpose of this training is to prepare local civil society organization (CSOs) personnel to gain knowledge and skills and have the ability to use the strategies, methods, and techniques of the training provided to develop their social entrepreneurship. Expected outputs are civil society organizations that are trained to take the initiative to pioneer, create, and even develop productive economic businesses intended to support their serving and empowering activities of the society.

2 RESEARCH METHODS

This study used a qualitative-exploratory approach in the format of evaluation of Community Leader Program (CLP) training organized by NICE Foundation as the implementer of NAMA Foundation program in Indonesia from October to December 2019. CLP training is given to 10 (ten) civil society organizations in DKI Jakarta, West Java and Banten provinces as the first phase of the pilot program within 5 (five) years period. Data was collected through interviews with trainees and trainers, direct observation, documentation and questionnaire during and after the training. The evaluation of the study used 4 (four) levels of Kirkpatrick evaluation model.

3 DISCUSSION AND ANALYSIS

Evaluation research on CLP was using Kirkpatrick's Four-Level Training Evaluation [6], which consists of levels 1-4. There are 4 (four) levels that show the sequence of ways to evaluate the program. Each level is important and has an impact on the next level. From one level to the next, the process becomes more difficult and requires time, but also provides more valuable information. Level 1 (reaction) is an evaluation that measures how the reactions of the participants involved in the training are usually expressed in terms of participant satisfaction. The second level is learning, which is the extent to which participants change their attitudes, improvise knowledge, and/or improve their skills as a result of attending a training program. The third level is behavior; knowing the extent to which behavior change has occurred due to trainees participating in training programs. And finally, level 4 (results), which is the final result that occurs because trainee participate in the training program.

3.1 Level 1 Evaluation (Reaction)

Evaluation at level 1 is measuring the reaction to the training followed in the form of participant satisfaction. Their level of satisfaction is shown in the picture below:

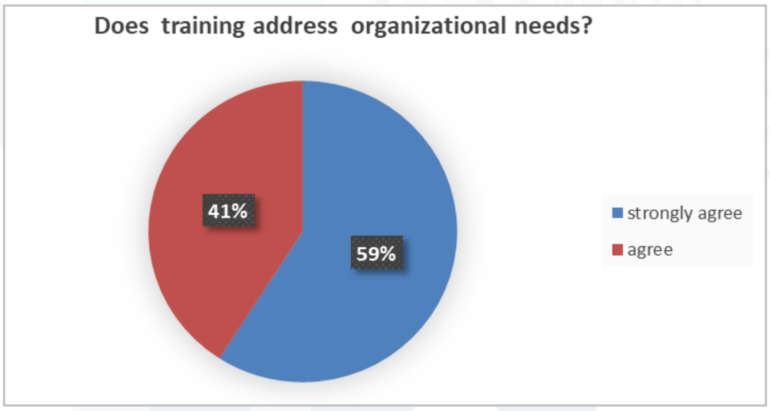

Figure 1 : Level 1 Evaluation: Suitability of Training with Organizational Needs

Figure 1 shows that the reaction of participants to the training that was held was very positive. This is proven by their answers, in general, stating that the training provided by NICE Foundation answers the needs of the participants' organizations, with 59% answering strongly agree and 41% answering agree. The response that training received meets the needs of their organization, which includes the content of the training material. Some view that CLP training is eye-opening, adding information, opening the mindset, training in seeing opportunities and introducing many traits and characters that drive or hinder performance in their organizations.

In the second phase of CLP training, participants received training materials on Brainstorming Pattern, Hearing Model, Stakeholder Analysis, Prototype, LFA, Value Proposition, analysis, and problem-solving, which were considered very important to them. In this second phase of training, the participants were more inspired by the existence of business planning materials in organizations where this material had never been obtained before. The reaction of the participants to the training even reached 100%, that the training answered the organization's needs. Based on interviews with participants, this CLP training teaches participants how to solve problems, build leadership insight and skills, even further encouraging social institutions to be supported into profit getting institutions to develop and contribute to all. In addition to increasing knowledge and insights about NGOs, this training also obtained methods or tools to solve problems and achieve organizational goals and objectives and build ideal leadership criteria.

The narrative comments delivered by the participants as mentioned above are the participants' positive reactions to the training, which reinforces that the training can be seen as effective and can be continued. Although participant recognition is still articulated verbally (level 1) and in the form of knowledge (cognitive), it has led to level 2 (learning) in Kirkpatrick's model. This means that theoretically, by increasing the knowledge and skills that have been obtained, it can deliver participants to be motivated to learn again and develop their ability to solve problems, especially in their organizations. Behavior change (level 3), of course, has not yet been seen and can be seen considering that they are still in the first stage following this CLP training activity.

The training also fulfills expectations of what participants want with their statements, strongly agree by 50% and agree by 50% as shown in figure 2 below:

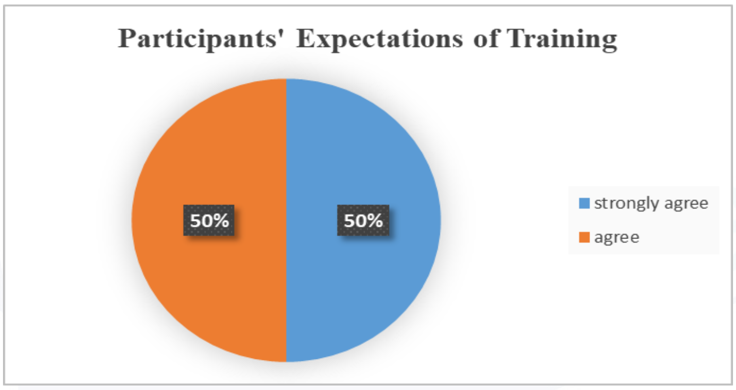

Figure 2 : Expectations of Participants Towards CLP Training, Phase 1

The positive reaction shown by the participants with the high expectations of CLP training given to them can encourage the desire and willingness of the participants to learn at a later stage. The first stage of CLP training also motivates participants to take part in stage 2 CLP training.

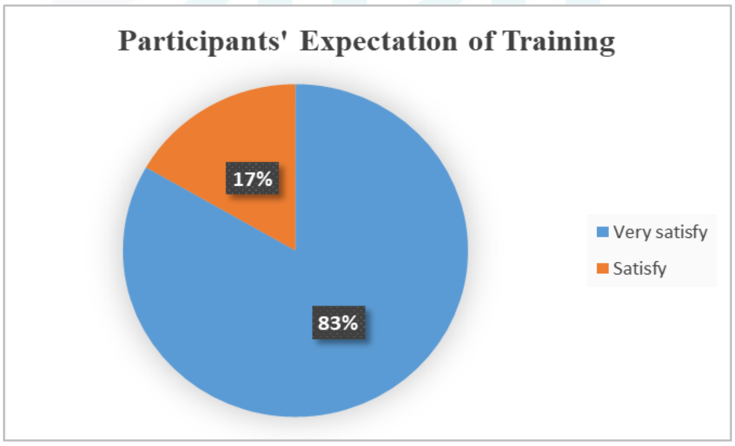

Figure 3 : Expectations of Participants Towards CLP Training, Phase 2

The figure above informs that participants who expressed great satisfaction with their expectations of training experienced an increase from 50% in CLP training, phase 1, to 83% in CLP training, phase 2. This indication shows the strengthening of participants' positive perceptions of the training given to them. The high expectations they expressed for the training that they participated in will make them more comfortable and open to participate in each stage of the training material presented. This will be a positive stimulation for them to take level 2, namely learning.

In Figure 4 below, we look at the effectiveness of CLP training in terms of management training that has been designed by the training manager. The success of a training implementation cannot be separated from the factors that support it such as dishes served to participants, training venues, supporting equipment; both the main equipment such as in-focus, whiteboard, flip chart board, to additional equipment in the form of teaching aids and stationery, as well as the services of the committee as the organizer of the training. The average reaction of participants to the presentation from the management side gave an assessment above 60%, which is in the range of 70% -80%.

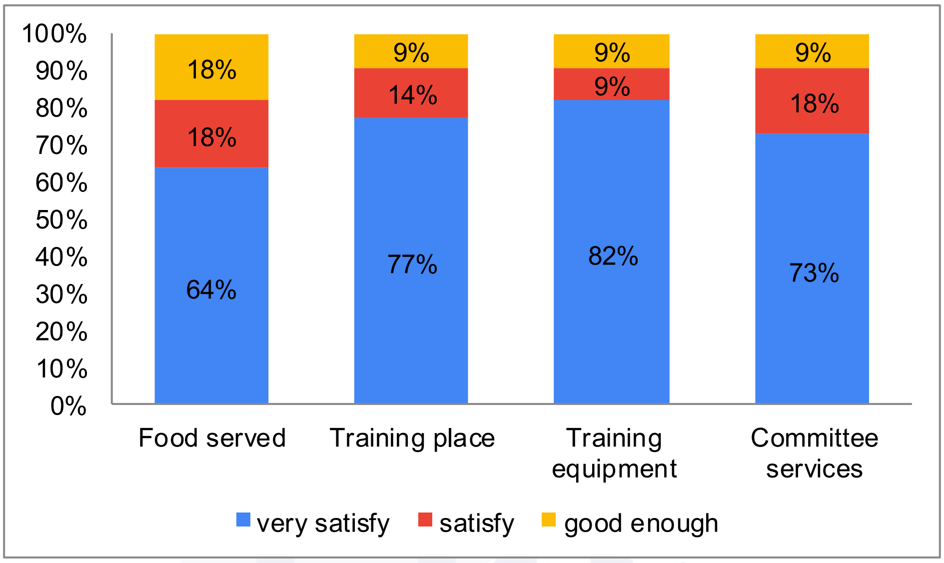

Figure 4 : Evaluation of Participants in Management Training Presentations

The venue used for training uses air conditioning, tables and chairs are available for learning, adequate lighting and space for a maximum of 40 participants, is assumed it can create a comfortable and quiet atmosphere and conditions. Although the training center was located in the middle of the city, the room was soundproofed from various city noise so that the training can run well and be protected from noise disturbances from outside the building (based on direct observation of researchers when visiting the training site). A comfortable atmosphere and calm conditions are needed by the participants during the training in a certain period of time.

There is an expression, that the material is important, but there is even more important is the method for teaching (training) that is the material (content). The method is important, but there is even more important that is the teaching actor (trainer if in the training activities). In terms of evaluating training, one of the main and important components of the training is the trainer component. Therefore Kirkpatrick [6] himself mentioned one of the actors that must be considered when planning and implementing an effective training is selecting and determining the instructor (trainer). This means that the effectiveness of a training is determined by the performance of the trainer. The success of the training cannot be separated from the success of the trainer in providing training to the trainees. There are several criteria for assessing the trainer's performance including the knowledge of the subject taught by the trainer, the desire in training, the ability to communicate and the skills to get the trainees to participate [6].

The CLP trainees gave a very satisfactory rating of 55% and a satisfactory rate of 45%. In addition to the criteria above, it has become an indicator of the trainer's performance items in the evaluation instruments that have been prepared by the NICE Foundation training management team and also by the research team including, how the trainer explains the material and how the trainer facilitates the training participants' activities. CLP trainees reacted to the way the trainer explained the training material, 36% stated that it was very satisfying in the sense of being easily understood, satisfying in the sense of being easily understood by 59% and those answering were difficult to understand by 5% as shown in Figure 5 below :

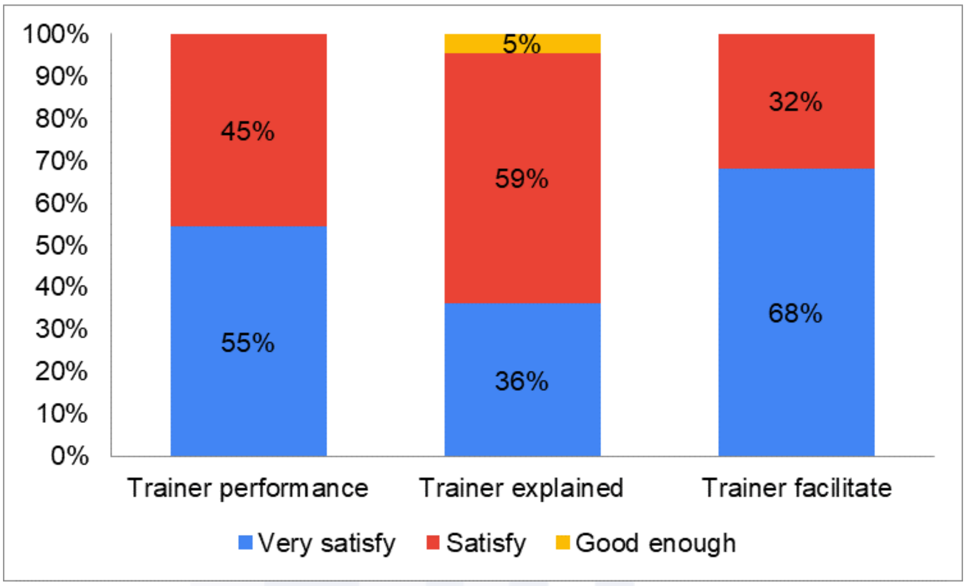

Figure 5 : Participant's Evaluation of Training From the Trainer Side

One of the trainer's criteria that was assessed by the participants during the CLP training was the way the trainer explained the material. In the sense of how when giving an explanation of the material presented to the trainees was easily understood. The ease felt by the trainees in understanding the material presented by the trainer will greatly assist participants in absorbing the knowledge gained in the training, making it easy for participants to understand the material itself, so that motivates and encourages participants to follow the entire material given during the training. Positive reactions from the participants because it was easy to understand the exposure of the material from the trainers can stimulate them to continue learning activities and even attracted their attention to be willing to accept the material (acceptability level) and liked the training material that was followed in the next period if they received more training.

The easy explanation of the trainer's material to be understood by the trainees is an indicator of communication skill that must be possessed by every speaker or trainer. The ability to be value added from a coach. This ability besides being supported by communication skills from the nature of the trainer is also obtained from the learning process (nurture) which goes through long hours of flying. Therefore training is not merely an activity that can be seen from the side of science but it is also an art, namely the art of training [7]. When a trainer is able to combine training as a science and art, this will make the training provided interesting, fun, meaningful and impactful.

The participant's assessment to the trainer is also based on how the trainer facilitated the participants during the training. Based on direct observation from the research team at the training venue and documentation, the trainer starts the training activities by making a learning contract between the trainer and all participants. In making agreements in the learning contract, this is done between the trainer and participants by exchanging ideas or sharing suggestions and advices. The result of the agreement was made into a joint rule that must be obeyed and implemented by all participants during the training. If there is a violation of the learning contract that has been mutually agreed upon, then the participant is given a penalty of singing or recitation. This activity shows the existence of an art approach in carrying out training. Interrupted by each session accompanied by a fun game. The first time face-to-face meeting between the trainer and participants was emphasized by the trainer that this training used a facilitation approach. That is an approach which is not carried out only one-way communication from the coach's side but every participant has the same opportunity to express their opinions. Space is opened for each participant to take the initiative without having to wait before the trainer.

After the learning contract, the training begins with a little ice breaking to provoke the participants' interest in participating in the training. After the ice breaking, the activity continued with a little introduction about the training material contained in the training module that was distributed by the management of the training to all participants without exception. Then proceed with brainstorming among participants facilitated by the trainer regarding the concepts contained in the material that need to be known and understood together. The concepts conveyed and discussed together in the initial sessions include what was meant by the third sector organization and the ins and outs associated with it. The concepts raised for discussion are examined in advance by each group. Each group discuss and write down their opinions. After everything was written down, each group was asked by the facilitator to present the results of their group discussion in front of the class before the other participants. After all groups present their views by means of presentations, the facilitator then tries to draw conclusions after making conceptual confirmations from the participants themselves.

The plenary discussion facilitated by the trainer invited the participants to identify the profiles and characteristics of civil society organizations (CSOs) from the ten foundations participating in this CLP training. Followed by recognizing the purpose of the foundation, the orientation of the foundation and the problems faced by each foundation. From this side the facilitation carried out by the trainer is to use a problem-based learning (PBL) approach. Namely learning that involves all trainees to find the problems they face and discuss roughly what solutions they have to do. A deep pattern of knowledge and experiences sharing is applied between each group and among all training participants.

Facilitation was also carried out by the trainer through a reflective approach. Where each participant gets the opportunity to personalize himself with a certain metaphor that will later be learned from the illustrations. The lesson to be explored was to recognize ourselves with all our strengths and weaknesses, obstacles and challenges faced. How do we take a picture of ourselves from our own inner view and look in the mirror from what other people think of us? It was expected that participants reflect on their past experiences to look to the future, where their position was and what needs to be achieved. This material teaches the importance for someone to travel and find a turning point to trigger and spur to dare to make changes. This material instills the importance of changing everyone's mindset for the better.

For mastering the material, simulation techniques and role play were also used by the training participants. After carrying out the simulation and role playing, each participant was asked by the trainer as the facilitator to explain to the other participants. Alternately each participant to explain the function of the role played. This approach was a form of the art of training that creates a comfortable and pleasant atmosphere but there was a process of internalizing ideas for each participant.

3.2 Level 2 Evaluation (Learning)

Based on the Kirkpatrick's 4 level evaluation model, to find out the level 2 evaluation (learning), the researcher has compiled a research question that will answer the outputs of the implemented training program, which includes indicators, (1) increasing knowledge after attending the training, (2) increasing understanding of social entrepreneurship, (3) improving understanding of social entrepreneurship issues, and (4) upgrading understanding of social entrepreneurship management. In terms of indicators (1), participants stated strongly agree that there was an increase in knowledge after completing the CLP training (from the research team questionnaire), strengthened by the research team's interview with the participants, who stated that they gained knowledge from the training held by the NICE Foundation, especially tools that teach the structured and systematic concepts and techniques are very helpful in mapping, diagnosing and analyzing problems, developing social projects, prototypes, and business models.

An increase from the level of knowledge to the level of understanding (level of comprehension) according to Bloom's Taxonomy [8] shows an increase in one level of thinking ability from the previous level. To explore the extent to which participants' understanding has been carried out by giving them an opportunity to present the material in front of the class in front of the other participants, then after the presentation, the trainer and other participants can do the questions and answers, give responses, ask for confirmation and so on. This CLP training can be said to be effective if there is increased knowledge, understanding and increased skills. Actually the evaluation of level 1 training (reaction) if it has been realized by the participants in the form of a positive reaction, can be directed to the evaluation of level 2 training programs (learning), then the positive reaction of participants in the form of attention, concern, enthusiasm, interest, their involvement in each stage in the training process that is followed will be able to stimulate to level 2 (learning) in the form of a desire and willingness to learn further and so on. Many factors affect the learning process of participants after the training, namely motivation, attention, perception, memory, forgetfulness, retention and transfer. Factors outside the participants who participated in the training (learning) include learning objectives, rewards and punishments, giving feedback and so on.

3.3 Level 3 Evaluation (Behavior)

To find out the evaluation of level 3 training program in the form of behavior, is to answer what the impact of Community Leader Program (CLP) training is for CSOs (foundations) who were beneficiaries. This research question includes several question indicators, namely (1) changes in behavioral change to be more active in socializing social entrepreneurship, (2) behavior change to be more consistent in acting towards social entrepreneurship (3) Increased creativity in the implementation of social entrepreneurship, (4) Increased responsibility in implementation of social entrepreneurship.

To make change happen, according to Kirkpatrick at least four conditions are needed: one must have a desire to change, the individual must know what he wants to do and how to do it, he must work in the right climate, and finally, one must be given appreciation for the changes he made [6]. The training program can achieve the first two requirements by creating a positive attitude towards the desired change and by teaching the needed knowledge and skills. The third condition, the right climate, refers to the direct supervisors of the participants.

Actually for the evaluation of level 3 (behavior) training, which is checking whether there are changes in behavior produced by CLP training activities conducted after participants complete the entire set of training activities, it is not yet fully known without carrying out the advanced stages after the training as a broader concept and design that is intervention. In the concept and design of organizational and community intervention includes socialization, training, development, assistance, system development and so on. In this intervention concept, training is only one form of intervention. Although the change in behavior of the trainees cannot be seen directly after the training activities, except by conducting visitations, direct observations, actively involved, living together with facilitated civil society organizations (CSOs) and so on, but behavior changes will occur if someone has a way views and a strong desire to change, realize why it must change and what consequences will be experienced if it does not change, the individual knows what he must do and how to do it, supported by a conducive climate for changes in behavior he does and so forth.

3.4 Level 4 Evaluation (Results)

To know the evaluation of level 4 training program (results), is to answer the results (both in the form of outputs and impacts) Community Leader Program (CLP) training using indicators as follows: (1) improvement of social entrepreneurship skills (2) improvement in ability to find solutions from every problem faced by individuals in the organization, (3) increase of ability to find solutions to every problem faced by the organization, (4) increasing ability in developing social entrepreneurship in the organization, (5) upgrade of ability to deal with environmental changes originating from in organizations, (6) the benefits of applying social entrepreneurship training materials to participant performance, and (7) the benefits of applying social entrepreneurship training materials to organizational performance.

If the desired results in the form of increased knowledge, advanced understanding and skills of trainees from participating in CLP training have been stated by all participants at the end of the training based on information from a questionnaire that has been distributed by the training management, the training team and the research team. The results in the form of CLP training output can be mentioned as follows:

- gaining knowledge from the experience of other institutions and from practitioners
- building a new mindset for managing the institution
- obtaining networks among similar institutions
- applied science for institution development
- getting tools to map problems, analyze and solve them
- adding insight and motivation to the development of the foundation
- increasing the knowledge and capacity as an organization
- skills in managing institutions

Reviewed from the results of the positive impact of the training program can be delivered here include:

- as the manager of the foundation increasingly understand what is appropriate and what needs to be improved in the organization
- institutions become more serious in managing their goals and work processes in organizing more arranged
- getting a lot of input for foundation training product development so that it can more easily do marketing and programs sales
- marketing techniques for organizational products in the form of services or training modules from the foundation

With the results of the Community Leader Program (CLP) training organized by the NICE Foundation in the form of outputs and impacts, using the evaluation formula 4 (four) levels of Kirkpatrick [6] can It was said that this training program was effective and could provide benefits for CSOs who took part in the training.

4 CONCLUSIONS AND RECOMMENDATIONS

The goals/targets of the Community Leader Program (CLP) training program facilitated by the NICE Foundation is generally achieved according to the plan and get a positive reaction from the training participants even though the level of response varies from very good, good and quite good. The outputs of this program is new knowledge and skills for participants especially mapping and problem solving tools, stakeholder analysis, prototypes and business plans for pioneering business units and marketable and valuable product enhancements, Training impact is cognitive insight, new perspectives, motivation and enthusiasm to improve and develop social entrepreneurship-based CSOs, and the courage to start economic businesses for social activities and create and market creative products from CSOs to the public.

5 ACKNOWLEDGMENTS

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Can Blockchain Technology Help Improve Higher Education?

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ABSTRACT

Blockchain technology is poised to disrupt higher education. This paper begins by briefly explaining how this new technology works. Then, the focus shifts to blockchain technology in the field of education, with specific emphasis placed on practical applications in higher education for institutions, teachers, and students. Educators, who share a common interest in effectively using technology in the classroom in particular and throughout an institution in general, will benefit from this overview of blockchain and its potential to transform higher education.

KEYWORDS: blockchain, disruption, Distributed Ledger Technology (DLT), potential

1 INTRODUCTION

Much hype surrounds blockchain with some heralding it as the main technological breakthrough of the 'Fourth Industrial Revolution' or *IR 4.0* (Chung and Jaehyoun, 2016; Schwab, 2017). Although people tend to associate blockchain technology with cryptocurrency its influence has moved beyond that and has spread to the realms of social media services, distribution and shipping, finance, health, law, and education, to name but a few. Blockchain's rapid expansion has created many challenges but also opportunities in the world of education. This paper will provide an overview of blockchain technology before closely examining its potential to improve higher education.

2 BACKGROUND: WHAT IS BLOCKCHAIN?

Distributed Ledger Technology (DLT), more commonly known now as 'blockchain,' facilitates secure recordkeeping, smart contracts, and peer-to-peer payment. Since a whitepaper which explained the theory and mechanism by which Bitcoin operates (Nakamoto, 2008) was posted on the Internet over a decade ago interest in this technology has been growing. Blockchain is a decentralized Internet-based software application that guarantees truth in transactions. This means whenever two parties engage in a transaction using blockchain, it is time-stamped, added to a block of other transactions, and then permanently attached to an unalterable 'chain' of blocks. The potential for developing applications with blockchain is therefore immense, since software systems that ensure the impossibility of outside tampering are invaluable. Figure 1 provides a simple overview of the workings of blockchain technology.

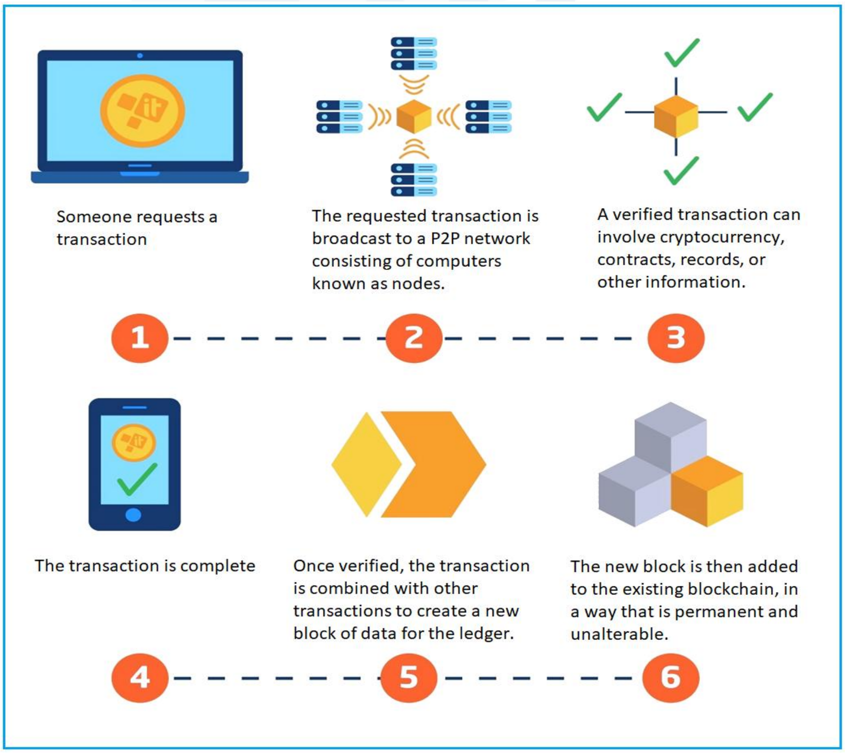

Figure 1: Explanation of blockchain technology (Fedak, 2018)

Tomczyk and Oyelere (2019, p. 85) highlight four groundbreaking areas of technology; Artificial Intelligence (AI); Internet of Things (IoT); Augmented Reality / Virtual Reality

(AR/VR) and blockchain technology. Ubiquitous technology has completely changed the educational terrain. Although blockchain is seen to be a technology with ‘disruptive power’ and is closely associated with often-volatile cryptocurrency, increasing numbers pf people are exploring its potential in fields outside of finance. The main interest is in “…its ability to move from a centralized data logging system to a distributed system that ensures no change in information and keeps the privacy of data” (Bidarra & Mamede, 2019, p. 29). Section 3 below explores blockchain, and how the technology will likely disrupt the existing systems of higher education.

3 BLOCKCHAIN TO DISRUPT THE CURRENT MODEL OF EDUCATION

3.1 An overview of what lies ahead

The potential of blockchain to act as a crucible for educational change is real, and the number of its applications is increasing. Lemoie outlines some of its positive aspects: “The advantages blockchain provides to store information on a secure, permanent, historical ledger that can be both public and private will change how edtech applications approach student data” (2016, para. 1). Currently, there is still only a minute amount of blockchain adoption, but it is likely that the next decade will bring a variety of innovative applications according to Clark’s analysis (2016), many of which will have a direct impact on the educational sector. Tomczyk and Oyelere (2019, p. 87) point to five main advantages of using blockchain technology in education; Reliability; Trust; Security; Efficiency; and Authenticity of documents. They contend that institutions can use blockchain technology to find solutions to many problems which presently exist. Similarly, a report by the European Commission sets out different scenarios in which blockchain technology can affect the education sector (Grech, Camilleri, & Inamorato Dos Santos, 2017). Although in its nascent stage, blockchain technology is set to disrupt education as Briggs summarises: “Educators and policymakers are in the earliest stages of applying blockchain tech to teaching and learning… but the possibilities point to a long-overdue disruption of the current education system” (2018, para. 1).

Innovative ideas in every imaginable domain are presently being entertained and blockchain in education is no exception. Blockchain technology offers considerable advantages for teachers, students, and institutions. For instance, records kept within and between institutions of students’ grade performance, academic achievement, and verification of assignment/course completion are just a few examples of how this new technology might potentially be used to revolutionize education. It is known as being a ‘disruptive’ technology but we must bear in mind that the same concerns were raised when computers and the Internet first began to be used. It is therefore vital that institutions, administrators, and teachers develop a fundamental understanding of blockchain in order to respond to the challenges this emerging phenomenon is unleashing.

3.2 Blockchain technology and institutions

Commentators have highlighted several areas in which blockchain technology can benefit higher education institutions, especially with regard to improved security, transparency, and efficiency. Ralston (2019, pp. 2-3) identifies six such areas as listed in Table 1:

Table 1: Areas of blockchain's contribution to higher education

1	Academic degree management
2	Summative evaluation of learning outcomes
3	Storage and access of degree records and certifications
4	Reduction of diploma and credentials fraud
5	Monetization of academic skills and reward for scholastic achievement
6	Reducing administrative waste and expense by increasing process efficiency in such areas as admissions, registration and time-to-degree reporting

Blockchain technology offers the appeal of streamlining administrative efficiency. Input and processing of student data, which is labour intensive, will be reduced in areas such as admissions, registration, credit transfer, transcript production, and the issuing of graduation certificates. As a result, some believe that because of blockchain, traditional transcripts might even be phased out one day. Currently, learners cannot access their credentials directly. This is a very important point as life-long learning is challenging current education systems. A more fluid (yet secure) system, which allows for the addition to a student's portfolio of learning, is needed. An example of this is MIT's Media Lab which distributes certificates and authenticates them using blockchain technology. Ultimately, this may lead to a universal credit transfer system between educational institutions (Devine, 2015).

According to Ralston (see also Schroeder, 2019), it is said that blockchain may push educational institutions:

> …from degree-centric, two-level (undergraduate and graduate) institutions, preparing young adults for the workplace, to supply chain providers of education certifications (professional, continuing and online), providing learning and training opportunities throughout an individual's entire lifetime (2019, p. 4).

Some might argue that one of the primary purposes of universities is to develop the mental faculties of students so that in whatever situation in life they may find themselves, the fundamental skills of sound, logical reasoning and effective verbal articulation will accompany them. However, blockchain may cause institutions to adopt a more practical outlook on what their goals are to be. In fact, it has been said that blockchain may ultimately turn educational institutions into businesses.

In the real world, this effect might play out in a variety of ways. For example, consider the following scenario: A well-known pharmaceutical company seeks to hire young people highly skilled in performing standard laboratory duties. The skill set they desire among these new employees includes meticulousness and precision in terms of measurement, observation, and record keeping. They also expect newcomers to be able to operate technical equipment ranging from electron microscopes to infrared spectrometers. If, however, a traditional-minded university grants degrees to individuals who pass all prescribed courses based solely on academic scores, such a strategy might eventually work against the school if blockchain is involved. For example, should an employer become disgruntled with inept staff recruited from what was thought to be a prestigious institution, blockchain would immediately factor into the equation – the effect goes both ways. The company that hires so-called graduates would also stamp performance reports on the blockchain, forever informing the world that during a certain period of time, a certain number of newly hired workers from such and such a university were severely lacking basic skills in laboratory tasks. A trickle-down effect would eventually dissuade high school students from applying to a university no longer a popular pool from which corporations select new workers. Institutes of higher education, thus, would be faced with a sink-or-swim situation. They must learn how to function as a legitimate money-making business so as to ensure companies that they will deliver on the product they offer (skilled graduates from their programs).

The future will decide if such an environment of education eventually takes shape. Blockchain, however, clearly has the potential to propel such a system, whether its long-term consequences be positive, negative or a combination of the two. Uncertainties abound as to how this technology will change the educational sector, though it is likely that its adoption will lead to a certain degree of streamlining and efficiency, both concepts of which are closely associated with successful business practices.

Bartolomé et al discuss the issue of accreditation of custom learning, introducing a kind of learning platform that would greatly enhance student mobility:

> A platform that abounds in this type of solution and poses a future based on BC [Bitcoin] is "Learning is Earning 2026" (http://www.learningisearning 2026.org). This basic curriculum model design responds to a fragmentation of the program in small blocks (read activities, units, lessons...) that the student runs according to their own needs and skills. Each unit is translated into a smart contract that will be resolved when the subject has acquired the knowledge or skills (or attitudes?) in a satisfactory manner (2017, p. 7).

Through a reliable and transparent system, confidence in such fragmented or compartmentalized learning could be assured using blockchain technology. Complicated credit transfer of students returning from overseas could be completed in a fraction of the time it currently takes which would considerably reduce administration work while maintaining trust in the student's learning history and credentials. In addition, blockchain technology, through automation of smart contracts, can eliminate labour-intensive aspects of Learner Management Systems such as course registration, attendance, course progress, and online tests.

Blockchain will act as a catalyst for educational research cooperation between the private and public sectors. It may also lead to an expansion in degrees where business and technology merge e.g., in Fin-tech, cryptocurrency, financial security, and of course blockchain courses.

3.3 Blockchain technology and teachers

Many are familiar with the concept of digital natives. Our students nowadays expect us to use the technology that is around them, and they often have a healthy interest in games and competition. Even at university, students like to play online games and the growth of E-sports is a testament to this. Consequently, teachers are starting to experiment with the 'gamification' of the learning process. Using technology to enhance this process is changing both teaching and learning as Tomczyk and Oyelere illustrate:

> Transferring the mechanisms found in computer games into the learning-teaching process increases motivation to meet the desired didactic objectives. Gamification provides the opportunity to awake the ludic characteristics in the process of knowledge acquisition (2019, p. 85).

This, in concrete terms, manifests itself in the awarding of 'badges' on completion of a course, a part of a course, or even part of a lesson. These badges are verified by blockchain technology and can be added to a student's learning portfolio. This security and flexibility is especially useful for educators considering the importance of life-long learning in our society.

One major advantage of blockchain technology, through its proof of intellectual work, is that the intellectual copyright of academics can be protected. Teachers can design and teach courses which will be made available through Massive Open Online Courses (MOOCs) with trusted accreditation. Apart from academic recognition and self-satisfaction for teachers, there will also be financial benefits.

Teachers need to prepare their students for the prospect of life-long learning. Education no longer ceases once students graduate from university. Companies are now demanding that their employees continue to upgrade their academic and practical skills while in employment. Similarly, in such dynamic and uncertain economic times, teachers have to be cognizant of the fact that they need to update their qualifications just in case they lose their jobs. Blockchain applications would thus allow them greater freedom of movement within the labour market. Such teacher mobility has been described by some as being another component of the shift away from formal education to "post-formal." In summary, many teachers may find themselves in a new landscape that challenges old views about conventional learning structures and paradigms and will need to develop strategies to work with blockchain in the field of education while preparing themselves and their students, incorporating a variety of digital resources such as MOOCs, online distance learning, the Kahn Academy, and Apple's iTunes U.

3.4 Blockchain technology and students

Blockchain technology has the potential to completely reconfigure how credits are offered inside (and outside) educational institutions. The widespread adoption of digital (micro) credentials (also known as 'nano-degrees,' 'digital certificates,' 'badges,') is becoming a real probability (Keevy, 2020). These digital credentials are much smaller than conventional credits for passing a course. In essence, they are micro credits for passing sections of a course or even one class. Australia has experienced considerable growth in the awarding of micro credits and this has important ramifications in terms of increasing student mobility.

As university students begin to turn their minds towards securing employment, they will create their own CVs. How can a prospective employer guarantee that a CV is reliable? Blockchain can provide an answer to this issue of 'trustworthiness.' Using the technology, students can make their CVs available and employers will be able to access the documentation knowing that they can trust it completely as it has been verified by the blockchain.

The notion of a student's digital identity is intertwined with that of the concept of digital privacy and ownership. The promise of blockchain is that it offers a secure and flexible platform where individuals can take full ownership of their online identity, which can be shared with interested parties at an institutional, national, or even a global level. Satish, Vanathi, and Suryanarayanarao (2018) put forward the idea of a decentralized and distributed blockchain-secured educational network for higher education. They provide a scenario where blockchain can be used to keep and maintain the data in university students' ledgers throughout India. In order for a student to get an authenticated degree certificate from their university, first of all, the student has to share a code number for verification purposes:

> A Distributed Identifier (DID) is generated and shared with the candidate's college. The respective college verifies the DID & the blockchain address, which in turn authenticates that the candidate is a bona fide student of that

particular college and establishes a connection. The trust group use a public key to verify the DID. The other nodes neither know the candidate nor his/her college. The entire privacy is preserved through DID (Satish, Vanathi, & Suryanarayanarao, 2018, p. 34).

The student can then access their data through this decentralised system. Figure 2 demonstrates how the system could work.

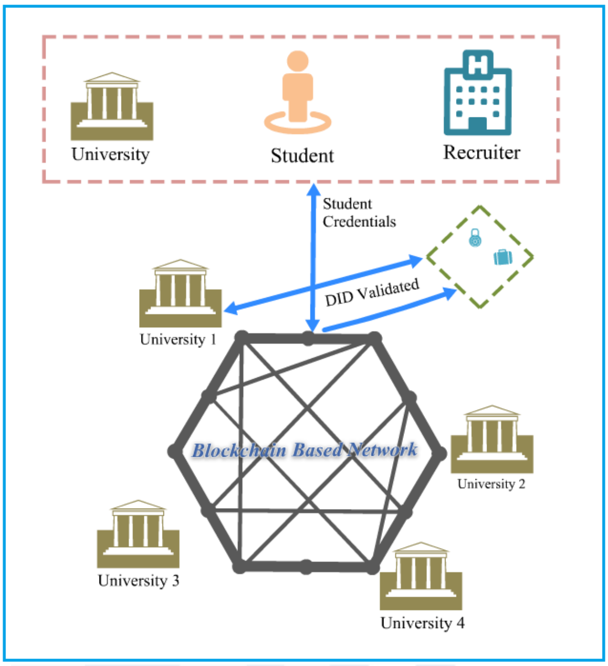

Figure 2. Blockchain Based Education System
(Satish, Vanathi, & Suryanarayanarao, 2018, p. 34)

Once the information provided by the student has been verified through the blockchain-based network the connection can be accepted, and information can be shared:

The candidate thus will create a connection with the office with a new DID. Now the transcript is embedded with the DID. This can be submitted by the university either to the candidate or the concerned organization in which the candidate is selected (Satish, Vanathi, & Suryanarayanarao, 2018, p. 34).

Using this network will ensure that transcripts can be authenticated and authorized by universities. This will work towards the elimination of fake transcripts and increase trust in certificates, leading to an increase in educational transparency (see Turkanović et al, 2018). Satish, Vanathi, and Suryanarayanarao (2018) believe that this system will lead to a 'digital India,' especially with regard to higher education. If this system becomes a reality, then it is likely that other countries will follow suit and students will greatly benefit by knowing that their academic credentials will be authenticated at each step of their learning career and will be accepted by future employers.

4 THE FUTURE

The application of blockchain technology can have a serious impact on education (Matthews, 2017) with the current digital landscape being described by Jirgensons and Kapenieks (2018) as a "wild west." Events are changing at a rapid pace and it is difficult to predict what exactly the future of blockchain technology and its application will be. Below some possible areas of future development are offered, namely 'smart contracts,' 'data harvesting,' 'Artificial Intelligence' (AI), and 'educational funding through blockchain.'

The development of smart contracts is an area of blockchain development which is predicted to expand in the education sector. Some examples of already existing smart contract solutions of blockchain technology highlighted by Tomczyk and Oyelere (2019, p. 89) are; Smart blockchain badges; Connecting learning data over different learning platforms and institutions; Allowing learners to keep their own educational records which can be shared; Creating a higher education credit and grading system allowing for an alternative to the European Credit Transfer and Accumulation System (ECTS).

Promoters of blockchain technology highlight its potential to harvest data from Learner Management Systems around the world with the possible objective of creating a centralized knowledge base (Ocheja, Flanagan & Ogata, 2018). This data could be used to improve how teachers teach and students learn and could greatly enhance the efficiency of education. A further possible benefit of blockchain technology is offered through AI and its integration into the data network. Bidarra and Mamede predict that these AI systems will be able to respond to teachers' and students' needs based on the data gained through analysis of e-learning platforms and Learner Management Systems around the world (2019, p. 27). They highlight the initiative by EADTU [European Association of Distance Teaching], which tries to "…organise action lines on Artificial Intelligence in teaching and learning with the participation of other European universities" (Ibid, p. 27).

Some blockchain advocates are even proffering the idea that higher education could be funded by blockchain technology by creating an innovative funding model based on newly created wealth generated through cryptocurrency (Carter, Ziegler, Purice, & Lehner, 2019). Melaine Swan, a noted blockchain academic and the founder of the Institute for Blockchain Studies, suggests that blockchain technology could be used for educational donations (Tapscott and Tapscott, 2019). If an individual wanted to sponsor a student in another country, then the blockchain could be used to set up payments once that student has reached pre-determined goals such as completing a test or attending school regularly. Swan also suggests that students can use the blockchain to further academic knowledge. Instead of waiting for papers to be reviewed and accepted by educational journals (with this process sometimes taking over a year), a draft paper could be published online to a select group of scholars to be reviewed in real time. Scholars could add their suggestions, and these would strengthen the academic credibility of the paper in an expedient manner. Furthermore, Swan believes that a MOOC infrastructure, with its decentralized education, will benefit the future of education once appropriate accreditation issues have been resolved.

5 A NOTE OF CAUTION

Despite blockchain's massive promise, we need to be circumspect when assessing its positive impact on higher education. Of course, it is true that blockchain has the potential to completely revolutionise the traditional system of education for institutions, teachers, and students, however there are considerable costs. Bidarra and Mamede (2019, p. 2) remind us to take into account blockchain's limitations: "The goal of blockchain is to provide confidence in data, although these attributes also configure many technical challenges and limitations that need to be addressed" (see also Brandão, Mamede, & Gonçalves, 2018). Blockchain creates a permanent record of a degree's existence; it does not, however, serve to guarantee its academic validity. Therefore, any degree management system that incorporates blockchain technology must also have some degree of peer review and reputation management (Ralston, 2019, p. 3).

Although blockchain technology offers the appeal of streamlining administrative efficiency, there are some problems inherent with its adoption. Critics caution that such high levels of automation used to perform recordkeeping functions could lead to redundancies. The impact of a reduction of employment in the education sector could result in shrinking the 'financial footprint' of institutions and local communities could be under threat.

Some have questioned the wholly beneficial effects of blockchain. These detractors have pointed out that the fundamental purpose of university education (i.e. studying for purely academic reasons) could soon be replaced by a wholly vocational focus. This would be a result of the "quick and easy certification of individual learning accomplishments and the monetization of employment skills and qualifications" (Ralston, 2019, p. 4). There could very well be a strong, negative reaction to blockchain by educators. To counter the 'digital dumbing down' of education, there may be (and already is) a call to 'go back to basics' as far as education is concerned. This has already led to calls for more one-to-one tutorials. Other examples are the eco-technology movement which advocates the benefits of gardening and having classes amongst nature. Similarly, some academics are calling for more use of handwritten essays to avoid plagiarism and to allow students to feel a physical connection with their work as opposed to just using a computer. A push for hands-on experiential learning is also growing and this may be amplified as blockchain technology percolates into many facets of our daily lives. This may seem like a luddite stance but it is a reality which has to be considered.

The growth in digital credentials should be met by a parallel growth in programme monitoring and quality assurance yet it is still in its nascent stages: Keevy highlights the approach to programme monitoring in New Zealand noting that it:

> …unlinks the quality assurance of the institution providing the learning, from the quality assurance of the curriculum, and of the delivery of the learning (Klinkum, 2018). This approach to "future proof" the New Zealand Qualifications Framework has gone by relatively unnoticed by the international quality assurance and credential evaluation communities, and certainly deserves a closer look. Lessons from the piloting process would be useful to the international research community and the public release would be encouraged (2020, p. 7).

The Qualification Framework established in New Zealand is gaining global recognition. Their platform is likely to be adopted by other educational institutions around the world in years to come.

To conclude this section, it is prudent to bear in mind Ralston's (2019, p.7) warnings about the implementation of blockchain technology: "…the truth is that blockchain's advantages in the higher education space do not always justify the technology's adoption and persistence. Without certain basic non-digital preconditions in place (quality instructors, just working conditions, healthy learning environments, etc.), innovative DLT can have an inconsequential effect on the primary mission of colleges and universities: namely, to educate students." We should never let technology interfere with educational goals.

6 CONCLUSION

It is clear that blockchain technology is not a passing fad, but is well established and continues to expand in influence. It offers considerable advantages for institutions, teachers, and students. The sharing of records between institutions of students' grade performance, academic achievement, and verification of assignment/course completion demonstrate how this new technology might potentially be used to revolutionize education. Blockchain technology is here to stay and this has important ramifications on the education sector and also our lives.

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Capability In Action Between “Deep Learning”, “Response Learning” And “Lifelong Learning”

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ABSTRACT

Referring to Educational System, the “Capability in Action” is the particular human predisposition to turn the “cognitive potential” into “behavioral skills”. In Education, when we talk about capability, it is clear that we are still in an early stage of reflection on searching learning processes. According to Martha Nussbaum's theory, the capability approach highlights the issues of “human dignity” and “quality of life”. Knowledge is achieved through the continuous interaction between the "response learning", the "deep learning" and the "lifelong learning". On the basis of these considerations, a new vision of educational action is outlined and a new way of understanding and giving meaning to the term “education”. In this context of reflection, the subject of learning assumes a different connotation and a different awareness of its “possibilities of action”, which here become “generative of new worlds”. Therefore, action gives the way to the perturbation, in an autopoietic and creative didactic-educational circuit of worlds, never before experienced. In this perspective, the perturbation represents the element capable of triggering the process of structural coupling between different systems, allowing the individual to generate his own domains of knowledge. In this context, learning represents a process of continuous compensation of entropy.

KEYWORDS: Capability in Action, Knowledge, Lifelong Learning.

1 INTRODUCTION

By ability in action, we generally mean (trying to go beyond the rich semantic diversification that, at various levels of interpretation, specifies its meaning) that particular predisposition of the human being to transform their cognitive potential into behavioral skills.

In recent decades, the reflection on the issue of capabilities has taken on a significant interest from an economic and social point of view, as well as anthropological and cultural, profiling, in this sense, a new theoretical framework of pedagogical-educational reference.

Although the conceptuality underlying the term is already found in the thought of some theorists of the past such as Aristotle, Adam Smith and Karl Marx, it is the economist and philosopher Amartya Sen and the philosopher Martha Nussbaum who first specify it in a relevant way, essentiality in the field of human and social sciences.

A fundamental prerequisite of their perspective is having considered that the capability approach (as a strategy for achieving well-being) is subordinated to what people are actually able to do and to be and, consequently, to the type of life that they are truly capable of leading.

2 THE CONCEPT OF CAPABILITY BETWEEN "ACTION" AND "PERTURBATION".

In this perspective, the concept underlying the term ability takes on a new, particular meaning, closely interconnected with human action, which identifies man as the undisputed architect of his own destiny.

In this regard, Hannah Arent represents the human act as archein, freedom of action, the principle that generates innovation, placing it on the margins of a concept of action intended as the re-proposition of pre-established and replicated behavioral patterns (Arendt, 1988). For Martha Nussbaum, the approach to skills places the emphasis on issues of human dignity, quality of life, social, environmental and cultural opportunities that allow man to act, create, imagine and be. In fact, the firm point in the Martha Nussbaum's thought is the assumption that the respect for the “human dignity” passes, both through the focus of “human capabilities”, and through the "ontology of being". In the explicitization of this principle, the imagination, the feelings and the full unfolding of “capabilities” (which she distinguishes in “fundamental”, “internal” and “combined”) and of the “human functions”, (capable of making man realized, dignified and free) play a fundamental role.

For Nussbaum skills are basic components of an innate nature present in every subject; in the form of “basic capabilities”, they represent the essential substrate for the development of more “advanced capabilities” (Nussbaum, 2013).

On the basis of these considerations, a new vision of educational action and a new way of understanding and giving meaning to the term "education" are looming. In this context of reflection, the subject of learning takes on a different connotation and a different awareness of its possibilities of action which here become generative of new worlds and of innovation.

Therefore, the action gives way to perturbation, in an autopoietic and creative didactic-educational circuit of worlds never before experienced. In this perspective, the perturbation represents the element capable of triggering the process of "structural coupling" between different systems (self and other), allowing the individual to generate their own domains of knowledge. In this context, learning represents a process of continuous compensation for entropy (Maturana & Varela, 1985).

In this reflective dimension, a learning theory centered on the category of autopoiesis and on the mutual co-evolution of learning and teaching systems is proposed, which leads to the identification/distinction of two particular and non-linear forms of learning: "response learning" and "deep learning". The continuous tendency towards the research for an increasingly defined and complex of an identity passes throught the multiple, articulated and undifferentiated interaction between these two types of learning: one projected towards the dimension of the depth of thought and the other (categorisable, necessary and essential) directed towards the dimension of the authentic subjectivity (Minichiello, 2009).

Certainly, here the discussion cannot be released from a deep sense of ethical value responsibility that must guide each person and his “capability in action” during the act of knowing.

3 LEARNING BETWEEN "ABILITY" AND "PERFORMANCE"

Therefore, "capabilities in action" are expressed through learning, in this context recognized both as a relationship between the self and the other, and as a non-linear process based, essentially, on the principle of the unexpected.

In this sense, learning is understood as innovation, distinguishing itself, substantially, from training which, instead, is configured as a linear, self-referential, reiterative and repetitive process (Minichiello, 1995).

If considered in this way, the semantic coding configuration assumes re-translation of the perturbation impulse in a significant context for the subject; this new manifestation of the mind, considered as the subject's response, is expressed in an attempt to generate order from the entropy of disorder.

All structures capable of creating order starting from disorder follow the logic of non-linearity. In the dissipative structures, hypothesized by Ilya Prigogine, this passage is considered possible only in a non-equilibrium environments; where, in short, there is the criterion of a non-equilibrium constraint (Prigogine, 1986).

By bringing the discussion back to a sphere of reflection centered on the interaction of teaching-learning dynamics, some questions arise spontaneously.

"How much do the assumptions mentioned affect the identification of learning processes? How does the interactive dynamic between teaching and learning disentangle itself in an educational-didactic environment?"

The teaching is defined by Minichiello as "a process organized theoretically and practically to allow learning according to the methods proper to this". (Minichiello, 1995, p. 17).

However, what is interesting to emphasize here is that the learning process follows logics, strategies and aims that are independent of the teaching process. In fact, while the teaching involves the epistemological side, following linear logic and proposing knowledge already constructed and organized in concepts, learning gravitates on the psychological side, or on knowledge in continuous evolution; here the subject, through the use of action schemes and symbols, tries to give meaning to the reality that surrounds him.

The didactic planning is therefore based on the assumption that each form of teaching must be strictly aimed at the acquisition of articulated and complete forms of knowledge. But, what are the teaching objectives that express real learning?

Gagnè puts in place an articulated taxonomic schematization in which it indicates, not only the learning objectives, but also how, in the educational system, they must be achieved through the practice of teaching. The founding principle of his theory is that learning finds its essential presuppositions in translating human skills into performance (Gagnè, 1973).

4 "INTELLECTUAL SKILLS" AND "COGNITIVE STRATEGIES"

Intellectual skills represent, for Gagnè, the ability to pertinently apply the information acquired by the subject in his living environment. Information can be defined as the material on which intellectual abilities and cognitive strategies are practiced. The cognitive strategy is what controls the learning and memory process and allows the "subject who knows" to pass from the observation of the particular to the general hypothesis. It implements, in this cognitive environment, a process called "abduction", which consists in making an “implicit deduction” and “induction” in assuming unable to confirm a deduction.

While "intellectual skills" apply to specific learning contents, "cognitive strategies" refer to learning itself and are identifiable with the "learning styles" with which each subject is innate bearer.

The "abductive logic", by its very nature, allows the discovery of the new, the production of innovation, while leaving wide margins of uncertainty about what has become known. On the contrary, deductive logic gives absolute certainty on the very nature of knowledge, but does not create and does not produce innovation.

Both of these logics are cognitive strategies of the mind, essential and necessarily complementary components of any learning process. In this perspective, the attitudes, that is the value orientations, preferences and idiosyncrasies of which each individual is the bearer play an important role. Therefore, in defining an educational project, it is necessary to identify both the human skills to be developed and the performances through which these skills are manifested, expressed, verifiable, evaluable.

Intellectual skills (which are part of a learning response) can be learned and taught, are related to linear processes and refer to linear teaching, cognitive strategies (which are part of a deep learning) can be learned only through non-linear teaching and in situations of systemic complexity. In fact, intellectual abilities have as their object contents / information on which the mind can work; cognitive strategies refer, instead, to the mind itself and to thought and have as their object the way in which the mind assimilates, processes, decodes the information.

In learning, each individual uses a personal style (method) and it is the ability of each to develop relevant and productive styles that depends on the ability to develop "cognitive strategies" appropriate to the different contexts of reference.

5 "RESPONSE LEARNING", "DEEP LEARNING" AND "LIFELONG LEARNING"

In an interesting research, Minichiello identifies two forms of learning: one "profound", unpredictable, another "intentional", foreseeable. The two forms of learning interact synergistically and influencing each other. In a report on this topic, he says that learning is always a consequence of the compromise between the two types of learning (Minichiello, 1995, p. 124).

In this context, "linear didactics" intersect " non-linear didactics" in a joint interactive intentional processes (response learning) and personal responses (deep learning).

In the first level it is possible to identify both the procedures that teachers use to control the inputs capable of generating the desired outcomes, and the methods for identifying the answers provided by the student. The criteria of unpredictability, discontinuity, systemic reticularity and non-casuality, on the other hand, characterize a second level defined as hermeneutical-interpretative.

"Learning is an unpredictable process. This means that an observer is not in a position to predict what his outcome will be, in what ways he will develop, with what timeframe, it is easy to attribute such inability to the observer's lack of adequate knowledge. But it is not correct since the unpredictability expresses the discontinuity between the initial situation of disorder (symmetry, lack of information) and the final situation of order (asymmetry, information). The final order is causal (it has a linear logic) but the way you get there is not causal "(Minichiello, 1995, p. 122).

In teaching, learning objectification processes and learning subjectification processes constantly intersect, determining the continuous passage from the use of intellectual abilities (subject in response learning) to the use of cognitive strategies (subject in deep learning). In this perspective, learning processes and objects take on a dialectical dimension in a recursive-generative perspective that produces articulated thinking, or knowledge. The continuous trend towards increasingly complex forms of learning specifies, in this perspective, the form of learning that completes and closes the circle: lifelong learning.

6 "FROM THE "ABILITY IN ACTION" TO "CONSCIOUSNESS OF THE ACTION"

Francisco Varela in an interview released to Rai Educational in January 2001 and published in the Multimedia Encyclopedia of Philosophical Sciences, expressed himself on the theme of conscience: «all of a sudden it became acceptable, indeed desirable, to speak of conscience and ask oneself what is the cognitive apparatus that makes possible the existence of a lived experience, the existence of a phenomenal world [phénoménal]. Of course we always talk about animals - some would say that [consciousness] is found only in man, others would say that it is also present in the higher primates. But, in all cases, under certain conditions, the cognitive apparatus, of which we now know several things, makes possible the appearance of this unique phenomenon in the universe which is to have a life, or to use the expression of the American philosopher Thomas Nagel, author of a famous article: "What is the effect of being a bat" (1974), being able to ask the question "what does it mean to be someone?" and, by implication, "what does it mean to have an experience?" From this moment the great boom of consciousness begins and in the boom of consciousness there is a fashion, a fascination of mystery, for what is considered the hard core in the study of consciousness, which does not consist in explaining a phenomenon or a capacity or a any cognitive ability, considered difficult, but essentially at hand for scientific research. The hard problem is: what allows us to say that there is an emergency of consciousness? What is consciousness? "(Varela, 2001).

The reflection on the “essence of consciousness”, on its nature and on its entity is therefore outlined, like the hard core of speculation on the general theme of knowledge. Over the years a close debate has developed on the subject (pedagogical, philosophical, anthropological, sociological, psychological, biological) which has opened up a wide range of complex and articulated discussions / theorizations, ranging from superficial and materialistic interpretations to studies of a certain relevance and significance.

In this regard, Chalmers identifies two different visions (which he calls problems) on the essence. of consciousness.

The first problem, defined by him as “easy problem”, relates to the functioning of the brain in the act of decoding the sensory and perceptive stimuli that lead the subject of learning to the acquisition of knowledge.

The second problem, identified as “hard problem”, places the theme of consciousness in relation to the theme of experience. Here there is something more than the simple transformation / activation of neural circuits in the act of knowing and in the ability of the mind to act.

But, it is certainly Francisco Varela who elaborates, in the field of neuroscience, one of the most articulated and representative models on the emergence of consciousness, which he calls neurophenomenology.

On the emergence of conscience he expresses himself thus: "It is not in any way an attempt to reduce or an attempt to dissolve the phenomenal element [le phénoménal] in the empirical, because it would be a company destined to fail. What is the alternative? The alternative is in a certain sense evident - I would not say trivial, but evident - only that it is adequately reflected in it. Why? Because when I say that consciousness is lived, I don't speak of something that exists only in my head. I can't start looking for consciousness from a section of the brain circuit. Consciousness does not belong, so to speak, to a group of neurons, it belongs to an organism, it belongs to a human being, to an action that is being experienced. It is not quite the same. What does it mean exactly? It means that one cannot have a notion of consciousness and of the way it emerges, if one does not take into consideration the fact that the phenomenon of consciousness appears in an organism and is linked to at least three permanent cycles of activity. First, it is permanently connected with the organism. It is too easily forgotten that the brain is not a bundle of neurons sectioned in the laboratory, but it exists within an organism essentially engaged in self-regulation, nutrition and self-preservation, which is hungry and thirsty, who needs relationships social. At the basis of all that is pertains to the integrity of the organisms, there is finally the feeling of existence, the feeling of being there, of having a body endowed with a certain integrity, in fact »(Varela, 2001).

Consciousness, therefore for Varela, does not live within us and is not perpetually "present in our heads" (Varela, 2001): it is an “emergency” which, in order to come to life, requires the existence of three particular phenomena: “with the body”, “with the world” and “with others”.

In this sphere of reflection, the awareness of action, or rather of capacity in action, manifests itself as a purely relational identity, dropped in a non-linear phenomenological-experiential context, where every act of thought is generated by the emergence of a mental state.

Thought is not considered an epiphenomenon here and, to put it with Varela, it is not "smoke coming out of the brain" (Varela, 2001). The emergence of a state of consciousness acts, in fact, in a relevant way on the local components of the nervous system (on the action of neurotransmitters and / or on the synaptic interaction), determining a causal circle of action between what makes possible the action of emergence and what actually emerges.

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Collective Memory and History Teaching: The case of Okinawa

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Abstract:

The purpose of this paper is to examine how historical memories collectively shared by a group of people affect the formation of their group identity. A case is drawn from Okinawa, whose people identify themselves as *Uchinanchu* and have demonstrated a strong sense of group identity distinct from that of *Yamatonchu*, the word used by Okinawans to indicate the majority of Japanese living in the main islands. Okinawans have done so throughout their modern history, which was started when their independent kingdom was coercively absorbed by Japan in the late nineteenth century. The background of this distinctiveness of Okinawan identity is the geopolitically-oriented policy of the central government which deliberately placed Okinawa in disadvantageous conditions, but also the policy of discrimination based on their socio-cultural and ethnic grounds.

At the same time, it is argued that, Okinawan identity has long been maintained within their society because it was a self-claimed one as opposed to the 'official' identity of the Japanese race formulated by the central government since the Meiji Restoration. This trend has become particularly strong since wartime hardship befell Okinawans due to attack upon them by both the US and Japanese militaries. In other words, Okinawan identity has largely been affected by their own historical experience and the political and economic positioning of Okinawa within modern Japan.

What is theoretically framing this paper is the notion of collective memory. It is socially constructed, reflecting the dominant discourses of a society. In reality, the history construed within a society largely shares the elements of collective remembering, and often becomes compatible with it. Unquestionably, collective memory is not the collection of individuals' memories. In the cases of historical incidents of injustices, the memories of individual victims are sometimes alienated from collective memory, affected by the 'public' interest of concerning society. This discrepancy often results in the exposure of victimhood to political whims or the trivialisation of it.

What is called 'Okinawa nationalism' is traced by a number of historical incidents in which Okinawans adjusted or challenged to the officially-formulated notion of the Japanese in in coping with the legacy of colonial rule and World War II. They have their own history teaching, e.g. prefecture history museum.

Keywords:
collective memory, World War II, The Battle of Okinawa, Colonial and war legacy,

Introduction

The purpose of this paper is to examine how historical memories collectively shared by a group of people affect the formation of their group identity. A case is drawn from Okinawa, whose people identify themselves as *Uchinanchu* and have demonstrated a strong sense of group identity distinct from that of *Yamatonchu*, the word used by Okinawans to indicate the majority of Japanese living in the main islands. Okinawans have done so throughout their modern history, which was started when their independent kingdom was coercively absorbed by Japan in the late nineteenth century. The background of this distinctiveness of Okinawan identity is the geopolitically-oriented policy of the central government which deliberately placed Okinawa in disadvantageous conditions, but also the policy of discrimination based on their socio-cultural and ethnic grounds.

At the same time, it is argued that, Okinawan identity has long been maintained within their society because it was a self-claimed one as opposed to the 'official' identity of the Japanese race formulated by the central government since the Meiji Restoration. This trend has become particularly strong since wartime hardship befell Okinawans due to attack upon them by both the US and Japanese militaries. In other words, Okinawan identity has largely been affected by their own historical experience and the political and economic positioning of Okinawa within modern Japan.

What is theoretically framing this paper is the notion of collective memory. It is socially constructed, reflecting the dominant discourses of a society. In reality, the history construed within a society largely shares the elements of collective remembering, and often becomes compatible with it. Unquestionably, collective memory is not the collection of individuals' memories. In the cases of historical incidents of injustices, the memories of individual victims are sometimes alienated from collective memory, affected by the 'public' interest of concerning society. This discrepancy often results in the exposure of victimhood to political whims or the trivialisation of it.

What is called 'Okinawa nationalism' is traced by a number of historical incidents in which Okinawans adjusted or challenged to the officially-formulated notion of the Japanese in in coping with the legacy of colonial rule and World War II. They have their own history teaching, e.g. prefecture history museum.

1. Concept of Collective Memory

Collective memory has trends. It is socially constructed, reflecting the dominant discourses of society (Halbwachs 1989). Therefore, in principle, collective memory is differentiated from 'objective' history. In reality, the history construed by the elites in society largely share the elements of collective remembering, and often becomes compatible with it (Burke 1997; Wertsch 2002, 20). Official interpretations of historical events are inseparable from, or often the direct reflection of, collective memory. Thus, national history is transmitted over the next generations differently along with the metamorphosis of the society.

Unquestionably, collective memory is not the collection of individuals' memories. In the cases of historical incidents of injustices, the memories of individual victims are sometimes alienated from collective memory, affected by the 'public' interest of concerning society. More often than not, this discrepancy results in the exposure of victimhood to political whims, and the trivialisation of it. Such cases can be found in East Asia where the settlement of WWII in the region was left more ambiguous than in Europe. For example, the Nanjing Massacre had long been left untouched by the Chinese government, until the death of Mao Zedong who did not intended to transmit the history of 'national humiliation' to children in the midst of national building. The Massacre has become a collective memory in China after Mao's death and the subsequent rise of Deng Xiaoping who drove a radical policy shift including in history education (Mitter 2003). In the case of Hiroshima and Nagasaki as well, the stories of the victims of atomic bombs had not been heard while the country was driven to its national reconstruction, and have become part of collective memory influenced by the enlargement of anti-nuclear movement around the world.

The official interpretation about past injustices or the dark side of national history are largely affected by public memory. Over the past few decades, such dark histories have drawn intensive political and academic attention. A number of the governments and the leadership of countries which had heavily been involved in past injustices began to review the traditionally and broadly accepted perceptions of those incidents. Often, they offer official apologies and compensation to the victims. Such tendencies are observable in many spheres of the world. Although not all cases of such official apologies resulted in durable reconciliations with the victims, examples are many.

WWII-related apology announced by the French President in 1995 for the deportation of Jewish residents to Nazi 'death camps' was a symbolic one, as discussed later. Another apology to Holocaust victims was offered by the Swiss government in 1997, along with five-billion-dollar compensation for the property loss of the victims in Swiss banks. This is a remarkable example, as it demonstrates the unspoken guilt of so-called 'Holocaust bystanders' in a war-time neutral state. In Asia, the Japanese Prime Minister Tomiichi Murayama stated his 'deep remorse' and 'heartfelt apology' to the victims of Japan's aggression during the war and its colonial rule in his official speech in1995. Unlike a number of other WWII-related official apologies, the Japanese case did not bring about lasting reconciliation with the victims, revealing 'the difficulty of translating the western rhetoric of apology into terms of consistent with non-Western culture' (Barkan & Karn 2006, 7).

Certainly, in any case, these cases of official apology more or less coincided with the 50th anniversary of the end of WWII.

Official apologies were addressed to amend the injustices of the more distant past as well. The Australian government acknowledged its policy of discrimination imposed on indigenous people in an official report, loosely-called Bringing Them Home, published in 1997. This Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families documented the forced relocation of those children from their family homes based on the official policy, and had a shocking but a lasting impact on public perceptions about this centenary policy of the mistreatment of the aboriginal people (Celermajer 2006). Ten years later, the Prime Minister Devin Rudd sent a televised speech of his formal apology to the people. In the United States, another traditionally multi-ethnic society, apologies for the unequal treatment of people took place also domestically. In 2001, the state of Oklahoma admitted the guilt of its legislature during the Tulsa Race Riot of 1921, 'the worst race riot of American history'. Taking about four years, the state had re-examined this historical incident, which had long been treated as a 'myth' in education, and launched official compensations to the victims of ethnic minorities. At the 175th anniversary ceremony of the establishment of the Bureau of Indian Affairs in 2000, the US Assistant Secretary of Indian Affairs Kevin Gover expressed 'profound sorrow' for what the agency had done to Indian people. Notwithstanding the initial perplexity and criticisms about the apology, it initiated the process of healing in the multi-ethnic society (Tsosie 2006). Efforts for the remedy of past wrongs are noticeable elsewhere. In Africa, community leaderships in North Ghana have been trying to overcome ethnically-inflicted violence along with the assistance of the UN and NGOs. The peacebuilding efforts of the South African legislation for violently divided communities brought about the foundation of the Institute for Justice and Reconciliation in 2000 (Abu-Nimer 2001).

In the case of Okinawa, however, reconciliation has long been attempted unsuccessfully even domestically between the local government and the public in Okinawa on the one hand, and the Japanese central government in Tokyo. The gap in understanding about the history of World War II by both sides is observable in many arenas of education and in society as a whole. In fact, this gap is not only based on the history of the war per se but also can be traceable back to Japan's colonial history in which Okinawa was absorbed in one of the Japanese prefectures in the late nineteenth century.

2. Formation and Disruption of Okinawan Identity

The racial superiority of the Japanese was the *raison d'être* for the Empire of Japan and its educational policy. Pride in the race, culture and tradition was instilled in every aspect of formal education. After the collapse of Tokugawa's semi-feudal society (1603-1867), one of the first issues the newly-established Imperial Japanese Government launched was to formulate the concept of the racial 'purity' of the nation. Indeed, in the course of state formation and colonial expansion, Japan in the nineteenth century was a remarkably multicultural society (Willis & Murphy-Shigematsu 2007). It was thus vital for the central government to make all adults and children as the members of the 'family state' which was doomed to be bound in the unbroken imperial lineage. In the viewpoints of the government, the idea of the progression of the 'pure' Japanese race and culture was opposed to that of the regression of the 'others' within the Empire, i.e. the colonised people. At the same time, while Taiwan and Korea were under the jurisdiction of the Bureau of Colonial Affairs as *gaichi* (outer territories), Okinawa defined as *naichi* (inner territories) was not.

The intricate policies of assimilation and differentiation had affected the life of Okinawan people. The treatment of Okinawa and Okinawans by the central government had far distressing effects upon their life and history. Politically and economically, Okinawa had remained in a peripheral position within the country. From the onset of its modern history, Okinawa had been one of the poorest prefectures in the country. Convincing evidence is the high ratio of Okinawans' emigration in the pre-war period. Between 1899 and 1937, over 10% of Japanese emigrants were Okinawans (67,650 out of 641,677), the second highest after Hiroshima Prefecture, and left for Hawaii, mainland US and Latin America (Ishikawa 2005, 11-13). Culturally as well, Okinawans as the 'others' had to and actually wanted to be integrated into the society of mainstream culture (Bhowmik 2012). Okinawan children were expected to 'behave like the Japanese'. Primary schools were established in 14 places in Okinawa Prefecture. Initially, children's enrolment was stagnant due to the poverty and antagonism against the central government of the local people. The situation had changed after Japan's victory in Chino-Japanese War in 1895. From that period, indigenous Ryukyuan culture, such as male long hair and tattoo-like paintings on female hands, had gradually diminished (Miyagi 1997). The Ryukyuan language followed a similar destiny. The Okinawan local government set up the Dialect Punishment Board and punitive measures were inflicted on pupils who spoke in the dialect in the school.[1] Notwithstanding a variety of dialects within the country, the Okinawan dialect is distinct. It is hardly understood by most mainland Japanese and, as mentioned later, its distinctiveness brought about fatal consequences to Okinawan people during the War.

Hardships were most severely imposed upon Okinawans in the national crisis during the War. Like all war-time Japanese youth, Okinawan students were mobilised to serve the state and the Emperor. But the ratio of students who had fallen war victims in Okinawa was outstanding. The evacuation of Okinawa was far from completion unlike the other distant islands, mainly due to its relatively large population and long distance from the mainland. By the time Okinawan children and elderly people were evacuated by ship, the sea had already become the theatre of the war. The most tragic incident was the attack of Tsushima-maru ship, which had 1,661 school children aboard, by a US submarine in August 1944. As most residents of the Ogasawara Islands, including Iwo Jima, had been evacuated months before the American landing, Okinawans felt that they were the only Japanese who had deliberately been abandoned by the state and were exposed to the ground battle (Ryukyu Shimpo 2014, xvi). In front of the American attack, a guerrilla unit called *Gokyo-tai* of 1,000 boys between 15 and 18 years old was formed by the Nakano School, the training centre of the Imperial Japanese Army (IJA) for military intelligence operations. In the end, 160 boys lost their lives during their operations, including the gun shots of the army surgeons and suicides (Kawamitsu 2018). Moreover, with no legal basis, over 1,800 male students between 14 and 16 were drafted into *Tekketsu Kinno-tai* – The Iron and Blood Corps for the Emperor – and integrated into the Army as the soldiers of the lowest-rank, of which over 1,550 died in the Battle of Okinawa (Ota 2017, 318).[2] Female students were no exceptions and directly served the Army in the Student Nurse Corps which also took heavy death tolls. Further catastrophic tragedies befallen to wartime Okinawans were mass suicides committed by about 1,000 civilians collectively during the Battle.[3] In many cases, those self-killings were carried out among relatives, friends and neighbours. Altogether, about one fourth of Okinawans lost their lives, including 94,000 civilians, due to military as well as non-military actions. Some Okinawans were killed by their own Army in suspicious of espionage as they spoke in the Ryukyuan language. One of the few survivors in the Student Nurse Corps recalled their experience that "What we experienced in Okinawa was madness, and it was miserable beyond description" (Japan Times 2007).

Even after the War, the US military forces had remained in Okinawa under the contract of the US-Japan Security Treaty which defined Okinawa as outside the Japanese sovereignty. As a matter of course, Okinawans needed a passport to travel to Japan. Although it was reverted to Japan in 1972, about 15% of Okinawa Prefecture has been occupied by the US military bases until now. That is to say, around 70% of the US bases in Japan are concentrated in Okinawa which is merely 0.6% of Japan's territory. Besides the danger and noise of the military operations, Okinawans have been suffering from crimes committed by the military personnel. All Okinawa Council for Human Rights asserts that "We regret that the Government failed to take any effective measures against serious human rights violations caused by the existing U.S. military bases in Okinawa" (AOCHR 2017).

3. The Central Government's Views

In US-occupied Okinawa between 1945 and 1972, education had been under the control of the Americans. The textbooks authorised by the Japanese Ministry of Education were 'imported' from Japan and literally doubled-checked by the US authorities. Until the 1990s, the history of the Battle of Okinawa had never been the central issue in textbook controversies, although attention was partly paid in the 1980s in the textbook lawsuits filed against the state by a historian, Saburo Ienaga. On the contrary, the above-mentioned war-time activities of the Okinawan youth were praised as heroic services for the state in the textbooks. In popular culture as well, stories about the Student Nurse Corps were widely read and watched on TV dramas and movies in the 1950s and the 1960s.

However, from the late 1990s, the treatment of the Battle above all the earlier-mentioned collective mass suicides in the textbooks has drawn attention not only by academics but also by the public. Partly, this was triggered by the rape of an Okinawan primary school pupil by the US Marines in 1995. It provoked the fury of the Okinawan people, and their voice became hardened in the 2000s. In 2007, it was disclosed that the Textbook Authorization Research Committee (TARC) – the textbook scrutinising body attached to the Ministry of Education – did not approve the narratives which indicate the direct involvement of the IJA in the mass suicides, including the military orders, and requested the textbook publishers to revise them. According to TARC, "recent research and publications on the mass suicides show that the existence of such [Army's] orders is not necessarily evident" (TARC 2007, 6). As a result, 110,000 Okinawan residents staged a public rally to protest the TARC's views. Consequently, the treatment of the Battle of Okinawa in history textbooks became larger than before. Narratives about the mass suicides in the textbooks have remained uneven in various textbooks but, at least since then, have been treated with more care as a sensitive issue.

4. Okinawans' Views

The rebirth of OPPMM in 1978 was the results of vigorous debates by the local authorities and the public. The exhibitions of the initial museum in 1975 were not accepted by the local public, as the Okinawans' victimhood was downplayed. As a result, the spotlight of the exhibitions has gradually shifted from the military weapons and personnel to the local civilians. In 1995, Okinawa Prefecture built the monument of the Cornerstone of Peace *(Heiwa no Ishiji*) within the Peace Memorial Park on Mabuni Hill, the south-eastern lands' end of the Okinawa Main Island, where the IJA terminated their organised fight. In the monument, the names of all fallen individuals in the Battle are inscribed, regardless of their nationality.[4] In 2000, the museum was enlarged in 10,000 square meters within the Park, ten times larger than the initial one. Admission is free for the pupils and students of the

Okinawan schools of all educational levels. In the academic year 2017, 19,842 children of 221 Okinawan schools visited the museum, while 207,177 pupils and students of 1,330 educational institutions outside Okinawa visited it (OPPMM 2018, 53).

The museum now overtly shows the Battle from the viewpoints of Okinawans. It highlights the civilian victims of the Battle and pictures the Battle as their misery brought by the maltreatment of Okinawa by the Imperial Japanese Government, the Emperor and his Army. The exhibitions and the guidebook issued by the museum post some unique photos of the American soldiers who were seen as the rescuers of Okinawan civilian victims rather than their enemy.

5. Conclusion

Okinawans have been exposed to policies of assimilation and differentiation since its absorption into the Japanese state. The policies were imposed upon the people along with the rhetoric of the purity of the 'homogenous *Yamato* (Japanese) race', which was an ideological driving force of Japan's colonialism. However, as seen above, Okinawa has never been seen 'purely' as a part of Japan in the time of colonial expansion and of the War. As a consequence, Okinawan identity maintains its notion as opposed to the national identity of the 'Japanese'. This is because since the onset of Okinawa Prefecture until the end of WWII, or arguably until today, Okinawa has treated politically, socially and educationally as the 'others' – if not the 'stranger' – and recognised as such within Japanese society.

The gap between the public memory of the Okinawans about the Battle and the official views of it by the Japanese government and the Ministry of Education is considerable. The political sensitivity is not only based on the fact that Japanese civilians were killed by the Army of their own country. The strategic significance notwithstanding, military and educational policies imposed upon war-time Okinawa reflected how it was positioned in the Japanese Empire and post-war Japan.

Based on the sense of local identity, Okinawa Prefectural Peace Memorial Museum demonstrates the power of knowledge beyond formal education. It has formed a particular sense of identity of Okinawa and Okinawans as opposed to the rest of prefectures in Japan. The identity is not merely a local identity. It is distinct in a sense that Japan is occasionally seen as 'enemy'. It was strongly demonstrated in the perceptions of the Battle of Okinawa. It is indivisible from Japan's colonialism and warfare which had lasting impact upon the destiny of Okinawans. As long as OPPMM exert the power of knowledge, the collective memory of Okinawans' hardship particularly during the War does not doom to oblivion.

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[1] The Dialect Punishment Board had survived the American occupation which ended here in 1972 (Itani 2012).

[2] When the Iron Blood Corps were built up, males of 17 years old and older were subject to the conscription law.

[3] The figure in various literatures ranges from 700 to over 1,000. In the case of the history textbook controversies over the suicide incident, the number of suicides is generally not a prime concern of dispute. Because of its relative precision, the author adopts the recently disclosed figure of 1,143 suicides in 30 cases (Ryukyu Shimpo 2014, 38-39). cf. According to Fujioka (2008) and Watanabe (2008), the number of the suicide victims rose in the post-war period, influenced by the government's policy for extending the coverage of the Act on Relief of War Victims and Survivors brought in 1952, to civilians who cooperated with the military or were involved in military actions.

[4] As of 29 June 2015, the monument bears the names of 241,336 war victims: i.e. 149,362 Okinawans; 77,402 Japanese from other prefectures; 14,009 Americans; 82 British; 34 Taiwanese; 365 South Koreans; and 82 North Koreans. http://www.peace-museum.pref.okinawa.jp/qa/isiji.html. (accessed on 19 December 2018).

Critical Analysis of Secondary Education Placement Policies in Turkey: Intentions and Outcomes

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This research paper aims to analyse the changing placement exam systems in Turkey by looking into the policy discourses that are used to legitimise the rapid changes in the nationwide high school placement systems. The exam system implemented for the transition to secondary education (grades 9-12) has been changed six times in the past twenty years. Considering the rapid pace of change, our research aims to understand the rationales given by policy makers for the changes and to explore the relationship between these rationales and their actual outcomes. Document Analysis method and Critical Discourse Studies (CDS) have been utilized in understanding the chages and rationales behind them. The data for the research were gathered from the exam booklets, official policy documents, educational statistics, and the speeches of actors involved in placement exam policy changes, the Ministers of Education in particular. Preliminary results show that the two most commonly voiced rationales are at odds with the outcomes of examination policies. The results also indicate that not only larger policy priorities are mentioned by policy makers but also populist discourses are given to rationalise the policy changes. Although the ministers of education have largely rationalised the changes in the exam system through discourses that address the grievances of parents and students of different socioeconomic backgrounds, the outcomes appear to have been far from realising the intentions.

Key words: Placement exams, educational policy, educational change,

Dietary quality of university students and salt contents of a university canteen in Indonesia: a case study of Bogor Agricultural University

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ABSTRACT

The purposes of this study are to show the dietary quality of university students in a developing country, especially in Indonesia. Concretely, 1) the place where students take their meals, 2) the amounts of salt in a menu served in university canteen, 3) frequently appearing meals, and 4) nutritional balance. Data were obtained through structured interviews in Bogor Agricultural University (*Institut Pertanian Bogor*).

For obtaining data on research purpose 1), 331 students were interviewed through the internet for a week. For 2), 49 kinds of meals served in 1 university canteen was analyzed by salinometer (Atago PAL-sio). For 3) and 4), 28 students responded through email with photographs of their meals for a week from 22nd to 28th September 2019 and the food amounts were estimated by using the Buku Foto Makanan, Survei Konsumsi Makanan Individu published by the Ministry of Health, Republic of Indonesia. Balanced Diet Index was applied for analyzing nutritional balance.

44.8% of lunch on weekdays was eaten in university canteen, 38.3% of dinner on weekdays was eaten in *barang*, shopping street adjacent to the university, and 33.7% of breakfast on weekdays and 25.2 % on weekends was not eaten. The salt contents of meals served in university canteen was high such as 4.02 ± 0.41g of Mie goreng (Spicy fried noodle), and 3.66 ± 0.10g of Kwetiau goreng (Stir fried flat rice noodle). Based on the food-based menus, the menu with the highest percentage of appearance was mainly rice-based (31.1%), followed by chicken-based (12.0%), egg- based (10.5%), bean-based (8.3%). Balanced Diet Index of males was 15.7 ± 4.0, and females was 13.8 ± 6.2.

KEYWORDS: Dietary quality, Nutritional balance, Salt contents, Food habits, Indonesian university students

1. Introduction

Food consciousness increases in developing countries with its economic development. Although the consumption of organic food was more popular in developed countries, awareness of the importance of organic food has spread in developing countries (Williams & Hammitt, 2001). Newson et al. (2013) revealed that people in both developing and developed countries were largely aware of the negative health effects of salt and the necessity of reducing salt intake for their health (Newson et al., 2013).

The dietary habit in young adult age is important for their current and future health. Fatty food or salty food course lifestyle-related diseases. Many young adults undergo significant lifestyle change such as starting to live alone for attending a university leaving from parents (Butler et al., 2004) and starting work (Burke et al., 2002). For this, the dietary habit of this age group has the potential to influence the health status of the next generation (Ma et al. 2003).

Although food consciousness increases in Indonesia, young adults tend to take foods of higher intakes of calories, fats, sugars, and salts. Peltzer & Pengpid (2018) found a high prevalence of hypertension, which is associated with salty food, in the general adult population of the Indonesia Family Life Survey. The prevalence of overweight has increased among adults in Indonesia (WFP, 2018). Anggraini et al. (2016) suggest the relationships between poor nutritional quality and food outlets such as street food vendors and small shops (*warung*). However, as Colozza & Avendano (2019) pointed out that relatively little literature on dietary change is available for Indonesia, current dietary habit in Indonesia is uncleared. For this, the dietary habit, especially urban young adults, still needs to be studied in Indonesia.

The purposes of this study are to show the dietary quality of university students in Bogor Agricultural University (*Institut Pertanian Bogor*) of Indonesia, which is located in West Java Province and has 24,946 students as of July 2004. Concretely, 1) the place where students take their meals, 2) the amounts of salt in a menu served in university canteen, 3) frequently appearing meals, and 4) nutritional balance.

2. Materials and Methods

2.1. Questioner survey on the place where students take their meals

The number of the subjects was 331 university students, consisting of 127 males and 206 females. The subjects were interviewed through the internet and asked to answer where they had their meals in a week. Subjects were recruited by the university students through student communities. The response rate among students was 36.3%. The items of where they had their meals were following: 1) university canteen, 2) *barang*, shopping street adjacent to the university, 3) self-cooking, 4) skipping meal, 5) others.

2.2. Measurements of the amounts of salt in a menu served in university canteen

This survey was conducted between September and October 2019. 49 kinds of meals taken from 32 food shops were analyzed by salinometer (Atago PAL-sio). The menus for each meal were taken and the salt concentration was measured with a salt meter (Atago PAL-sio) according to the method of measuring food with salt concentration meter.

2.3. Structured interviews on meal contents

This survey was obtained through food survey. The data was collected with the food photography method. The subjects sent photos of their meals for a week from 22nd to 28th September 2019. 41 students participated in this survey, and 28 effective respondents, consisting of 15 males and 13 females were included in the study.

Two methods were involved for the data analysis: the first was counting the number of meal menus at each meal so that the frequency to appear can be calculated. The second was measuring the nutritional balance. The extent of the meal balance was determined based on BDI3-60 standard (Amrin et al., 2013; Hardiansyah & Suk; Perdana et al., 2014), where three levels of scoring, i.e., 0, 5, and 10 were assigned. The standard considers six food groups which are carbohydrate food sources, animal protein food, plant protein food, vegetable, fruit, and dairy products. Herein, the indices such as fat, saturated fat, cholesterol, and sodium are not considered. Table 1 presents 6 assessment components and assessment criteria for the three levels. The food amounts were estimated by nutrition students by using the Buku Foto Makanan, Survei Konsumsi Makanan Individu published by the Ministry of Health, Republic of Indonesia.

Table 1 Food groups and criteria for evaluation of 3 level balanced nutrition index

Food Group	Score		
	0.0	5.0	10.0
Carbohydrate	<4 portion	4-8 portion	>=8 portion
Animal-protein	<1 portion	1-3 portion	>=3 portion
Vegetable-protein	<1 portion	1-3 portion	>=3 portion
Vegetable	<1 portion	1-3 portion	>=3 portion
Fruit	<1/2 portion	1/2-2 portion	>=2 portion
Dairy product	<=1/4 portion	1/4-1 portion	>=1 portion

Notes)
1 serving of carbohydrate is equivalent to 100 g of rice
1 serving of animal protein (other than milk) is equivalent to 50 g of meat
1 serving of vegetable side dish is equivalent to 50 g of tempeh
1 serving of vegetable is equivalent to 100 g of vegetable
1 serving of fruit is equivalent to 100 g of fruit
1 serving of milk: 200 ml of liquid milk/ 30 g of milk flour

3. Results and discussion

3.1. The place where students take their meals

As shown in Figure 1 to 4, both males and females often skip breakfast, and on weekday have lunch at Canteen and dinner at *barang*, shopping street adjacent to the university. 31.3% of males (Figure 1) and 34.9% of females (Figure 2) do not have breakfast. For lunch, 39.2% of males (Figure 1) and 48.0% of females (Figure 2) have lunch at Canteen. For dinner, 35.7% of males (Figure 1) and 38.6% of females (Figure 2) have lunch at Canteen.

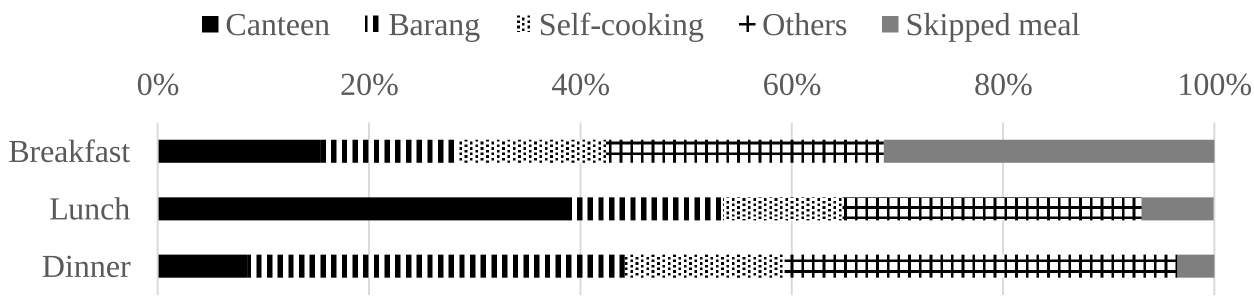

Figure 1: The place where the male students take their meals on weekdays

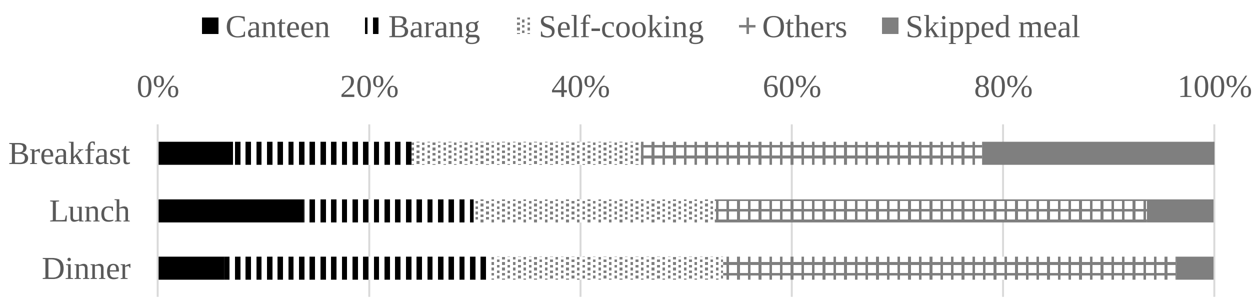

Figure 2: The place where the male students take their meals on weekend

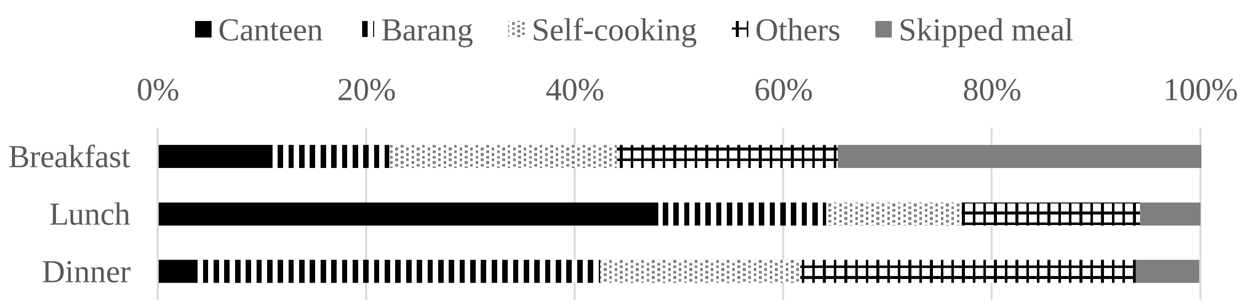

Figure 3: The place where the females students take their meals on weekdays

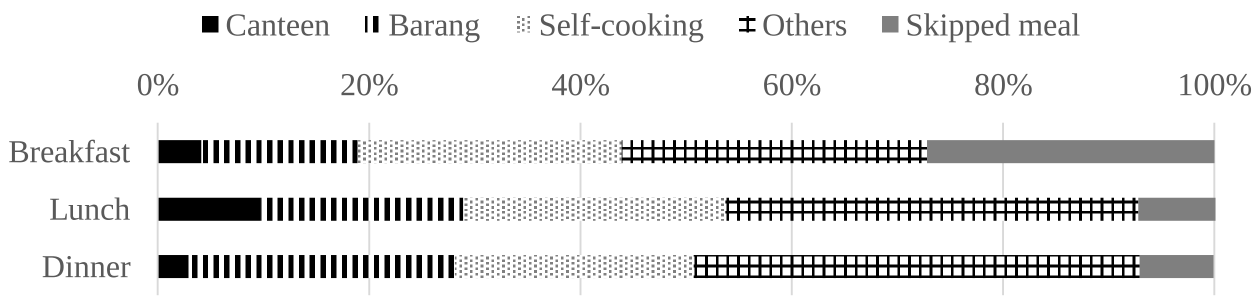

Figure 4: The place where the female students take their meals on weekend

3.2. The amounts of salt in a menu served in university canteen

The amounts of salt in a menu served in university canteens are high with a few exceptions. The menu with the highest salt content was noodle-based menus (5.16 ± 1.80g), followed by seafood-based menus (3.58 ± 0.71g), and beef-based menus (3.56 ± 1.42g).

Table 2 The amounts of salt in a menu served in university canteen

Menu based on food type (Number of menu)	Average of salt contents (g)
Noodle (2)	5.16 ± 1.80
Seafood (3)	3.58 ± 0.71
Beef (1)	3.56 ± 1.42
Chicken (10)	2.47 ± 1.88
Rice (3)	2.42 ± 0.65
Vege (3)	2.17 ± 2.04
Tofu (1)	1.44 ± 0.21
Egg (1)	0.94 ± 0.31
Snack (6)	0.45 ± 0.23
Combination of several small portion menus	
Shop1 (4)	0.70 ± 0.44
Shop2 (15)	0.67 ± 0.27

3.3. Frequently appearing meals

Rice-based menus were equipped 31.1 % of the total with the highest percentage, it could be reflected that rice is the staple food in Indonesia. Chicken-based menus were equipped 12.0 % of the total, which is the highest percentage in the meat group. Pork was occupied 0.4 % of the total with the lowest percentage, it could be reflected that a large part of Indonesian is Muslim.

Table 3 Frequently appearing meals

Food based on food type	Number of apparence	Frequency (%)
Rice	213	31.1
Chicken	82	12.0
Egg	72	10.5
Bean	57	8.3
Noodle	55	8.0
Beef	50	7.3
Seafood	41	6.0
Snack	32	4.7
Bread	27	3.9
Other grain	21	3.1
Fruit	17	2.5
Tubers and Roots	15	2.2
Pork	3	0.4
Total	685	100

3.4. Nutritional balance

As shown Table 4 and Table 5 (next page), the average score of the balanced diet index on males is 15.7 (S.D.: 4.0) and females is 13.8 (S.D.: 6.2). The carbohydrate food group occupied the highest percentages of the food consumption of university students. The number of servings of carbohydrates Animal protein, and vegetables in breakfast were lower than those in dinner. The intake of fruits was remarkably low in all kinds of meals: breakfast, lunch, dinner.

4. Conclusion

The rate of skipping breakfast was relatively high: 31.3% of males and 34.9% of females on weekdays. University canteens were chosen for lunch: 39.2% of males and 48.0% of females. The salt contents of meals served in university canteen was high: 4.02 ± 0.41g of Spicy fried noodle, and 3.66 ± 0.10g of Kwetiau goreng Stir fried flat rice noodle. Rice-based menus were equipped highest and pork was lowest. the average score of the balanced diet index on males is 15.7 and females is 13.8.

Table 4 The number of servings and balanced diet index score on male

Categories: Timing	Food types	Average	S.D.	C.V. (%)	Median	Maximum	Minimum
Breakfast	Carbs	1.5	0.9	61.4	1.7	2.9	0.0
	Animal Protein	0.5	0.4	79.0	0.6	1.2	0.0
	Vege Protein	0.3	0.7	234.5	0.0	2.9	0.0
	Vegetables	0.1	0.1	156.8	0.0	0.4	0.0
	Fruits	0.0	0.1	374.2	0.0	0.5	0.0
	Dairy products	0.1	0.2	197.2	0.0	0.5	0.0
Lunch	Carbs	2.0	0.4	18.5	1.9	2.6	1.4
	Animal Protein	1.0	0.4	38.4	1.0	2.0	0.4
	Vege Protein	0.2	0.2	117.1	0.2	0.8	0.0
	Vegetables	0.2	0.1	67.5	0.1	0.5	0.0
	Fruits	0.1	0.1	204.0	0.0	0.5	0.0
	Dairy products	0.1	0.2	137.9	0.0	0.5	0.0
Dinner	Carbs	1.8	0.5	28.0	1.9	2.4	0.2
	Animal Protein	1.0	0.4	40.7	1.0	1.9	0.4
	Vege Protein	0.2	0.3	123.8	0.2	1.2	0.0
	Vegetables	0.2	0.1	51.0	0.2	0.5	0.0
	Fruits	0.0	0.1	256.2	0.0	0.4	0.0
	Dairy products	0.1	0.1	164.4	0.0	0.4	0.0
Daily total	Carbs	5.3	1.0	18.5	5.4	6.9	2.8
	Animal Protein	2.6	0.9	33.5	2.5	4.5	1.3
	Vege Protein	0.7	1.1	152.2	0.5	4.9	0.0
	Vegetables	0.5	0.2	40.8	0.5	0.8	0.1
	Fruits	0.1	0.3	168.2	0.0	0.9	0.0
	Dairy products	0.3	0.3	118.5	0.2	1.2	0.0
Balanced diet index score							
	Carbs	4.7	1.2	26.7	5.0	5.0	0.0
	Animal Protein	6.7	2.4	35.4	5.0	10.0	5.0
	Vege Protein	1.0	2.7	270.8	0.0	10.0	0.0
	Vegetables	0.0	0.0	N.A.	0.0	0.0	0.0
	Fruits	0.7	1.7	255.0	0.0	5.0	0.0
	Dairy products	2.7	3.1	115.9	0.0	10.0	0.0
	Total	15.7	4.0	25.7	15.0	20.0	10.0

Table 5. The number of servings and balanced diet index score on female

Categories		Average	S.D.	C.V. (%)	Median	Maximum	Minimum
Timing	Food types						
Breakfast	Carbs	1.1	0.7	65.3	1.2	2.1	0.0
	Animal Protein	0.5	0.4	70.5	0.5	1.5	0.0
	Vege Protein	0.2	0.2	146.3	0.0	0.7	0.0
	Vegetables	0.1	0.1	81.3	0.1	0.3	0.0
	Fruits	0.1	0.2	188.1	0.0	0.5	0.0
	Dairy products	0.1	0.2	203.1	0.0	0.6	0.0
Lunch	Carbs	1.5	0.5	30.4	1.6	2.2	0.3
	Animal Protein	1.0	0.5	53.3	1.2	1.6	0.0
	Vege Protein	0.2	0.1	83.2	0.2	0.4	0.0
	Vegetables	0.3	0.5	132.6	0.1	1.7	0.0
	Fruits	0.1	0.2	167.5	0.0	0.6	0.0
	Dairy products	0.2	0.3	161.1	0.0	1.0	0.0
Dinner	Carbs	1.4	0.4	30.6	1.4	2.1	0.5
	Animal Protein	0.8	0.4	55.6	0.7	1.4	0.2
	Vege Protein	0.1	0.2	204.1	0.0	0.7	0.0
	Vegetables	0.1	0.1	69.4	0.1	0.3	0.0
	Fruits	0.1	0.3	214.7	0.0	1.1	0.0
	Dairy products	0.1	0.1	120.5	0.1	0.4	0.0
Daily total	Carbs	4.0	1.0	24.8	4.1	5.5	1.8
	Animal Protein	2.3	1.0	42.0	2.7	3.7	0.7
	Vege Protein	0.4	0.4	106.9	0.4	1.4	0.0
	Vegetables	0.6	0.5	88.6	0.5	2.4	0.1
	Fruits	0.3	0.4	125.2	0.1	1.1	0.0
	Dairy products	0.4	0.5	127.7	0.3	1.9	0.0
Balanced diet index score							
	Carbs	2.7	2.5	92.6	5.0	5.0	0.0
	Animal Protein	5.8	3.3	57.3	5.0	10.0	0.0
	Vege Protein	0.8	1.8	234.5	0.0	5.0	0.0
	Vegetables	0.4	1.3	346.4	0.0	5.0	0.0
	Fruits	1.2	2.1	182.6	0.0	5.0	0.0
	Dairy products	3.1	3.1	101.6	5.0	10.0	0.0
	Total	13.8	6.2	45.1	15.0	25.0	5.0

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Enhancing reflective practice and nurturing the creation of sustainable learning environments amongst natural sciences students at a university of Technology

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Abstract

The study focuses on reflections by Natural Sciences pre-service students at a university of technology on the development of teacher identity and nutrturing the creation of space, process and experiences through which they can participate in sharing and forming relationships and supporting one another to become different persons. This development is an ongoing process which starts during teacher education. Specific attention is paid to the self-reflection. Teachers' beliefs about themselves, about learning and its educational relevance and about learners if consistent with their action are vitally important for effective teaching. Our student teachers will graduate in the midst of the fourth industrial revolution (4IR) and need to be prepared accordingly for creative endeavours, social interaction, physical dexterity and mobility such that they will be able to apply these along with the digital needed in their future careers as teachers. This will enable them to produce learners who have the required skills in the future. A convenient sample of forty-eight (48) natural sciences senior students was used through focus group discussions to collect qualitative data. The data obtained proved the crucial role of teaching practice and reflective activities in the study process of teacher education. The study highlighted the importance of teaching the capacity to be reflective at earlier points of the professional development, so that pre-service students can be more receptive to change throughout their career. They also need to understand the role schools need to play in preparing learners for the future in the 4IR with automation and robotics redefining the need for humans in the workplace, shaping their minds on how to acquire new skills and apply these skills and how to solve problems creatively.

Keywords: professional, reflection, teacher identity, social justice, sustainable learning environments

Introduction

The roots of forming identity originate from the childhood experiences longing to adulthood. In the process of appearing identity, the task of a young person is the combination of the past assimilations and future wishes so that these may bring him or her prospectus feelings from these successes [1]. It should also be noted that self-perception related to identity as a professional directly alters a person's development as well as his or her ability to deal with a variety of situations in and out of the classroom; also, according to John Dewey (1933:212), reflection is central to all learning experiences, enabling "..us to act in a deliberate and intentional fashion .." Research indicates that the ways teachers view themselves as professionals determine how well they do as teachers, how long they stay in the profession, and how they feel about themselves as teachers in the classroom [2].

Teachers' identity is central to their practice and commitment to the profession [9,5,16], and it has a critical impact on the profession in relation to teacher commitment and educational change [5,16].

Theoretical framework

Grounded in Vygotskian (1978) perspective, the overall aim of teacher education program is best conceived as the development of professional identity. A Natural Sciences student teacher should possess a belief in his or her capability to teach the subject effectively. Educator effectiveness is of great concern in implementing constructivist science methods. Teachers must diagnose student misunderstandings and prescribe interventions to help students progress in their knowledge [6].

Teaching is not "simply a matter of following a script or carrying out other people's instructional designs" [8] but is instead a cognitive exercise fraught with decisions, diagnoses, and prescriptive interventions. Regardless of curriculum or resource, the educator assumes a critical role in implementing appropriate instruction.

The educator must create a teaching and learning environment that enables learners achieve more and perform to the best of their abilities. The learning environment should be such that the leadership role of the teacher planning, organizing, leading and controlling is not only prioritised but maintained and the teacher's morale, self-esteem and self-efficacy are boosted [19].

When the student teachers go on Teaching Practice, they are confronted realities of the profession and get to reflect in the real world of practice [10, 26] therefore this allows them as novices to be analytical of their developing practice [5, 13]. The teacher education preparation programs in higher education need to enable the student teachers as well as new teachers to translate and put what they have learned in their teacher preparation program into practice.

The impact of the fourth industrial revolution (4IR) on higher education is often conceptualised as a unidirectional relationship whereby the higher-education sector is forced to align itself with the demands of the prevailing socio-political trend [23]. Creating an understanding of such relationships help us visualise the various dimensions in which higher education should prepare itself for the imminent structural upheavals. Higher education, as an educational service sector, has witnessed three key phases in recent decades [20], namely, the elite, mass, and post-massification phases (p.2). Irrespective of these phases, sustained social development remains the most significant aim of university education. This happens to be a social goal that resonates well with the progressive notions in educational thought in general. Digital education, as a novel idea embraced by the higher-education sector, is to be seen beyond its mere technical nature. Just as in the case of online educational experiences, the concepts of shared humanity and social interactions are being redefined. Certain "humanistic concerns" of this nature are thus indispensable, while such educational experiences are transformed to a higher level of sophistication [4: p222]. An obvious deduction from this universal assertion is that higher education environments take up the challenge to cater for newly conceptualised graduate attributes and employability skills that facilitate the sustainable value creation that 4IR entails. Meeting the physical and emotional demands of the present generation without disrupting future generations' affordances to realise their needs and demands is what is envisaged in sustainable exploitation of resources.

Graduates in the 4IR should be able to advance the 'material culture', with concomitant emphasis on ethical and sustainable use of technologies [4]. Social change, as a moral obligation entrusted to the higher-education professional practice, envisioned in the context of technological advancements, is inherently vested in those graduates. In spite of a primary education system that has consistently fallen short of expectations, a higher-education system that is one of the best on the African continent, raises hopes for a social transformation agenda that can be carried by the system as a vehicle [22].

Aim of the study

The aim of the study was to investigate the reflections of Natural Sciences student teachers on the planning for micro-teaching as a way of enhancing the reflective practice towards creating sustainable learning environments and lessons learnt.

Research questions

The study sought to answer the following questions:

- To what extent do Life Sciences student teachers plan for micro-teaching?
- Were there any lessons learnt in the exercise and what are the implications thereof in the creation of sustainable learning environments?

Method

This is an exploratory case study. In the qualitative research approach, the retrospective narrative inquiry was used to elicit reflections by Natural Sciences student teachers at a university of technology on how they plan for micro-teaching as a way of nurturing and creation of sustainable learning environments. This allowed participants to share their perspectives. This study followed an interpretative approach

Participants

A convenient sample of forty-eight (48) senior students was used through focus group discussions to collect qualitative data. The following ethical principles guided the research project: informed consent, voluntary participation and safety in participation (confidentiality, anonymity and privacy). All student teachers involved in this study have teaching experience acquired during teaching practice.

Data collection and analysis

Data were collected by means of observations and focus group discussions. Focus groups were voluntary; a focus-group schedule was used to guide the discussions. Qualitative data analysis is aimed at interpreting and examining content that is meaningful to the study and categorising the data through themes and subsequently putting data back together [7]. All interviews were transcribed, coded and themes were identified [15, 16] in accordance with the research questions.

Through data analysis generated by the qualitative method wherein focus group discussions were made, the student teachers were able to reflect, amongst others, on collaborative learning, systematic thinking and analysis, participatory learning and to improve on their practice.

Findings and discussion

The results are discussed under the following themes which emerged:

Participatory and collaborative learning

The student teachers planned micro-lessons together and made notes as they observed a colleague present the lesson. They took turns in presentations. Comments on their observations were made as well as recommendations to the presenter. Sustainable learning environments require participatory teaching and learning methods that motivate and empower learners to change their behaviour and act for sustainable development [18].

There was emphasis on peer learning and development of dialogue amongst the student teachers. At the beginning there seemed to be efficacy and confidence problems on the part of the student teachers. One student teacher, quoted verbatim indicated that:

> *"It was not easy for me to make a contribution in the presence of my classmates. I was scared and did not feel confident enough. I learned that there is nothing to be afraid of as we are all learning"*

Another one indicated that:

> *"I am happy that every experience and incident has been molding me into the teacher I always wish to be. I know what to do now".*

For any lesson to be a success, planning together is important as it is the guide for presentation of the lesson, without which the teacher may go astray [14]. Collaborative planning is a necessity, and not just something that can be done as a formality. Collaborative planning created a platform for student teachers involved in the study to engage in an analysis which focused their opinions or strengths, weaknesses, opportunities and threats which could affect their implementation strategy to create a sustainable learning environment.

The focus on planning together was on developing guiding directions for a micro-lesson wherein the skill of introduction was demonstrated. The lesson was planned accordingly in collaboration with other classmates and this promoted competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way. "To learn to be a good (highly qualified) teacher, the person needs to be exposed to different contexts and pre-service teachers need opportunities to practice their acquired skills within these contexts" [12: p4].

Student teachers who participated in this study successfully did collaborative and co-enquiry, negotiated and established genuine trust and respect within a safe and supportive environment in which members were willing to take risks [25]. Participants shared best practices and learned from one another.

Effective communication

Good communication also clarified limits or boundaries that every member was expected to work within, and thus, unnecessary conflict was avoided. Quoted verbatim as student said:

"I am an introvert by nature and very shy, but working together with my classmates, preparing a micro-lesson and the discussions we had made me feel comfortable to participate in discussions"

It is through communication that student teachers involved in this study could know exactly what their roles and responsibilities were and to ensure that set goals are reachable or attained.

Thinking creatively for future scenarios

Micro-teaching afforded participants an opportunity to practice by using role play, real-world inquiry, futures visioning, problem-based learning, and providing space for emergence. A student indicated that:

"I think I am now better prepared and ready to stand in front of the class to teach and I can confidently face a class now".

The exercise enhanced on the students teaching skills, development of the teacher pedagogical content knowledge through reflection, creation of opportunities for them to share best practice as well as the development of common understanding of what constitutes an effective lesson can be transferred to other lessons to ensure sustainable learning environments.

Reflections

Reflection is a necessary step if one wants to make a positive change. Reflecting on the lesson in general: it was evident that the lesson outcomes were achieved. One of the students who presented the micro lesson presenter quoted verbatim said:

"This has been a very good journey for me….., I have learned and gained a lot from this exercise, in particular, the value of working together with my peers"

Another student mentioned that:

> *"even though my classmates and I did not agree on everything, this made have a different perspective, it was such a good opportunity for learning and was very helpful"*

The student teacher's reflection upon their learning showed evidence of willingness to incorporate the learnt ideas of good teaching in their future classrooms teaching. Identity formation is a personal and individual process, but this study showed that identity formation is a social and institutional process and engaging pre-service teachers in reflective practice can highly impact teacher identity development.

A teacher with a strong and positive professional identity will be an effective teacher who in turn will be self-directed and develop skills needed in the fourth industrial revolution and knowledge necessary for teaching throughout their lives enhancing Sustainable Learning Environments (SuLE) and ensuring social justice. As stated by Mahlomaholo (2012), SuLE focuses on fostering principles of social justice, care, love, equity, respect and inspiring hope. The study highlighted the importance of teaching the capacity to be reflective at earlier points of the professional development, to enable the student teachers to be more receptive to change throughout their career to ensure SuLE. The need for higher education to respond to the 4IR is multidimensional and has a degree of urgency [3, 21]. At a societal level, it involves questions of ethics, morality, and social justice, while at a technical level it raises questions of adaptability of the higher education system, that includes curricula, as well as reconsidering the educational aims of courses.

Conclusion

Micro teaching provided the experience for the student teachers to learn a simulation of the concept of teaching and learning. In this study, through micro-teaching, simulation of the concept of teaching and learning indirectly encouraged the student teachers to link the knowledge gained from theory to teaching practice. Engaging student teachers in reflective practice can highly impact teacher identity development, effective communication, enhance and nurture sustainable learning environments. Also, key to the 4IR, is to note the reality that youth of today no longer start careers to grow in one role but that roles will change regularly.

The student teachers who participated in this study were a representative of the larger undergraduate population. Further study, on a larger scale is recommended.

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ENVOY APPROACH FOR HETEROGENEOUS GROUP

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Abstract

The prequel to engaged students are teachers who established high challenging standards of performance in order to encourage students to engage deeply in what they are learning. Thereupon, this study offers an analysis of phenomenographic research devised by Ference Marton. Hence, the main focus of this research is to describe the lived experience of the selected participants in envoy approach. Given the open-ended interviews, the participants tacitly expound their lived experiences. In particular, it aims to demonstrate how the structural component with the referential component of the phenomenon as described, is fundamental in promoting a framework in teaching envoy approach in the Filipino setting. Anchored with the 21^{st} Century skills, envoy approach with its appropriate method and design promotes lifelong learning which leads to the empowering of the learner through the iterative teaching-learning envoy approach with the accountability in learning in groups, responsibility in learning and or to foster ownership, developing listening and speaking skills, and in promoting the skills in synthesizing and summarizing ideas. By and large, this paper explores information on variation of experience visible, to present alternative views; a process more of discovery than that of verification.

Keywords: Envoy, Approach, Envoy Approach, Heterogeneous, Heterogeneous Class

Chapter 1

INTRODUCTION

There is not a real world 'out there' and a subjective world 'in here'.
The world [as experienced] is not constructed by the learner, nor it is imposed upon her;
it is constituted as an internal relation between them."

-Marton & Booth

Traditionally, teachers esteem the highly articulate and logical students in the classroom and labelled the artists, architects, musicians, naturalist, designers, dancers, therapist, and entrepreneurs, whose talents are not reinforced as "learning disabled and or underachievers." Dramatically, in 1983, the Multiple Intelligence theory of Howard Gardner has one of the most remarkable features; that is how to provides eight different potential pathways to learning which means a teacher will get inside a classroom to unearth and reinforce the eight intelligences of his or her students (Gardner 2011; Armstrong, 2019).

In paper and pencil test assessment era, a myth describes the teachers who devote time to creative endeavors, student engagement, critical thinking and advance writing rob time from the content coverage and test drills which for others are necessary for good test performance. By such logic, good teachers have bad test scores. However, critics of school testing do not agree with the notion that good test scores equate with good teaching. In contrast, they believed that not everything can be measured with a number (Reeves, 2004).

The teachers in school -who used the MI philosophy- redesign the way to educate the learners who are word smart, reasoning smart, picture smart, body smart, music smart, people smart, self-smart, and the nature smart. Thereupon, with the rise of the network society constituted itself as a global system, university attains a privileged position under globalization since it produces and disseminates the highest level of education (Stromquist & Monkman, 2014, p.103). Nonetheless, networks do not stop at the border of the nation-state (Castells, 2011, p. 1968) but like an envoy, it pushes the learners with respective intelligence to defy their limits. The learners are encouraged to top the intrapersonal intelligence and more, and to work in a group or team with the people smart.

Eventually, in employing the Envoy Approach, Kiddy et al., (2001) in the teaching and learning process, the class is divided into groups or teams and to select an envoy. The envoys will visit other groups one at a time and return to his or her original group. The envoy in a group listens to reports from the group that he or she has to visit then returns to his or her original group to present the information he or she has gathered for discussion. The ability to listen attentively and the level of understanding of the concepts discussed can be observed in their ability to summarize, to synthesize, and to organize information clearly, to the extent with which students critically questions and reflect on ideas (BEAM, 2008).

The study of envoy approach hint at present on how far the students' thinking and communication skills could be enhanced. The experiences they are to share unveil significant information with their prior knowledge and the feeling of being accountable in their learning in group discussion. Their feelings towards the process and experiences reveal their values on how to learn than what to learn. The suggestions they are to bring out with the envoy approach will possibly lead to create a method and or a strategy on how to fit the approach in the Filipino setting. In whole, the students cognitive, affective, and physical exposure with the envoy approach in learning bring to light their capabilities and or potentials by which Imam et. al (2014) called it as scientific literacy. In their study, it leads for the learners to participate fully as citizens, community members in the globalized economy.

In the Philippines, poor quality of education and no global recognition were among of the reasons of the switch to the implementation of the K to 12 Program. Imam et al. (2014) posited that students need to develop scientific literacy in order to participate fully as citizens, community members in the globalized economy. One of their recommendations is for the teachers to be aware of the powerful relationship between meaningful science learning and reading comprehension through professional development on pedagogy, reading instruction and science content. Subsequently, Teach the Philippines (2013) presented that the K to 12 program aims to provide mastery of skills for lifelong learners and to prepare them for career opportunities. It also contextualizes lessons to students, as concepts will be explained using local culture with the use of the students' respective mother tongues.

In Davao Region, the facilitation of proper acquisition of skills in the K to 12 Curriculum where at stake due to lack of classrooms, displacement of some teaching and non-teaching personnel, and lack of qualified teachers (DOLE, 2014). Though teachers were trained in the Learning Effectively through Enhanced Pedagogies (LEEP) -in partnership with Knowledge Channel and the National Educators Academy of the Philippines (NEAP)- they need more time to adjust and master the skills to facilitate and manage the class; to develop and enhance the scientific literacy, and for the students to experience meaningful learning in order for them to function in the society, and to be globally aware.

Before long, the Commission on Higher Education (CHED) Memo 46. Series of 2012 mandates Outcomes-Based Education (OBE) standards for higher education institutions. The OBE includes the inquiry-based teaching which is described as an umbrella term that covers a number of other approaches like the Problem-Based Learning and the Project-Based Learning (Corpuz & Salandanan, 2015). Information from books on principles of teaching featuring OBE and K to 12 are too great with the learning theories, definitions, and conceptualization.

Consequently, in the local context, most of the teachers and students experience knowledge overload that they still find themselves in the same boat on the adjusted term 'transfer of learning' where what is written in the book is encoded in the power point slides and being copied by students in their notebooks during the presentation. In the end, they found themselves with the books, powerpoint presentations, and notebooks contained the same information.

Individual progress in learning is appreciated, however, with the observation of the 21st Century skills -critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, flexibility, leadership, initiative, productivity, and social skills- learners are encouraged to work and learn in group or team which can be experienced in envoy approach in teaching by which most of the skills are engaged.

The Filipino classrooms are nourished with foreign ideas, pedagogical approaches, methods, strategies, and or techniques. In addition, most students are oriented to achieve task alone. To be one in the honors list and to compete to rank oneself to the top. With the introduction of globalization in education, there is a urgent need to train the Filipino students to work, to achieve, and to be recognized in teams. Another important, with the adaptation of the new curriculum in the tertiary level, it is timely for the Filipino students to help them describe the structural and referential meaning of the foreign approaches, to give them the liberty to express how they perceive the teaching approaches they are engaged with and on how they learn. This paper explores information on variation of experience visible, to present alternative views; a process more of discovery than that of verification.

The Research Question

This qualitative study probes the envoy approach in teaching and learning. In this study, the research focuses the lived experience of the participants in envoy approach and the exploration of their feelings as on how they understand the approach in teaching. Thereupon, they are to expound their suggestions in the undertaking in group discussions and their propositions on the new way in the process of the envoy approach.

This study is a work on progress. The researcher is adhered from the viewpoint of credibility as presented by Elo et al., (2014) and the communicative validity checks as suggested by Åkerlind (2005). The former cited Koch (1994) who said that self-awareness of the researcher as essential; that pre-interview may help to determine whether the interview questions are suitable for obtaining rich data that answer the proposed research questions. On the other hand, the later suggested that part of the defense involves ensuring that the research methods and final interpretation are regarded as appropriate by the relevant research community. The prevalence of research seminars, conference presentations and peer-reviewed journals provides an obvious source of such validity checks.

To manage the data, the researcher believes pre-testing of the analysis method is important. Thereupon, out of the three questions --What are the lived experiences of the students in envoy approach ? How the students feel in understanding envoy approach in the teaching-learning process? What are the students' suggestions in undertaking envoy approach? -the researcher pre-tests the analysis method. Wherefore, she has to present the result and discussion of the first question only: What are the lived experiences of the students in envoy approach? The categories of description the researcher has worked and pre-test independently will soon be discussed with the data analyst. The premise the researcher has worked in the process is referred to the suggestion of Schreier (2012) as cited by Elo et al., (2014) who said that in trial coding, researchers independently try out the coding of the newly developed matrix and then discuss any apparent difficulties in the matrix with the other researchers and to modify the categorization matrix if needed

Theoretical Lens

The envoy approach in teaching and learning is anchored with the Actor-Network Theory as theorized by Callon & Latour (1981); Callon, 1986; Latour (1999); and Law (1994); (1999). The theory explains that all entities take form and acquire their characteristics through their relations with other entities in the location in which they circulate. It expounds on the framing and summing up of interactions and relations through various methods, into a very local, practical, narrow focus. More so, it implies transformations, translations or transduction among entities in relations or interactions with each other. This is in consonance with the theory of Dynamogenesis where the bodily presence of another participant is a stimulus to the other members in the group in arousing the competitive instinct (Miles, 2012).

The Actor-Network Theory and the theory of Dynamogenesis are confirmed with John Dewey's theory which tells that schools need to readjust to the life of the learner and to avoid unnecessary waste of energy. Dewey's theory insists for a shift of the center of gravity, a pedagogical revolution comparable to the Copernican shift in astronomy: "In this case the child becomes the sun about which the appliances of education revolve; he is the center about which they are organized." Dewey's theory is supported by Larry Hickman's who theorized that the school, as a place for learning should be organized after the model of the laboratory which involves opportunities for learning through active experimentation, observation, construction, testing, discussion, and artistic expression in cooperation with other learners (Pitchard & Woolard, 2010).

The theory is elaborated and strengthened with the Inquiry-Based Learning which has also its roots in the theories of John Dewey and is considered a type of constructivist educational paradigm where constructivism views learning as a situated, active, and social process where learning occurs when students construct their own knowledge. When the learning environment fosters inquiry and enables students to actively engage in knowledge construction in a socially participatory way. Kovbasyuk and Blessinger (2013) extended these ideas further with their theory on meaning-centered education and learning that focused on learning as self-motivating and self- regulating personality and cognitive development through open meaning-making processes. Levy et al., (2010) added that as part of their interaction and collaboration with others, students are more naturally inclined to engage in critical self-reflection and are more inclined to share the results of their learning with others (Carfora & Blessinger, 2014).

Significance of the Study

The researcher takes this study personally. In cognition of the spirit of Outcomes-Based Education, Section 1, Article of CHED Memo No.74 s. 2017, Spady (1994) succinctly described the teacher's role in exercising the learning principles as adopted. To expound the teacher's role, Corpuz and Salandanan (2015) elucidated Spady's Learning Principles.

That she, as a teacher, should focus on helping students to develop the knowledge and skills that will enable them to achieve the articulated intended outcomes. In designing down, she should design instruction which include designing assessment tasks. With regard to high expectations, she should establish high, challenging standards of performance in order to encourage students to engage deeply in what they are learning. Moreover, in expanded opportunities, I must provide opportunities for students to achieve high standards in learning. From the above mentioned standpoints, as a teacher, my research is my way to helping the students to be prepared for a more complex life and work environment.

The result of the study is the outset for the *Commission on Higher Education (CHED) Officials* to strengthen the design on the effectiveness of the materials and development for the learners to be at the center where the appliances of education revolve. Subsequently, for the *School Administrators* to persuade the faculty to develop materials with myriad activities which enhance self- reflection, collaboration, artistic expression in their interaction with others. Wherefore, for the *Stakeholders* and or *Industry Partners* to be interested in the provision of learning environment in the workplace. Thereupon, for the students to be more naturally incline and engage as critical thinkers and more incline to share the results of their learning with those audiences.

Definition and Terms

Envoy Approach – Michael Grinder's ENVoY is an acronym for Educational Non-Verbal Yardsticks). A classroom management approach that utilizes non-verbal strategies to preserve relationships and gain compliance in the classroom.

For Kiddy et al., (2001), envoy is a teaching-learning approach which entails accountability as to provide a structure for accountability in group discussions. The approach is believed to encourage students to learn from each other, to take responsibility for their learning, to develop listening and speaking skills, and to promote skills in synthesizing and summarizing ideas (BEAM, 2018).

Envoy is an approach introduce by the Pedagogy group of the Australia Education Project during the Basic Education Assistance for Mindanao which was employed by trained faculty to the Teacher Education as part of the classroom instruction. Technically, in this study, the learning experience in envoy approach has to be analyzed to capture on how the learning experiences affect their academic motivation and develop their understanding of concept discussed. Through the participants' suggestions in the new way in undertaking the envoy approach, the study could lead to the creation of its method and design in learning in Filipino setting.

Heterogeneous Class. In educational setting, heterogenous groups contrast with homogeneous groups, in which all students perform at roughly the same instructional level. Heterogeneous class is a group which composition includes students from a wide range of instructional levels. The practice of assigning mixed groups of students to shared classrooms stem from the education precept that positive interdependence develops when students of varying achievement work together and help each other reach educational goals (Lewis, 2019).

In this study, heterogenous class refer to the recruited participants who are selected based on the appropriateness to the purpose of the research. They are the students of UM Tagum College students who have lived experience with that envoy approach in the teaching-learning process.

Relevant Literature

Readings on the topics on envoy as teaching-learning approach can be read in clusters. In the outset, the envoy approach and its process, the skills to be honed and its assessment will be given a wider scope. And also, to give an overview on how envoy is used in the other field, such like: The ENVoy of Michael Grinder (1993); and the envoy as a military tactics will also be explored a little so as to compare and contrast the teaching-learning envoy approach.

Envoy would mean more than one concept, envoy can be taken as a government strategy, a classroom management strategy, and or a teaching approach to learning. Envoy as government strategy, Merriam-Webster defines it as a minister plenipotentiary accredited to a foreign government who ranks between an ambassador and a minister resident which also called envoy extraordinary; or a person delegated to represent one government in its dealings with another. In addition, Cambridge Dictionary defines envoy as someone who is sent as a representative from one government or organization to another. On the other hand, ENVoY as classroom management strategy, is an acronym coined by Michael Grinder which stands for Educational Non-Verbal Yardsticks. It is a classroom management approach that utilizes non-verbal strategies to preserve relationships and gain compliance in the classroom.

To elaborate more about envoy as government strategy, Wriston (1960) describes [special] envoy as a universal practice and not as an American institution. It can be read that envoy is practiced before 1252. During the Ming Dynasty, Korean envoys sent to China 153 times, an average of 0.6 per year. The envoy diplomacy between Ming China and Korea had been established after Emperor Zhu Yuanzhang dispatched envoys to Koryo while the Koryao King Wang Xu sent envoys to Ming in the early Hongwu period. Envoys of mutual exchanges and communication with the bilateral political, economic and cultural, close ties a strong impetus to bilateral relations, relations between the two countries with different characteristics before the Ming Dynasty (Yanlin, 2006).

The paragraphs below are relevant literature for envoy approach as teaching-learning process which can be read in cluster according to its theme.

Purpose of Envoy

Envoy in teaching-learning approach, Kiddy et al., (2001) explained that it entails accountability as to provide a structure for accountability in group discussions, to encourage students to learn from each other, to take responsibility for their learning, to develop listening and speaking skills, and to promote skills in synthesizing and summarizing ideas (BEAM, 2008).

Accountability

A myth opposite to accountability describes the teachers who devote time to creative endeavors, student engagement, critical thinking and advance writing rob time from the content coverage and test drills which for others are necessary for good test performance. By such logic, good teachers have bad test scores. However, critics of school testing do not agree with the notion that good test scores equate with good teaching. In contrast, they believed that not everything can be measured with a number. Consequently, accountable learning happens neither accidental nor serendipitous but through pedagogical advances. Accountable students feel they have been challenged to think, to analyze, to reason, and to write more frequently. They are aware of their shortcomings and have acknowledged them. They are aware how often they collaboratively score their work and its consistency as they notice how other students' works are also assessed (Reeves, 2004).

In this regard, accountability to learning could be best explain with the 'accountability theory' that describes a process in which a person has a potential obligation to explain his or her actions to another party who has the right to pass judgment on those actions and to administer potential positive or negative consequences in response to them (Vance, Lowry and Eggett, 2015, p. 347). Tredgold (2017) explained that accountability cannot be delegated. One cannot be delegate accountability. It is something that has to be accepted for the group members to feel accountable and to have them take ownership. People in the group should take accountability which is set to succeed because no one is going to take ownership and show accountability for something that they know is going to fail.

Students' accountability to learning is also in consonance with the 'dynamic capability theory' which is viewed by Macher & Mowery (2009); Zollo & Winter (2002) as learned and stable patterns of behavior through which a student systematically generates and modifies its way of doing things, so that it can become more effective. Schumpeter also posited that a novice to learning -learning Higher Order Thinking Skills- will gain and or will become productive because of innovations (strategies) as long as other novice to learning are not able to copy those innovations. This implies that gain or productivity emerges when innovations are new, and productivity disappear when innovations are copied; productivity can appear if new innovations are created (Miles, 2012).

When people do not take accountability and things start to go awry as they do not feel ownership, they will go into spectator mode and watch as things fail. Whereas, when people take ownership, if things start to go wrong, then they step into solution mode. They start to try and figure out what is going wrong and try to fix it (Tredgold, 2017).

In like manner, when a case study is done as a group project, learners may develop improved communication and collaborative skills. However, collaboration is difficult. It requires individuals to agree on a goal, divide a task into pieces, delegate the responsibilities, and agree on how to combine all the pieces to accomplish the desired end result. The key element of collaboration is that it brings people together to achieve something that could not be achieved individually. It is a mistake to see collaboration as something that is only necessary on giant, unique efforts like the space program. Now a days, people live in an age of increasing complexity and specialization, and fewer and fewer kinds of work can be done by an individual. (Palmer, 2014; Walker & Hmelo-Silver, 2015).

Group/Team-Based Learning

Teaching in a heterogeneous large class where students can feel intimidated by group of strangers, anxious about appearing as teacher's pet, and to feel uncomfortable coming to class with little or no preclass preparation; discussion-based approach then seems to be out of question. Faced with the situation, many teachers in large classrooms simply resort to lecturing.

For strategic teachers, however, teaching in large classes is equally rewarding as teaching small classes. It is a matter of developing instructional strategy to encourage students to learn from each other and take responsibility for their learning. To address the no preclass preparation by providing them what to read and or assigning them texts to read help them from feeling uncomfortable. Eventually, reading and answering given material engaged them in content and made them think critically. By working in same group, relationships develop and become richer over time. Adding the mechanism of peer evaluation addressed the perennial problem of freeloaders in permanent groups. Wrapping up the class and giving of assignments force students to make the kinds of decisions they would face the next meeting.

Indeed, the four elements: readiness assurance; permanent teams; peer evaluation; and application-based assignments have developed into cohesive social units in the process-transforming from groups into teams. It has developed over time into a synergistic system that has exploded out of the business management classroom and found implementation in virtually every discipline around the world. (Michaelsen and Sweet, 2012).

Team-based learning can be explained and described down to its surface through social network theory, social facilitation theory, and attachment theory as examined and discussed by Miles, 2012 in his Management and Organization Theory and other theorists in relation to team-based learning.

Moreno (1934) maintained that a person's location in a social network determined his or her behavior; while Durkheim (1951) argued that social irregularities were not caused by the intentions of individuals but because human societies were like biological systems made up of interrelated components. Baker & Faulker (2002) and Granovetter (1985) posited a tendency to stay involved in a network and create, renew, and extend relationships over time. Uzzi (1996) said that "arm's length" ties are less powerful than "embedded" ties for trust, rich transfer of information, and problem-solving capabilities. Wellman, 1998; White, Boorman & Breiger (1976) said that social network theory is a long-lasting pattern of clustering, connectivity, and centralization. To complete the picture, social utility of network connections provides opportunities and constraints for outcomes that are important to those actors (Miles, 2012).

The above school of thoughts is a discussion of Kildurf and Brass (2010) on the four leading interrelated ideas that dominate social network theory: (1) the relation between actors; (2) embeddedness; (3) structural patterning, and (4) the social utility of network connections. The theory posits that networks are more than just two people who interact. Freeman (1979) explained that centrality describes an actor's position relative to the entire social network. Feld (1981) and Watts (1999) concluded after their experiments which results showed that it looks six intermediaries to reach the target person. Small-world networks are highly locally clustered, have short path lengths among members, and can lead to extremely high levels of performance, such as collaboration and creativity (Friedkin & Johnsen 2011; Miles, 2012; McCulloh, Armstrong, & Johnson, 2013).

People developing relationships in groups develop and become richer over time; the reason permanent teams become the second pillar on how to practice Team-Based Learning (Michaelsen & Sweet, 2012, p. 6). On the other hand, Buelow et al. (2002); Hawkins, Howard, & Oyobode (2007); Renfro-Michael, Burlew & Robert (2009) posited that people with fearful attachments do not trust others, have low self-esteem, tend not to self-disclose, tend to have poor social and emotional coping skills, and tend not to seek emotional support from others during stress, and tend not to take orders well from bosses (Miles, 2012, p. 51). Attachment behaviors appear to be universal across all cultures. In this case, Miles (2012) posited that in an adult-child attachment relationship -and or teacher-student relationship- an adult can respond to the needs of a child through being sensitive and by attending to the child's needs.

To bring out a clear picture, the two-by-two matrix of adult attachment of Bartholomew and Horowitz (1991) illustrated the four cells in the matrix which are: (1) the secured (positive, positive) individuals who tended to believe that ethical transgressions were wrong; (2) preoccupied (negative, positive) individuals whose attachment-related avoidance had lower prosocial motives to lead and tended not to act as a secure provider for the people in his or her group; (3) dismissing (positive, negative) were most likely to exploit, cheat or deceive others, and displayed the greatest indifference to unethical situations; and (4) the fearful (negative, negative) who tended to be more self-serving, exhibiting poorer leadership qualities in task-oriented situations (Miles, 2012).

Richards & Schat (2011) said that attachment models as described above were found to be related to helping others emotional regulation. When identified, Mikulincer et al. (2005) posited that people with dismissing and fearful attachment models can be helped by securely attached individuals who were likely to show greater compassion to help a person in distress compared to those with less securely attached mental models. The help extended by people in a team-based learning to other people in a group is best explained in social facilitation theory which Zanjonc (1968) examined. The facilitation theory explains the influences of other people on the increases or decreases of an individual's performance level. Geen (1989); Feinberg & Aiello (2006) gave example that when other people are around and the task is easy, then performance is better than when the task is done alone. On the other hand, if the task is hard, then the person's performance is worse when one performs the task alone (Miles, 2012).

Social facilitation as a theory and as being related to team-building explains why it is ideal for a large class to teach in teams. In a big class with permanent groups collaborating with other groups (Michaelsen & Sweet, 2012, p. 6), they can develop core strategies and integrate overall strategies into their own objectives. In a collaborative process, each member would understand how the group mission and strategies applied to his or her tasks. Each person would embody the group DNA and or the team DNA. Wheatley (1999) puts it, each person would be seen as a fractal of the whole. As a result, groups and individuals would be able to do the right thing without constant direction from their teachers. Much more, the ideal collaborative groups/teams would be value driven based on the core values of respect for human dignity, belief in the right of the other people involved and commitment to collaborative process (Straus, 2002).

Learning: A Responsibility / A Personal Journey

Engaging oneself to critical thinking, collaboration, team-based learning, synthesizing and summarizing information for presentation needs one to be aware what an envoy be.

It is awareness not brain that can participate in the world of pure forms and archetypes (Nunn, 1995, p. 117). Merriam Webster (2019) defines awareness as a quality of being aware: knowledge and understanding that something is happening or exists. Charles Haanel (1866-1949) once said that the real secret of power is awareness of power (Byrne, 2006, p.171). After Straus' (2002) eyes' examination, he said, he was awakened with the doctor's insightful remarks *"Your eyes are fine. What is it that you don't what to see?"* The flash of insight marked the beginning of his own process of awareness. The moment was the first step in his lifelong journey to uncover and demystify the processes of individual and group problem-solving, and to transfer these concept and tools to others. Further, Straus (2002) maintained that in problem solving, awareness is the key to building one's repertoire; that to increase both the number of heuristics tool kit and the ability to use them effectively, one must increase one's awareness.

The presenter [envoy] must learn to be aware of not only what he or she has to say is but also on how to say it (Mandel, 1994, p. 75). When answering questions, it is important to maintain the same style and demeanor one used in the presentation. A change in demeanor can suggest that the envoy is not confident about his or her position. Presentation provides more of an overview and to be more conversational in its style. Synthesizing and or summarizing the key areas of the problem and the project employed in a conversational manner is ideal. Whatever the strategy of the presentation is adopted -in a flow chart, sequencing, cause and effect, concept connection- awareness of how it should be presented is likely important. To making a comparison one needs appropriate knowledge of what is to be compared, awareness of the appropriate frame of reference and awareness of the appropriate criteria (Johnson & Siegel, 2010).

Frame of reference is also called cognitive structure and or cognitive mechanism. It is the frame that human beings use to obtain information from the environment, to store information in memory, and to retrieve information-processing capacities of cognitive system. Neisser (1967) maintained that with a cognitive structure or framework to describe a subject, it is easy to make distinctions and therefore to acquire and retain new information. For example, without a language of process, without knowing something about the different strategies that can be used to solve problems, it is difficult to learn and acquire new ones. Newel & Simon (1972) maintained a simple but powerful fact that human problem solving is an educated trial-and-error process. It implies to teaching collaborative problem solving, and much more to developing approaches (Straus, 2002; Andersen, Barker, & Chen, 2006).

Listening and Speaking Skills

Speaking is an interactive skill. It is developed through exposure and practice. Garrett (1982) maintained the three stages of production, which begin from the conceptual planning to the actual speaking. It follows a cognitive process. People formulate ideas in their minds, decide for sentence structures and words and express them. In a multilingual country, English acts as the link language. Knowledge of spoken English is an asset. In a classroom, especially for professional courses, the learner has to be proficient in English to be able to: ask for the clarification of the problems, and participate in group discussion or debate. As a member of the group or of the society one has to interact with others. One needs oral proficiency to perform the functions such as making inquiries for different purposes, complaining and arguing. Thus, one needs speech for survival (Shastri, 2009).

Presentation of knowledge and ideas has its own transition. It varies from different levels. In the primary grades for example, the focus is squarely on content -the what is said rather than how. Pupils are asked to tell about personal experiences and to include important details. In grade two, the developed skills should be enhanced and to learn on how to speak audibly in coherent sentences. In upper elementary, they move from adding details to adding fact. Students must put information in logical order. The audible requirement becomes a bit more specific that it addresses enunciation and speed. When students reach middle school, the personal stories are gone. The concern is now with informational speeches only. The only new delivery requirement is the addition of eye contact. In grade eleven and twelve, speech has to be built with a particular audience and will include distinct perspective (Palmer, 2014).

In tertiary levels, it is not sufficient for students to build a speech with facts, details, examples, and evidences. A critical thinking attitude is a habitual willingness or commitment to engage in purposeful deliberation about claims or ideas rather than simply accepting them at face value. There is much more to an effective spoken presentation content. There is a need to back up with their assertion and provide support for their opinions. The content must be organized such that listener can follow the organization; to consider a grabber opening, clarifying information, connectors, and a powerful closing. A presenter (an envoy) should engage the audience immediately with an opening that hooks the listener; connects his or her topic to his or her audience; and he or she must leave the audience with something to think about or do (Palmer, 2011, 2012, 2014; Michaelsen & Sweet, 2012).

Collaborative activities whether conducted within the classroom or at extreme long distance are almost entirely dependent on listening and speaking. Collaboration is difficult. It requires individual to agree on a goal, divide a task into pieces, delegate the responsibilities and agree on how to combine all the pieces to accomplish the desired result. The key element of collaboration is that it brings people together to achieve something that could not be achieved individually. It's human nature to want to exclude those people who disagree with one's ideas or who are difficult to work with. The challenge of representing all of the different points of view can be managed, in part, by asking one individual to speak for several different interest at one time. Not surprisingly, people live in an age of increasingly complexity and specialization and fewer and fewer kinds of work can be done by an individual working along. Thus, in an interorganizational or community process collaboration has rings of involvement: the core problem solving group; the task forces; the input and feedback meetings and the communications and outreach (Straus, 2002; Palmer, 2014).

Synthesizing and Summarizing Skills

Bloom et al. (1956) defined synthesis as the putting together of elements and parts so as to form a whole. Generally, this would involve a recombination of parts of previous experience with new material, reconstructed into a new and more or less well-integrated whole. However, it should be emphasized that this is not completely free creative expression since generally the student is expected to work within the limits set by particular problems, materials, or some theoretical and methodological framework. At the synthesis level students are required to devise something -a system, a process, or an algorithm- and the result depends on students being able to use the learned materials on systems and situations they might not have envisioned or imagined previously. This means not only that the learned materials should be linked but also that students should be able to establish and generate new links to the material that has been learned (Mastascusa, Snyder, & Hoyt, 2011).

There are certain things speaker must think about ahead of time as part of "building a speech." There are also instant recognizable as components of good writing, and there are definitely strong parallels between effective written messages and effective spoken messages. In a case on point, synthesis objectives which occur at most levels of education: the production of unique communication; production of a plan, or proposed set of operations; and derivation of a set of abstract relations. For the production of unique communication, its illustrative educational objectives are: the skill in writing, using an excellent organization of ideas and statements; the ability to write creatively a story, essay, or verse for personal pleasure, or for the entertainment or information of others; the ability to tell a personal experience effectively; the ability to make extemporaneous speeches; and the ability to write simple musical compositions, as in setting a short poem to music (Mastascusa, Snyder, & Hoyt, 2011; Palmer, 2014).

Synthesis, as for Thorne & Paterson (1998) generates operational models, theories, or hypotheses that can be tested in later research. In addition, NHS CRD (2001) posited that it can assist researchers to explore differences and similarities across settings, sample population, and researchers' disciplinary, methodological and/or theoretical perspectives. Synthesis as to the production of plan, or proposal set of operations has specified education objectives (Bloom et al., 1956): the ability to propose ways of testing hypotheses; the ability to integrate the results of an investigation into an effective plan or solution to solve a problem; the ability to plan a unit of instruction for a particular teaching-learning situation; the ability to design simple machine tools to perform specified operations; the ability to design a building according to given specifications; and the ability to synthesize knowledge of chemistry, knowledge of the unit operations, and data available in the technical literature; and apply these to the design of chemical processes (Hannes & Lockwood, 2012).

Tuckman (1965) described a group as going through steps of maturation. In norming and performing stages, group begins sharing information more productively, collaboration, high commitment, and task function. As the group members synthesis to the derivation of a set of abstract relations, they project the following skills: the ability to formulate appropriate hypotheses based upon an analysis of factors involved, and to modify such hypotheses in the light of new factors and consideration; the ability to formulate a theory of learning applicable to classroom teaching and learning; and the ability to perceive various possible ways in which experience may be organized to form a conceptual structure; and the ability to make mathematical discoveries and generalizations. In this sub-category it includes objectives that require the student to produce or derive a set of abstract relation (Stenning, 2004; Breshears & Volker, 2012; Defining et al. 2013).

Chapter 2

METHOD

The overall strategy that the researcher chose to integrate the different components of the study is presented in this chapter. The blueprint for the collection and analysis of data is constituted in a coherent and logical way to ensure the researcher effectively address the research problem.

Research Design

The wider frame for qualitative research has number of different approaches and many of these share the same aim: to understand, to describe, and to interpret social phenomena as perceived by individuals, groups and culture. The choice to what approach to fit in the study are critical to understanding on how the researcher writes her methods and findings, and how those write-up are evaluated. The form of social inquiry in qualitative research focuses on the way people make sense of their experiences: ethnographers focus on culture and customs, grounded theorists investigate social processes and interaction, phenomenologists illuminate a phenomenon and describe the world (Holloway & Galvin, 2006; Saldana, 2011).

Though qualitative research has variety of genre, the usual criteria are the particular approach to inquiry, and the presentation and representation of the study. In this paper, the researcher reflects the phenomenological approach of qualitative research. Phenomenology though has three types: the transcendental, hermeneutic, and phenomenography.

Husserl's transcendental phenomenology describes the experiences of the participants. It seeks the essence by changing an aspect of the phenomenon and then evaluate the changes. In this type of phenomenology, the researcher brackets in order to give a clear view of whatever is being researched as it is. Heidegger's hermeneutic phenomenology understands the situated meaning of a human in the world, develops a sense of the whole, and reflects on the lived experience with interpretation by the researcher. Marton's phenomenography, investigates the different ways in which people experience something or think about something. Relatively, this type of research approach is used in education to observe student's approaches to learning (Macmillan, 2014).

Phenomenography has been used to explore approaches to teaching, including how different teacher roles, such as those of lecturer, preceptor and mentor, and the relationships between them are variously conceptualized. One of the most well-known findings of a phenomenographic study resulted in the metaphor of deep and surface approaches to learning and studying. This metaphor has been referred to as a foundation stone for much research, theory and practice in higher education, proving central to helping both staff and student, and is often used to encourage more student-centered learning and teaching (Stenfors-Hayes, Hult, & Dahlgren, 2013).

Phenomenography emanated out of research led by Ference Marton to investigate variation in student learning outcomes. As a research approach, it has historically been concerned with exploring questions relating to learning and understanding, that is, how people learn and how they see knowledge within a particular context. Phenomenography's focus on learning and the experience of learning in different contexts has meant that learning related phenomena comprise the most typical experiences investigated using this research approach (Edward, 2007; Dunkin, 2000; Harris, 2008; Yates, Partridge, & Bruce, 2012).

Envoy Approach for Heterogeneous Class employs the phenomenographic approach of Ference Marton. The researcher is convinced to the belief of Marton & Booth (1997) as quoted by Åkerlind (2005) when they said that "*there is not a real world 'out there' and a subjective world 'in here'. The world [as experienced]is not constructed by the learner, nor is it imposed upon her; It is constituted as an internal relation between them.*" Subsequently, the researcher studies the awareness or ways of experiencing envoy approach of the participants in the teaching-learning process. Outcomes are represented analytically as a number of qualitatively different meanings or ways of experiencing the envoy approach as the phenomenon.

Role of the Researcher

In cognition of the spirit of Outcomes-Based Education, Section 1, Article of CHED Memo No.74 s. 2017, Spady (1994) succinctly described the teacher's role in exercising the learning principles as adopted. The researcher chooses the envoy approach for heterogeneous class as research study for is it quite challenging, yet, it appears interesting. As an educator by profession, the researcher through this research accepts the challenge on the switch of education system by which her country has adopted now. With the right timing, the need to review or modify the methods and designs of the present approaches interest the researcher to study the envoy approach for the heterogeneous class.

All teaching approaches [which include envoy approach] are set of assumptions which define beliefs and theories about the nature of the learner and the process of learning (Corpuz & Salandanan, 2015, p.11). For example, the value-added approach embraces the fundamental feature of student-centered education, which is intertwined with how teaching and learning content can be modified to address students' learning needs and educational expectations (Thi, Tran, Ly, 2013). Another example, the communicational approach is based on the belief that grammar construction can take place in the absence of any explicit focus on linguistic. In a case on point, envoy approach is a package of learning and life skills: accountability, responsible of its own learning, listening and speaking skills, summarizing and synthesizing and socialization skills. In relation to that, envoy approach as discussed in the relevant literature is related to accountability theory, dynamic capability theory, social network theory, social facilitation theory, attachment theory and the multiple intelligence theory of Howard Gardner.

The above approaches are prequels of teaching methods and or strategies. According to Brown (1994) a teaching approach should have a method or design as an overall plan for systematic presentation of the lesson which should be based upon a selected approach. Spady's Learning Principles tell that teacher should focus on helping students to develop the knowledge and skills that will enable them to achieve the articulated intended outcomes.

As one of the faculty of the Department of Education, as one of the participants of Commission of Higher Education's (CHED's) Second Generation Faculty for Training New General Education Core Course, as one of the members of pedagogy group of Basic Education Assistance for Mindanao (BEAM) and one of the cluster leader in the In-Australia Training, the researcher has the duty to her community to act for innovation. The teaching-learning experiences should not stop in her. She has the duty and responsibility to apply the Learning Principles for Outcomes-Based Teaching Learning (OBTL) as maintained by Spady (1994): clarity of focus, designing down, high expectations, and expanded opportunities. Corpuz & Salandanan (2015) elucidated the outcomes when the teacher scaffolds the students to actually do with what one has learned about principles of teaching.

Hence, the researcher is challenged to design instruction which include designing assessment tasks; establish high, challenging standards of performance in order to encourage students to engage deeply in what they are learning; as a teacher she must provide opportunities for students to achieve high standards in learning. From the above mentioned standpoints, the teacher through her research is in her way little way to helping the students to be prepared for a more interesting and challenging life and working environment.

Another important, the researcher deals well the selected participants with lived experience in envoy approach. They are given open-ended questions/interviews to share about their experiences in their undertakings of the approach. In the process, the research complies the necessary steps for the success of this research. The research Envoy Approach for Heterogeneous Class creates meaning to the researcher as she believes that the success of the study helps to promote essential learning and innovation skills. As stated in 21st century skills, in order for students to be prepared for a more complex life and work environment the following skills should be promoted: creativity, critical thinking, communication, and collaboration.

Correspondingly, the purpose of envoy approach entails accountability as to provide a structure for accountability in group discussions, to encourage students to learn from each other, to take responsibility for their learning, to develop listening and speaking skills, and to promote skills in synthesizing and summarizing ideas. The application of her teaching experience, the enhancements she gained from the trainings and seminar workshops are employed in this research as to gather evidence as to illustrate the range of conceptions present within the population under study.

Research Participants

In qualitative research, Higginbottom (2004) is cited by Elo et al., (2014) who said that sampling strategy is usually chosen based on the methodology and topic, and not by the need for generalizability of the findings.

Wherefore, the criteria in the selection of the participants is based on the presentation of Elo et al., (2014) which is also adhered by MacMillan (2014) who maintained that participants in a phenomenographic study should be selected based upon their appropriateness to the purpose of the research. Likewise, Creswell (2013) also said that the data are collected from the individuals who have experienced the phenomenon. Obviously, the respondents recruited in this study are college students from one of the tertiary schools in Tagum City who have had the lived experience with the concept of phenomenon being researched, the envoy approach for heterogeneous class.

The researcher conducts Individual In-depth Interview (IDI) to the twenty (20) selected participants. The number of respondents are based on the statement of Creswell (2013) and Holmström et al., (2003) who are in the same wavelength in their judgements on the number of participants as respondents for the study. The former quoted Polkinghorne (1989) who recommended that researchers interview five (5) to twenty five (25) who have all experienced the phenomenon; the later succinctly said that experiences from a large number of phenomenographic studies have shown that data from twenty (20) informants is usually enough to discover all the different ways of understanding the phenomenon in question.

The researcher also considers Trigwell's (2000) and Bowden's (2005) words who maintain that the sample size is influences by two factors. In the first instance, the number of interviews conducted needs to be sufficient to allow for finding variation in conceptions. Secondly, sample size must also ensure that the amount of resulting data remains manageable. The authors imply that in-depth interview/focus group discussion has to be conducted one concept at a time. Nonetheless, the twenty (20) participants have had to answer the allotted questions on the scheduled session. This is supported by Larsson & Holmström (2007) who said that by concentrating on concrete experiences, the focus is maintained, avoiding expressions of how things should be, or ought to be.

In their presentation, Larsson & Holmström (2007) gave example on the conduct of IDI. The first author during the interview asked the respondents three (3) questions concentrating on a concrete experience to maintain focus. In like manner, the researcher in this study has to assign the three research questions accordingly. As suggested, since this study has three main research questions, this means that there are three (3) sessions to schedule for the participants for the interview. To maintain focus, the researcher has to ask three sub-questions from one of the three (3) research questions per session. Definitely, the participants have to answer nine (9) questions in all which are evenly divided in three (3) sessions with three sub-questions per session.

Moreover, on who should be interviewed first among the twenty participants, the researcher takes the suggestion of Larsson & Holmström (2007) who said that the participants can participate voluntarily. This implies that the respondents can volunteer to be one of the twenty (20) participants. In like manner, during the session, the selected participants in this study volunteer to be the first to be interviewed first.

To verify the participants' responses, the researcher takes the process suggested by various authors as quoted by Larsson & Holmström (2007) : Morse (1994); Trigwell (1994); Sandberg (2000); and Dunkin (2000). The authors maintain that sample size is determined by a saturation point, with data collection continuing until no additional conceptions of the phenomenon under investigation can be discerned. In the same process, the researcher has to undergo preliminary collection and analyzation; to reconduct the interview until no additional conception of the envoy approach for heterogeneous class under study can be perceived. Morse et al., (2002) expounded that saturated data ensure replication in categories, which in turn verifies and ensures comprehension and completeness. Guthrie et al., (2004) and Saldelowski (1995a, 2001) added that well-saturated data facilitates its categorization and abstraction.

Data collection

The prequel of a trustworthy data is a precise detail of the sampling method and participants description. If the method is thoroughly documented for all of the process (preparation, organization, and reporting) all aspects of the trustworthiness criteria are increased. The success of data collection should be assessed in relation to the specific research questions and study aim (Elo et al., 2014).

The sampling method used in this study is purposive sampling. The researcher believes that it is appropriate to employ since the researcher is interested with the informants who have the knowledge concerning envoy approach for the heterogeneous class. To expound, Creswell (2013) stated that in purposeful sampling the researcher selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study.

Further, Creswell (2013) created a data collection circle, though suggesting to begin at any entry point in the circle. By then, the first entry point of this study starts in access and rapport. It means to access the research site and rapport to gain permission to study. Thereupon, this study obtains approval from the college and selects individuals who can provide access and facilitate the collection of data. In a phenomenological study in which the sample includes individuals who have experienced the phenomenon, it is also important to obtain participants' written permission to be studied. The steps employ in this study anchored the idea of Saldana (2011) who stated that in the conduct of the interview, the researcher contacts or connects with the participants to negotiate an interview date, start and end time, and the specific location; all at the participant's convenience.

Moreover, the data collection, the content analysis, and the result reporting go hand in hand. Reassured, the data collected in this study provide precise details of the sampling method and participants description. The researcher as a phenomenographer makes use of her own interpretative resources (Rodham & Doran, 2015). This means to take care in identifying themes to ensure that each theme is actually represented in the transcripts being analyzed and not a product of the researcher's over interpretation Elo, et al., (2014).

Data Analysis

The analysis of data usually starts with a search for meaning, or variation in meaning, across interview transcripts, thereupon supplemented by a search for structural relationships between meanings as Åkerland (2012) explained. Primarily, Cavanagh (1997), Elo & Kyngäs (2008), Hsiesh & Shannon (2005) as quoted by Elo et al., (2014) said that a prerequisite for successful content analysis is that data are reduced to concepts that describe the research phenomenon by creating categories, concepts, a model, conceptual system, or conceptual map.

In the process, the researcher adopts the sequence of events in the analysis of data as suggested by Larsson & Holmström (2007) and Åkerlind (2012). First, the researcher reads the whole text; next, read the responses again and mark where the interviewees give answers to the three main interview questions [during the conduct it is only the first main question was realized since this study is on progress]; in these responses, the researcher looks for the *what* or the focus of the selected participants' attention and to decode on the *how* the participants describe their ways of undertaking the approach; then, the researcher makes a preliminary description of each participant's predominant way of understanding and work; thereupon, the researcher groups the descriptions into categories, based on similarities and differences; after that, the researcher formulates the *categories of description* and looks for the non-dominant ways of understanding; another important, the researcher finds a structure in the *outcomes space;* Lastly, she assigns a metaphor to each *categories of description*.

Results of the Phenomenographic Analysis

Åkerlind (2005) presented an account on phenomenographic analysis of Marton & Booth (1997):

> *The first phase of the analysis is a kind of selection procedure based on criteria of relevance. Utterance found to be of interest for the question being investigated are selected and marked. The meaning of an utterances occasionally lies in the utterance itself, but in general the interpretation must be made in relation to the context from which the utterance was taken. The phenomenon in question is narrowed down to and interpreted in terms of selected quotes from all the interviews* (Marton & Booth, 1997, p.133).

The in-depth interview of twenty (20) selected participants were transcribed verbatim. After several readings of the data, the researcher adheres Harris (2008) suggestions as he cited Marton, (1986) on the steps to employ. Based from the premise, the researcher selected and marked 'utterance found to be of interest' for the question being investigated. The recommendations of Harris (2008) for the bases of judgments by Sjostron and Dahlgren (2002) is also adopted:

- Frequency – how often an idea is articulated
- Position – where the statement is positioned: often the most significant elements are found in the introductory parts of the answer
- Pregnancy -when participants explicitly emphasize that certain aspects are more important than others (Harris, 2008. p. 63).

After the preliminary analysis, the most frequent appearing ideas were identified for further examination. For example, multiple participants made similar statements relating to experience envoy approach to gather ideas and information; that with envoy approach they experience to stand before the class to report information being gathered; and the opportunity to listen. For frequency, *the experience to gather ideas and information* has the highest number of utterances; next is *the experience to stand in front and report the information gathered*; then, *the experience to listen*.

As to where the statement is positioned, for the utterance *to stand in front and report the information*, has the highest number to position it in the introductory part of the answer. Next is the utterance to *experience to gather ideas and information*; and the utterance *the experience to listen*.

For the participants who explicitly emphasize that certain aspects are more important than others, samples are presented below. Multiple participants made similar statement relating to *the experience to listen*. Micheal, describing how should student listen and on how to deliver the knowledge and information

> *If the envoys are listening attentively and take down the important details with the accuracy and exactness that we shared to them and responsible enough to share the knowledge and information* . (M1.29)

Anthony talks about a student on how to learn new ways.

> *It was great listening to everyone about their experiences and how they are able to accomplish things. By listening to their stories, I was able to learn new ways or techniques as well that can also help me in the future.* (AP1.13)

Gabriel talks about the techniques on how to present ideas.

> *Every time I listen on how the people communicate and exchange the knowledge that they have, I saw how these people have different techniques in voicing out their ideas. I also found out that you don't have to always speak in order to have an information because listening is enough.* (G1.14)

Raphael described a student who describes an attentive listener and who values opportunity and ideas

> *To listen what others wants to say, to have the opportunity to write down what's on their mind because not everyone is given the opportunity to listen to the magnificent ideas of other people that's why I put it as a great experience in my "Book of life"*. (R1.03)

Cham described a group of students who worked as one for a goal to achieve.

> *Listening to the sharing of wonderful ideas, on how each group successfully developed their skills and passion. I've experienced that in achieving a certain goal we must learn teamwork in a group. Get only the important details in the group discussion then trying to express it in your own words.* (C1. 30)

When examining the sample passages, all five participants mentioned a student interest [listen] within the first sentence of their statement, reflecting the importance of the idea within their response. Within these passages, there are also examples of pregnancy where the participants clarify the meaning of their statements highlighting key points. Example Michael's statements imply that if envoy fails to listen, he can't get accuracy and exactness of what the group has shared. On the other hand, the statements also entail that even one gets the exact details if he or she is not responsible in handling it, the information lost its exactness and or the true meaning of the message.

After pointing out the interesting utterances for the question being investigated to be selected and be marked; which fit to Sjostrom and Dahlgren's (2002) criteria: frequency, position and pregnancy, the researcher adheres to Irvin's (2005) steps before forming *a pool of meaning*. Step one, the data needed to be analyzed in context to ensure that the participant's meaning was accurately represented; and step two, data excerpts needed to be proved representative of a larger section of data.

The researcher has employed the two (2) steps of Irvin (2005). By then, the data are removed from their context to form a pool of meaning. Harris (2008) expounded the recommendations of Marton (1986). Harris (2008) instructed that the pools of meaning should be carefully compared and contrasted and criteria be formed in association with each pool. Pools with many similar criteria will combined, while others split as finer distinction between the data became apparent. Once the criteria are established for each pool and the meanings stabilized, the collective meaning of the pool is abstracted to form a category of description.

> *Maintaining a focus on the transcripts and the emerging categories of description as a set, rather than on individual transcripts and categories is also essential in order to maintain focus on the collective experience. That is, reading of individual transcripts and defining of individual categories should occur within the context of identifying similarities and differences among transcripts and relationships between categories as a group. The primary feature of the constitution of categories of description is the search for key qualitative similarities within and differences between the categories. In practical terms, transcripts or selected quotes are grouped and regrouped according to perceived similarities and differences along varying criteria. The set of categories or meanings that result from the analysis are not determined in advance, but emerge from the data in relationship with the researcher* (Åkerlind, 2005).

As the collective meaning of the pool is abstracted, this study has discovered four (4) categories of description: technique, communication, channel, focus. The Categories of Description constituted different ways of experiencing the envoy approach for heterogeneous group.

Categories of Description

A primary feature of the constitution of categories of description is the search for key qualitative similarities within and differences between the categories. In practical terms, transcripts or selected quotes are grouped and regrouped according to perceived similarities and differences along varying criteria (Åkerline, 2005).

Thus, each quote has two contexts in relation to which it has been interpreted: first, the interview from which it was taken, and second, the 'pool of meanings' to which it belongs. Categories are tested against the data, adjusted, retested, and adjusted again. There is, however, a decreasing rate of change and eventually the whole system of meanings is stabilized. (Marton, 1986, p. 42)

Category 1- Focus

In this category, the new way to learn and or to learn envoy approach is to focus. This new definition of envoy approach was given by the participants and not from the preconceive idea of the phenomenographer. This definition signals the first part of the sequence in the process of teaching and learning. This tells that before anything else, before a student to learn new concepts, ideas, and other discipline, focus is the first entry point to learning. Student's experience in envoy approach be in listening, gathering information, and to present the information and or ideas gathered make the student needs to focus.

The two (2) individual transcripts express similar ideas but in different terms; B2.24 used the exact word 'focused', while, C1.30 expressed it in different phrase "get only the important details in the group discussion". Referring one of the bases of judgement of Sjostron and Dahlgren (2002) 'pregnancy' combined with the observation of Bowden (1994b) as quoted by Åkerlind "*Students often say similar things but their underlying meaning is different… Students also express similar ideas in quite different terms"*, Category 1- Focus is determined. Much more, this category anchored to the second step of Irvin (2005) by which *data excerpts needed to be proved representative of a larger section of data."*

> *When I am able to gather information and idea from the other groups regarding to the topic given to us. I was able to know what they think and able to learn something from them. Also, able to experience the feeling that I have to have to listen carefully and be focused*. (B2.24)
>
> *Listening to the sharing of wonderful ideas, on how each group successfully developed their skills and passion. I've experienced that in achieving a certain goal we must learn teamwork in a group. Get only the important details in the group discussion then trying to express it in your own words.* (C1. 30)

Category 2 – Technique

In this category, envoy approach is understood as technique. It also entails that students learn the technique first before they are to answer and or are to derive the correct answer. Most participants hinting that envoy approach is a technique to build confidence, technique to communicate other people, technique to learn new things, technique to improve speaking skills, technique to enhance noting details skills, technique to know other's idea, and technique to unveil hidden talents.

Though the passages from the participants which can be read below speaks to listen, to gather information and to summarize the information, a commonality is observed. The participants explicitly emphasize that certain aspects [technique] are more important than other. The phenomenographer looked for commonality from one transcript to another within the same category.

Gabriel speaks of technique in voicing out [speaking, expressing, reporting] though he positioned listen in the first sentence but the pregnancy as one of the criteria to judge by Sjostron and Dahlgren (2002) is being noted. He even explicitly emphasizes that listening is enough. This also hints that if a student does not have a technique in talking, then it is not necessarily to talk because one can have information by listening. It simply suggests that if a student wants to talk, he or she needs to acquire technique in talking first.

> *Every time I listen on how the people communicate and exchange the knowledge that they have, I saw how these people have different techniques in voicing out their ideas. I also found out that you don't have to always speak in order to have an information because listening is enough.* (G1.14)

Anthony's response positioned the word listening in the first sentence. However, to consider the bases to judge the utterance of interest of Sjostron and Dahlgren (2002), Anthony is describing an experience in envoy by which the students learn a new way or technique which can be used not only inside the classroom but even in the future. Anthony, by listening to the stories of his classmates, and by listening to everyone about their experiences and how they are able to accomplish things, Anthony learns techniques.

> *It was great listening to everyone about their experiences and how they are able to accomplish things. By listening to their stories, I was able to learn new ways or techniques as well that can also help me in the future.* (AP1.13)

Anthony Paul tacitly emphasizes that he learns another technique to improve his speaking ability.

> *To summarize all the information that you've collected is a great experience, also speaking it in front is a great experience because it can improve your speaking ability. (AP2_27)*

Raphael uttered 'learn how' and not 'learn what'. This is suggesting that he learns the technique that the other groups have employed to come up with ideas.

> *Whenever I gather information. It feels good because you get to learn how other groups came up with their ideas (RC1.25)*

Technique as described by Stern (a prominent authority in second-language education) is different from strategy. Technique is at the procedural level which refers to specific practical action, while strategies operate at the policy level which refer to broad intentional action (Kumaravadivelu, 2005. p. 186). From this premise, Gabriele, Anthony, Anthony Paul, and Raphael defined envoy approach from their own experience as technique. In like manner, to learn envoy is to learn technique.

Category 3 – Communication

In this category, communication is used to represent, message, ideas, and information. In the classroom, students in group activity communicate. (Solomon & Theiss, 2013) stated that interpersonal communication has consequences: Learning, Helping, Influencing, Relating and Playing. [Learning] Communication allows students to gather information about oneself, other people; past, present or predicted events, beliefs and attitudes. [Helpful] Communication allows the students to provide information, advice, emotional support, or assistance that can help other classmates deal with the activity and or given problem. [Influencing] Communication, allows the students to persuade another person to provide help, give advice, share an activity, change an attitude, change a relationship, give permission, or fulfill an obligation.

The lived experience of Rita defines envoy approach as venue to communicate. The [Learning] Communication that she engaged allows her to gather a lot of information. The passage also tells about the type of communication her classmates are in. When she said "and also it helps me as a shy person to boost my confidence." It means that the [Helpful] and [Influencing] Communication in class help Rita to be provided with information and to fulfill an obligation. With the absence of communication, Rita cannot gather information, cannot build confidence to communicate the members of the group.

> *When I gather a lot of information from other group and gather a lot of learnings and also it helps me as a shy person to boost my confidence to communicate other people (RA1.22)*

Uriel, hinted that his listening skill is activated. He is hinting that he has this listening skill in him and in the [Learning] Communication, he is aware that the skill needs to be activated in order to do a task on taking down notes of information. Even if [Helping] Communication is used to making the classmates of Uriel provide information for him, and on the contrary Uriel will not engaged himself with [Learning] Communication, then he cannot gather information, listen actively, focus, and taking down notes.

> *Gathering the information from other group is great because gathering information from other group require more focus and active listening skills to be able to take down notes of information. (U1.44)*

Learning, Helping, Influencing, Relating and Playing are consequences of interpersonal communication. It means that interpersonal communication produces outcomes. When people actively use interpersonal communication to accomplish a goal, those consequences are deliberate. For example, one might use interpersonal communication to persuade a classmate to help with paper, to resolve a conflict, or to cheer up a friend (Solomon & Theiss, 2013).

Category 4 - Channel

Referring back the bases of judgment of 'utterance found to be of interest' for the question being investigated by Sjostron and Dahlgren (2002) as cited by Harries (2008), the researcher selected and marked the utterances: *the experience to gather ideas and information the experience to stand in front and report the information gathered*; and *the experience to listen*.

The utterances 'found to be of interest' are all linked in this category [channel]. *The experience to gather ideas and information; the experience to stand in front and report the* *information gathered; and the experience to listen* all need a channel to where to gather ideas, to where to report the information, and to where to listen to. Based from the passages the participants have had, channel is implied.

The students who will report or present the gathered information need a channel to reach their listeners. In like manner, the listener cannot hear the message without a channel.

Faith is engaged in one of the consequences of interpersonal communication [learning]. Obviously, she takes down notes while listening; after that, she is to present the information in front of the class. The act of taking down notes and the act of presenting the gathered information in order to be heard need a channel.

> *When it was my turn to present the information or the things that I have gathered in front of the class.* (F1. 34)

The structure of the outcome space

Larsson and Holmström (2007) stated that the result of phenomenographic study is not always only the categories discovered by the researcher. The last step in the analysis can be to investigate the internal relations between the categories

In addition, Marton & Boothe (1997) stated that a core premise of phenomenography is the assumption that different categories of description or ways of experiencing a phenomenon are logically related to one another, typically by way of hierarchically inclusive relationships (Åkerlind, 2005).

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Figure 1 in the next page portray the structure of the outcome space. The selected quotes and or the utterance of interest: the experience to listen; the experience to gather information, and the experience to stand in front to present the information, are judge through the criteria of Sjostron and Dahlgren (2002): frequency, position, and pregnancy. The categories of description are based from the criteria of Marton and Booth (1997) quoted by (Åkerlind, 2005):

> *To judge the quality of phenomenographic outcome space, three primary criteria are considered: (1) that each category in the outcome space reveals something distinctive about a way of understanding the phenomenon; (2) that the categories are logically related, typically as a hierarchy of structurally inclusive relationships; (3) and that the outcomes are parsimonious – i.e. that the critical variation in experience observed in the data be represented by a set of as few categories as possible.*

The four categories of description and their internal relations then constitute the outcome space. In this study, there is a logical relation between focus, technique, and channel. The participants who understand envoy approach work in focus to capture the message in group discussion. Category 1 - Focus is hinted in the 'utterance of interest' be it in *the experience to listen,* in *the experience to gather information,* and in *the experience to stand in front to present the information* before the class. Category 2 - Technique is essential in tasking. In a group work, each member has a task to fulfill. For the participants, technique is part in the process of envoy approach. One needs technique in order to listen attentively to get accurate information, on what’s on their mind, ideas, and how they come up with the answers to the questions; technique on how to take down the information fast; and technique on how to report, present, deliver the information.

Communication as category 3, has relation to category 1- Focus, category 2- Technique. The students pay attention or give focus because they want to get the exact and or accurate information. Communication is effective when the person who you are talking to listen actively, absorbs your point and understand it. The students learned stories, ideas, information and answers from the given question are gathered not for the benefits of the person who listen but for the sharing of ideas; the student will present it to others be it groupmates or classmates.

Channel as category 4, has relation to category 1 – Focus, category 2 – Technique, and category 3 - communication. It is interesting to note that envoy is understood as channel. Channel is an imaginary place where focus, technique and communication cleave together for a magnificent outcome. It is a picture which tells that when one says envoy approach it pops up in the students mind that they need to focus to the instructions, focus to the questions, focus to

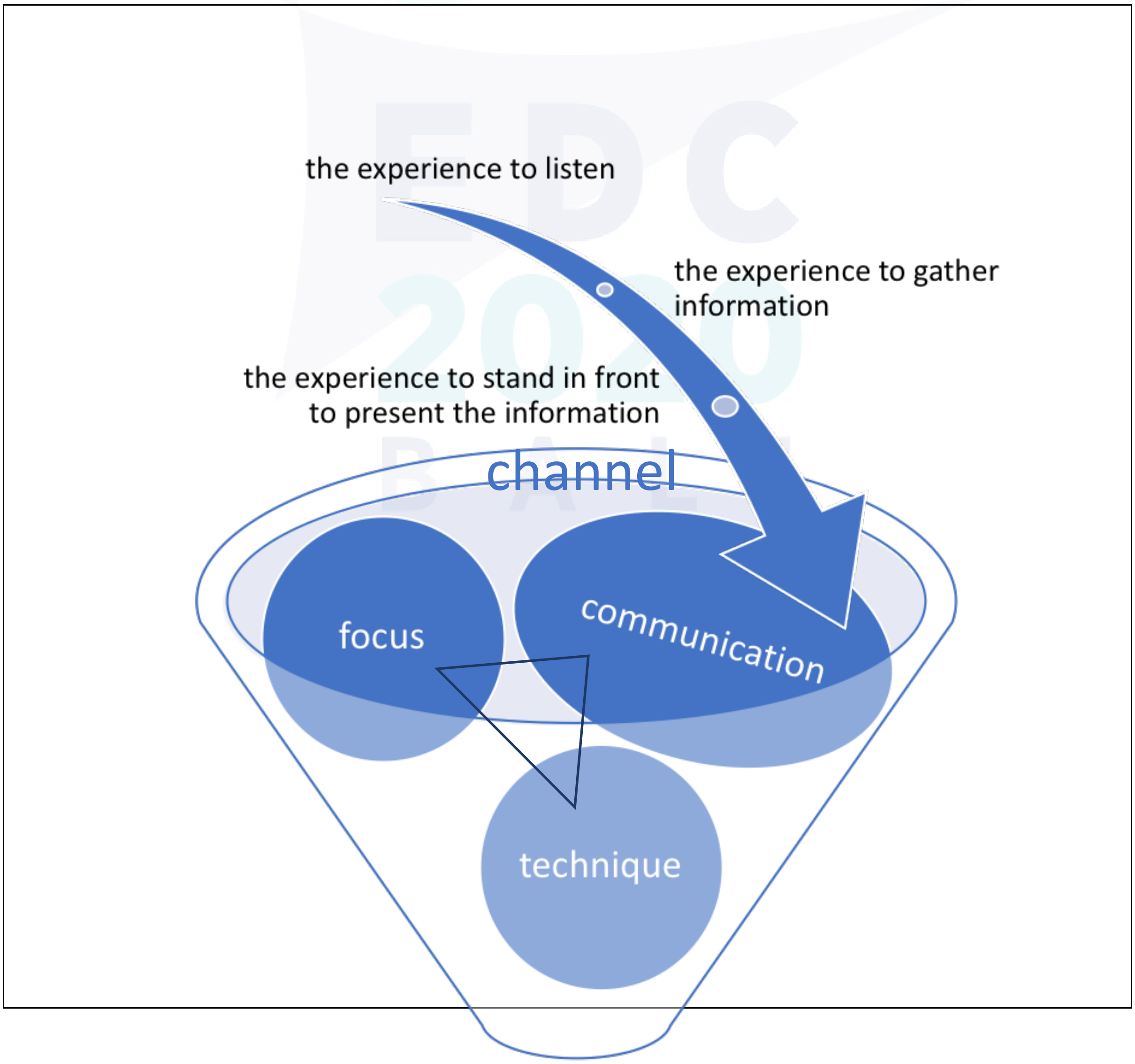

Figure 1. The participants' learning-map, representing the collective understanding of the envoy approach in a group of college students

the problem, and or focus to the discussion so that in return they have something to share, to report and or to deliver.

Further, when one hears envoy approach, automatically the students' minds think of "What technique will I employ?" Technique at the procedural level which refers to specific practical action (Kumaravadivelu, 2005. p. 186). The students think of steps, procedures on how to cope the task given by the facilitator.

Moreover, when students think of envoy approach, they visualize a place – a channel where they can communicate with focus. A place where the students actively listen, speak with skills, to gather information and to deliver the report and or present the information gathered. When students think of presentation of output, they will process it in envoy approach.

Once again, it can be gleaned in Figure 1, the focus, technique, communication in a channel to produce real learning. The arrow with the three utterances of interest reminds that the selected quotes or passages, the category of descriptions are taken from the transcript of lived experiences of the students in envoy approach. As a whole, it depicts the structure of outcome space in a phenomenographic study.

Discussion

As stated in the introduction, the aim of this paper is to explore the variation of experiences of the participant in envoy approach, to present alternative views on how they learn which is more of discovery than that of verification. In the end, the Filipino students are helped to describe the structural and referential meaning of envoy approach; to come up with the technical definition [their own understanding] and their ways of understanding of the approach.

Originally, before the participants give their own way of understanding envoy approach, Kiddy et al., (2001) defined envoy is a teaching-learning approach which entails accountability as to provide a structure for accountability in group discussions. The approach is believed to encourage students to learn from each other, to take responsibility for their learning, to develop listening and speaking skills, and to promote skills in synthesizing and summarizing ideas (BEAM, 2018).

The outcomes of the research put the students at the center. It seems coming in to their world and helping them build structure to discover and represent how they learn.

John Dewey's theory tells that schools need to readjust to the life of the learner and to avoid unnecessary waste of energy. It insists for a shift of the center of gravity, a pedagogical revolution comparable to the Copernican shift in astronomy: "In this case the child becomes the sun about which the appliances of education revolve; he is the center about which they are organized." Further, Larry Hickman theorized that the school, as a place for learning should be organized after the model of the laboratory which involves opportunities for learning through active experimentation, observation, construction, testing, discussion, and artistic expression in cooperation with other learners (Pitchard & Woolard, 2010).

Having analyzed interviews with the selected participants in envoy approach, using a phenomenographic approach, a structured description of the different lived experiences in envoy approach. The different ways of understanding can be understood. The results demonstrate how differently the students may see similar approaches, thereby possibly explain why they understand in different ways.

Phenomenography could thus be used in academic training by mapping the ways of understanding on how the students learn and using the map for competence development. According to Brown (1994) a teaching approach should have a method or design as an overall plan for systematic presentation of the lesson which should be based upon a selected approach (Corpuz & Salandanan, 2015).

The result of this study tacitly implies of the creation of pedagogical approaches which method and design help the students to learn in Filipino setting.

Conclusion

The research conducted in this study appears to relate to Anthony Paul's remark: *It was great listening to everyone about their experiences and how they are able to accomplish things. By listening to their stories, I was able to learn new ways or techniques as well that can also help me in the future*. (AP1.13).

The conduct of envoy approach for heterogeneous class opens opportunity to depart from traditional way of understanding by which people define and understand the phenomenon the way it was introduced to people. In this phenomenological study, the students and teachers are in the same wavelength to discover more than that to prove or to verify.

The teacher may introduce the concept and to make the students believe it was. From here, it opens the teachers' minds that students have the intellectual capabilities to understand the concept and or the phenomenon the way they experience it and to deeply understand how they learned.

> "Students often say similar things but their underlying meaning is different… Student also express similar ideas in quite different terms."
>
> -Bowden

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Equity In Education: A Tale Of Two Towns

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ABSTRACT

"A Tale of Two Towns" is a case study model comparing and contrasting a rural American K-12 school system to an urban American K-12 school system. The researcher assumes the role of participant observer in both school systems, comparing and contrasting two organizations functioning within the same governing entity. The purpose of this analysis is to highlight equity issues that impact students, families, and professionals in the field of education. Being a multi-faceted issue, a variety of topics are explored, including student achievement; teacher recruitment and retention; technology; organizational infrastructure; transportation; teacher training; compliance with state mandates; specialized programming; and parental engagement.

KEYWORDS: Equity, Disparity, Public Education, Funding, Resources

Morphological Affixation: The Case of Marinduque Tagalog

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ABSTRACT

A fresh look into its morphological affixation on the basis of the data from the oral language samples point of similarities and differences. Morphological description revealed both derivational and inflectional categories. Words identified as verbs in the sample utterances were segmented into the base word and affix. The segmentation process used was patterned after Lardiere (as cited in Fasold and Linton, 2006) tree diagram shown in bracketing. The longer line represents the affix and the shorter line stands for the root word. The meanings of the affixes when detached from the base words were explained based on the criteria of form and meaning. These affixes were identified as inflectional affixes using Mcfarland's (1976) Provisional Clarification of Tagalog Verbs. These affixes showed sociolinguistic link as to location of the residences of the four groups of respondents composed of the teens, middle age, adult, and elderly in the family, school, and church domains. The affixes singled out from their stem were categorized as prefixes, infixes, and suffixes and were described further in different categories like voice, mode, and tense aspect. Differences in affixation as used by male and native speakers indicate that they have deliberately adopted a way of speaking using the same pattern of affixation of the local language thereby associating themselves in single mainstream speech community. Finally, lexical items were mapped to show the location distribution of the varying forms of affixes in Marinduque Tagalog. Points of convergence and divergence were noted in the affixation of the language. Each point marked peculiar characteristics of morphological affixations of the two variants of the two local languages of Marinduque Taglaog in Region IV-B, Philippines.

Keywords: *affixations of verbs, Eastern Marinduque Tagalog, Western Marinduque Tagalog*

AFFIXATION OF MARINDUQUE TAGALOG AS USED BY THE NATIVE SPEAKERS IN EASTERN AND WESTERN MARINDUQUE

by

Susan B. Pineda

Introduction

Language features vary in different languages and most of these languages have such class of morphological forms. There are several word features and often, rigid description can be made. These features could be exhibited in the structure of words which characterizes language variation and peculiarity. According to Dil (1976) variations could be found in different levels of linguistic features like phonological, morphological, grammatical, and lexical features correlated to the identity of the speakers and the geographical location of the speaking community.

One of the most common analyses for the structure of words of a given language could be done through morphological description. Haspelmath (2000) wrote that words are characterized in two forms called the **lexemes** regarded as word forms and the **text-word** called a word form. If the focus of analysis is on the functions of words and phrases, the process is done through inflection whereas when it is directed to the meaning of words, the process is done by inflection.

As discussed by Lardiere (n d as cited in Fasold and Linton, 2006) derivational morphology is done by identifying the root of a given word and the affix attached to the word. Most common affixes are prefix, suffix, and infix. In Filipino languages, verbs in Tagalog language is usually identified with infix like the verb *kuha* (get/take), *k-**um**-uha* (got/took) by splitting up the lexical root. Likewise, in a study conducted by Bauer (2003) suffix is the common type of affix found in the English language as in the word *constitut-ion-al-**ity*** and also in Turkish as in the word *gel-e-miy-eceg-**im*** (come to-be-able-negative-future-first person) which were both analyzed and described through inflectional morphology. However, in the Tagalog language, suffix could be both derivational as in *pan-ta-sa* (sharpener) and inflectional as in *tasa-han* (sharpen).

It was concluded then by Falk (1978) that affixes are not only different as to their location in the word but also in their function in utterances when used in sentences like the inflectional affixes that signal the change in use once the form is changed whereas derivational affixes create and coin new words in a given language. Affixation has different forms and meanings in different languages. Affixes in a particular language may not be found in another language. In each case, such analysis describes the variation in the language. Speakers discern the use of different forms more common in their language. It often turns out that there is some slight difference in meaning or usage of certain words in a language as used by its native speakers. For instance, in the case of Tagalog verbs, Ramos (1986) claims that: “Tagalog verbs take on different affixes that denote the meaning of its inflected form. The conjugation or inflection of verbs reflects the focus, aspect or mode of the verb depending on what affixes are added to its base form, which may be the root or the stem.”

The fact that the Tagalog language is agglutinative, different forms of affixation could be identified and described**.** Marinduque Tagalog, one variant of Tagalog, appears to be the most divergent local language in Region IV in terms of its morphological structure. As such, it takes on different forms and meanings making the language peculiar than other Tagalog languages in the region.

Methodology

The descriptive analytical design was used to describe and identify the verbal affixation of the two local languages. It involved collection of data through interviews and video recording of conversations to elicit oral language samples. The study employed the criteria of form and meaning in describing the affixes. Further, data were analyzed both quantitatively and qualitatively using correlation technique, percentages, and mean scores.

The analysis of the verbal affixes identified in the transcribed utterances from the video recorded conversations and interviews followed a series of presentations at different levels. In the first level, the verbs identified with affixes were segmented into base and affix. In the second level, affixes were described using the criteria of form and meaning. In the third level, the affixes were presented in maps to show their location distribution in the two language areas.

Further, affixes were identified using Stockwell and Minkova's (2001) classification of morphemes. Both claimed that all morphemes which are not roots are affixes. Affixes differ from roots in three ways: (1) they do not form words by themselves- they have to be combined to stem; (2) their meanings in many instances, are not clear and specific as in the meaning of roots and many of them are almost completely meaningless; and (3) compared to the total number of roots, which is very large (thousands or tens of thousands in any language), the number of affixes is relatively small (a few hundred at most). Moreover, the verbs were segmented patterned after Lardiere (as cited in Fasold and Linton, 2006) tree diagram shown in bracketing. In bracketing, the longer line represents the affix and the shorter line stands for the root word. In the case of a lexical item with both stem and root, double brackets illustrate the segmentation process. Most importantly, the linguistic documentation of Soberano (1976) on the dialects of Marinduque Tagalog provided support to further investigate the affixation of the local language. The previous description does not contain any sociolinguistic link between the differences of affixes used by four generations of speakers and their age and gender.

Table 1. Classification of Barangays as to *Location*

Western Marinduque		**Eastern Marinduque**		**Grand Total**
Central	***Coastal***	***Central***	***Coastal***	
Buenavista		**Sta Cruz**		
Dos	Daykitin	Pag-asa	Alobo	4
	Yook	Lipa	Balogo	3
		Landy	Ipil	2
		Napo		1
Gasan		Torrijos		
Masiga	Bangbang	Poblacion	Kay Duke	4
	Bognuyan	Bonliw		2
Boac				
Malusak	Cawit			2
	Lupac			1
Mogpog				
Gitnang Bayan	Capayang			2

Market Site	Balanacan			2
5	8	6	4	**23**

The barangays included in the study located in the central and coastal areas are presented in Table 1and selected based on their description as to location, mode of transportation and nature of livelihood of the residents. Since the place is an island province, most of the barangays are located near the seaside, along the coasts or surrounded by water. It can be clearly seen that a majority of the barangays are coastal barangays equivalent to 60% of the total number of barangays. Only 40% comprises the barangays along the national road or within the central areas in each municipality. It should be noted that in Table 1, there are more barangays from Western Marinduque because of the accessibility of the place to more services. Boac, being the capital of the province, Gasan where the airport and port bound to Mindoro are located and Mogpog where the main port of ship bound for Lucena, Masbate, Romblon, and Batangas is found. In Eastern Marinduque, Santa Cruz is the biggest town and the most populated compared to other towns in the West. There is also a port in the municipality for boats bound for Lucena City and General Luna, Quezon. Torrijos is a small town adjacent to Santa Cruz.

Results and Discussion

Since Tagalog is an agglutinating language, it is important to analyze its morphological features. In particular, this language exhibits a peculiar affixation in terms of verb usage. Affixation can best be described when morphemes are identified in the lexical items. This could be done through segmentation process to single out the affix and distinguish the root word or the stem. The segmentation process employed for verbs taken from the oral language samples of the local language was patterned after Fasold and Linton's (2006) tree diagram. The data provided in their presentations used English terms, but the general principles of word formation whether it is inflection or derivation pertains to all languages. Thus, linguistic data can be segmented and analyzed in a similar way.

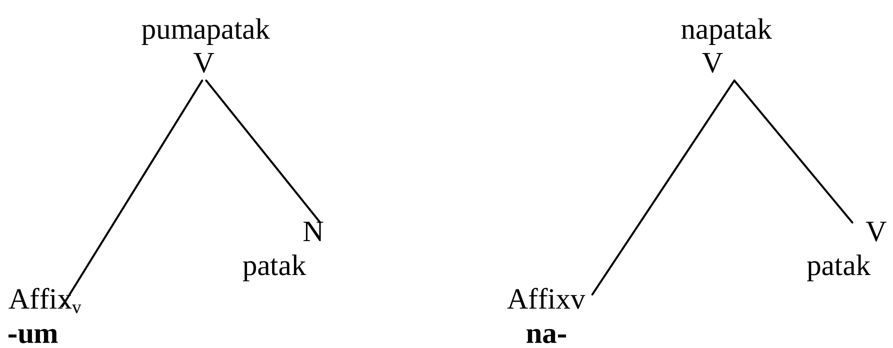
In the illustration that follows, the longer line represents the affix and the shorter line, the root word. In the case of a lexical item with both stem and root, double brackets signify the segmentation process. Meanings and functions of the affixes are then described and explained following certain guidelines. Furthermore, two segmentations are presented: the first is on the norm category and the second, on the variant category. The affixes identified in the local language with their corresponding affixes in Standard Tagalog are discussed individually.

Some of the verbal items identified in the oral language samples are segmented and the segmentation analyses are provided below.

Patak

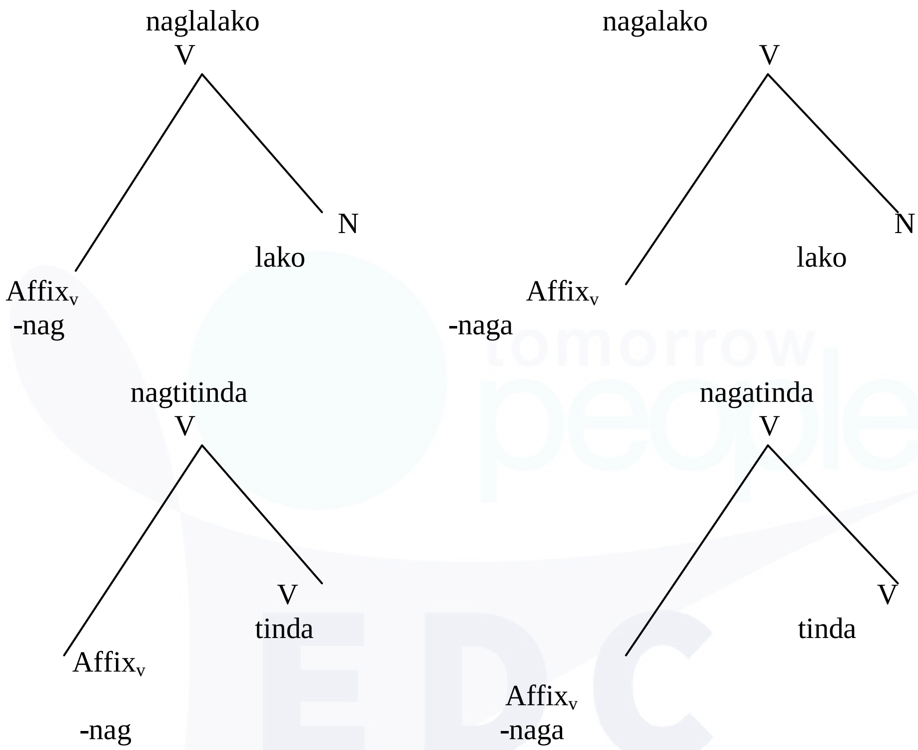
.....Ang isang libong piso ay *napatak* laang ng isang daan ngay/on.

Norm **Variant**



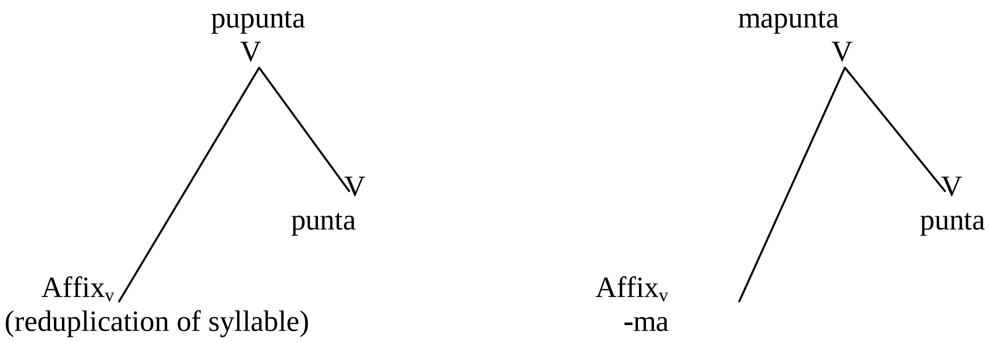
The verb *napatak* in the local language may be understood to have the structure *na-patak* presented in the tree diagram above. The verbal prefix *na* is prefixed to the verbal root *patak to* denote present time. The prefix *na* has its underlying form in Standard Tagalog, that is, the infix *um* which is affixed to the same verbal root to indicate a similar tense aspect. It could be noted that the verb structure changes because the location of the infix is within the verb. As the rule implies, infixes are located or inserted within a given lexical item. However, the meaning of the derived word does not change when used in utterances.

Lako
....Ay dito po'y ano may <u>nagalako</u> po, may nagabahay - bahay na <u>nagatinda</u>**.**



The verbs *nagalako* and *nagatinda* (selling) are both prefixed with the verbal prefix *naga* which signifies present progressive tense. The root words are *lako* and *tinda* (sell) which are both verbs. With the prefix *naga* added to verb roots, the derived lexical category is a verb. When the structure of the derived form is compared with its norm equivalent, there is a change in the structure of the word. The first syllable of the verb is reduplicated when added to the prefix *nag***,** the affix equivalent of the prefix *naga*.

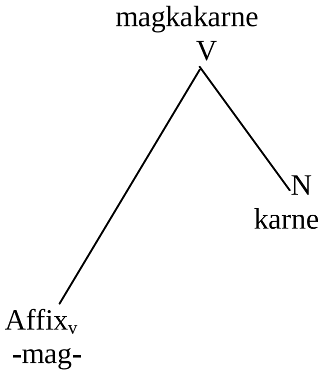
Punta
....Naaga po ako ng gising pag <u>mapunta</u> ako ng meeting.

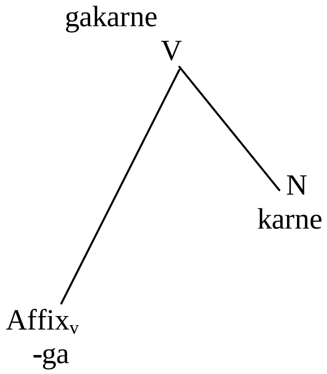


The verb *mapunta* (will go) when segmented into an affix and a root word indicates that the prefix *ma* denotes future tense aspect. The prefix *ma* is equivalent to a reduplicated component of the verb *pupunta* (will go) in Standard Tagalog indicating similar meaning. It can be noted that the root word is a verb and the derived form is also a verb.

Karne

…Sa pyesta kita ay *gakarne* ng baboy ng may handa sa mga maparito.

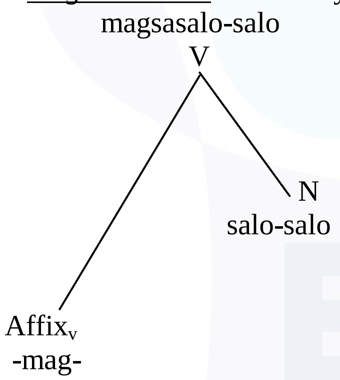


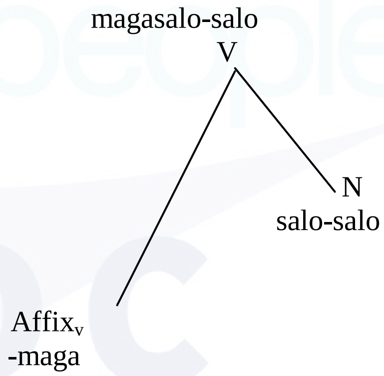


It is illustrated above that the prefix *ga* is combined with the root word *karne* which is a noun. Similar to the prefix *ma*, the prefix *ga* also indicates future tense aspect. Its equivalent form in Standard Tagalog is the prefix *mag* combined with the same root word which is reduplicated in the first component of the word.

Salo-salo

…<u>*Magasalo-salo*</u> mandin kaya nagareunion kita.

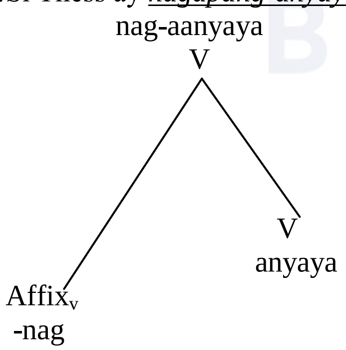


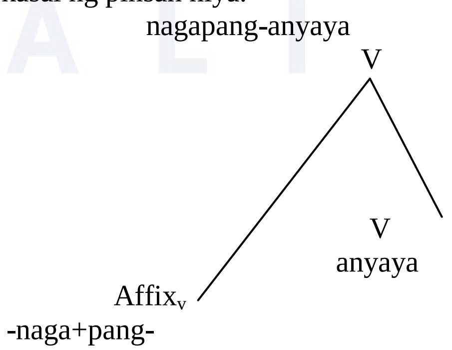


The prefix *maga* when combined with a root word, which is usually a noun or a verb, makes another verb. The root word is repeated with the use of a hyphen. The prefix *maga* has its norm equivalent *mag* which is also combined with a noun root compounded. The same lexical category is derived denoting a similar tense aspect.

Anyaya

…Si Thess ay <u>*nagapang-anyaya*</u> sa kasal ng pinsan niya.

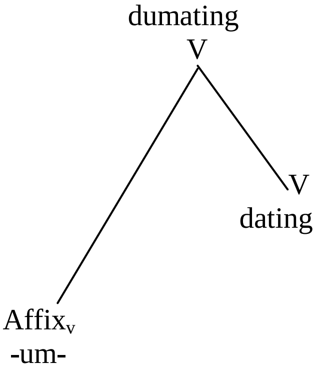


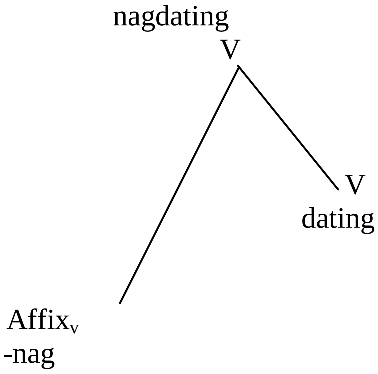


In the case of the prefix *naga,* which is combined with another morpheme *pang* in *nagapang-anyaya* (inviting), the root word is the verb *anyaya* (invite). The prefix *naga+pang* indicate future tense which is equivalent to the prefix *nag*. However, the verb is noted with a reduplicated vowel letter in its first component to indicate future tense.

Dating

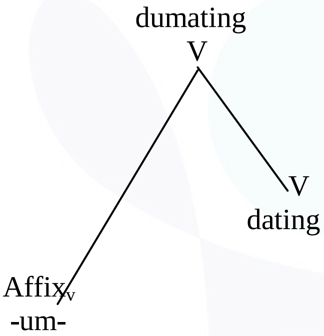
…Tapos na ang programa ng <u>*nagdating*</u> ang mga bisita.

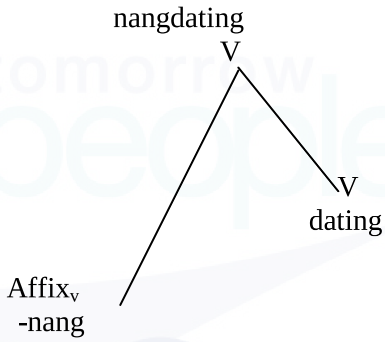




The infix *um* in Standard Tagalog, which is equivalent to the prefix *nag* in Western Marinduque, is used to indicate past action when combined with a verb. However, it could be noted that the structure of the derived form is *nagdating* (arrived) compared with *dumating* (arrived).

…Tapos na ang programa ng *<u>nangdating</u>* ang mga bisita.

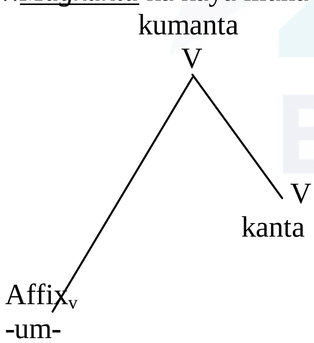


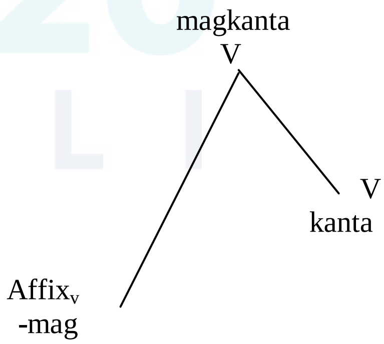


In Eastern Marinduque, the prefix *nang* is used instead and combined with a verb root denoting past action e.g. *nangdating* (arrived) with a plural subject. Similarly, it is also equivalent to the infix *um* in Standard Tagalog used for both singular and plural subjects. The prefix *nag* in Standard Tagalog has its underlying form *nang* in the local language. Both prefixes indicate past tense aspect and combine with verb roots. However, the prefix *nang* is used with plural subjects in an utterance.

Kanta

…*<u>Magkanta</u>* ka kaya muna para malibang kami.

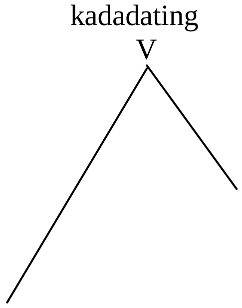


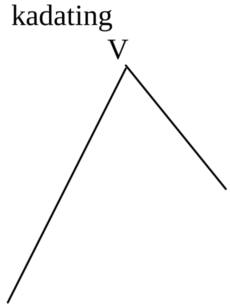


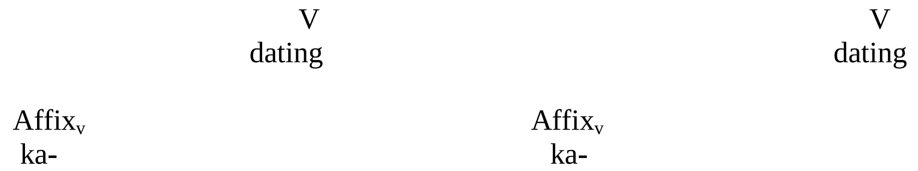
Another underlying form of the infix *um* is the prefix *mag* which is attached to a verb to denote imperative actions as in *magkanta*, *kumanta* (sing).

Dating

…Maya-maya ako makain**,** *kadating* ko pa.



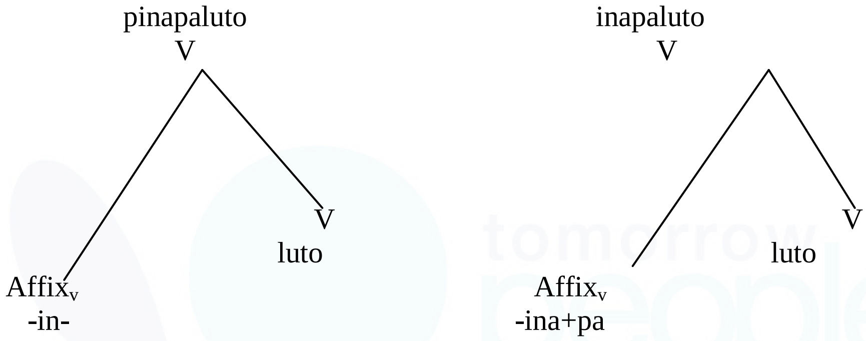




In Western Marinduque, the prefix *ka* is combined with a verb to denote past action. It should be noted that in Standard Tagalog, the same prefix when combined with a verb, requires reduplication of the first syllable in the verb which does not occur in the variant.

Luto

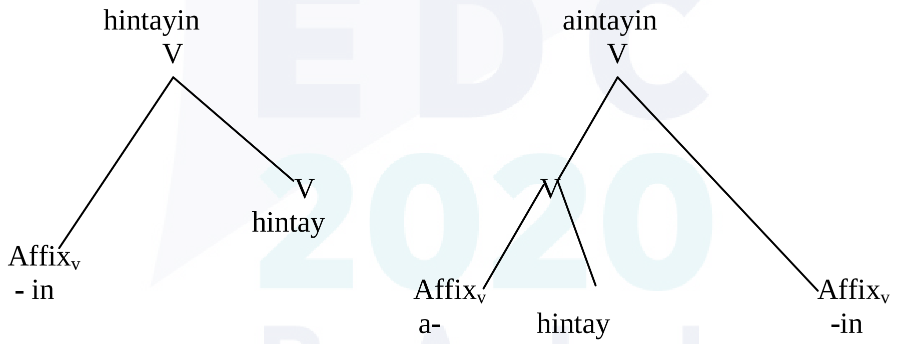
…*Inapaluto* ko mandin sa iyo yung chicken.



The prefix *ina-* is equivalent to the infix *in.* Both form verb-indicating imperative actions as in *inapaluto* and *pinapaluto.* Two different verb structures can then be noted.

Hintay

....Kami po ay mapar-un na, *aintayin* mo kami sa baba.

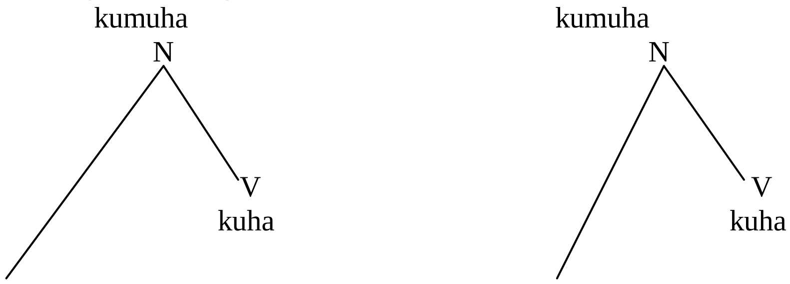


In the verb *aintayin*, there are two affixes combined with verb *hintay* (wait). These are the prefix *a* and the suffix *in*. The first line on the right side illustrates the prefix and the longer line on the left side indicates the suffix. The verbal root is presented at the middle of the tree. It could be noted that verb formation in Standard Tagalog is affixed with the suffix *in* to indicate future tense aspect.

Infix

Kuha

…Ilang beses ka ng <u>*kumuha*</u> ng board exam for teachers?



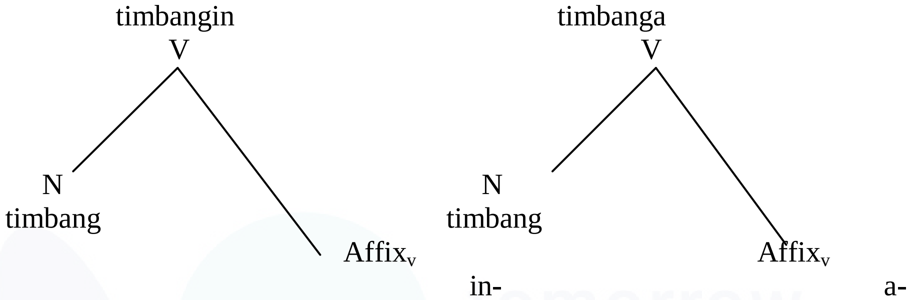
Affix$_v$ Affix$_v$
-um- -um-

The infix *um*, when combined with a verb is similar in form and meaning in Standard Tagalog and in Marinduque Tagalog. It denotes imperative action.

Suffix

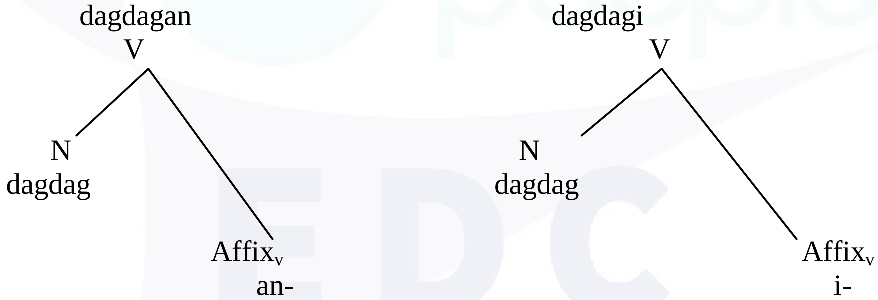
Timbang

....Otoy, *timbanga* daw ari ay...*Dagdagi* naman.



Dagdag

....*Dagdagi* naman ang nilagay mo sa kiluhan.



The underlying forms of the suffixes *in* and *an* in Standard Tagalog are the suffixes *i* and *an* in the local language. These affixes, when combined with verbs, denote imperative action.

All the verbal items segmented above were broken into affixes and root words. Very few items were identified with verbal stems. To fully comprehend the affixation of verbs of the local language, the verbal affixes were described in voice, mode, and aspect categories illustrated in Table 1. A detailed explanation of their meaning and function is likewise provided.

Table 2. Affixation of Verbs

AFFIXES			CATEGORIES		
Prefix	Infix	Suffix	Voice	Mode	Aspect
Na			Actor	habitual/repetitive	Progressive
Naga			Actor	habitual/repetitive	Progressive
Ma			Actor	Abilitative	Future
Ga			Actor	Abilitative	Future
Maga			Actor	Abilitative	Future
naga+pang			Actor	Abilitative	Progressive
Nag			Actor	External	Past
nang/na+ ngag			Actor	External	Past
Mag			Actor	External	Infinitive
Mang			Actor	habitual/repetitive	Future

Maka			Actor	Reciprocal	Future
Maki			Actor	Reciprocal	Future
Naka			Actor	Accidental	Past
Naki			Actor	Reciprocal	Past
Ka			Actor	Internal	Past
A			Goal	External	Future
Ika			Causative	External	Future
Ina			Goal	External	Progressive
ina+pa			Goal	External	Imperative
ina+pag			Goal	External	Imperative
	in		Goal	Internal	Past
	um		Actor	Internal	Past
		a	Goal	External	Imperative
		i	Goal	External	Imperative
		an	Goal	External	Imperative
		in	Goal	External	Imperative

The table above illustrates the verbal affixes found in Marinduque Tagalog. The affixes have three categories as identified in the utterances/oral language samples of the native speakers. These categories were identified as *voice, mode*, and *aspect.* Verbal affixes of Marinduque Tagalog consist of a root word and one or more inflectional affixes**.** Most of these affixes are different in form and function when compared with the affixes found in other Tagalog languages. In Eastern Marinduque, the prefix *na* is combined with transitive or intransitive verbs that may denote intentional or voluntary actions performed by a subject or doer and terminate with a direct object. This is illustrated in the following sentence:

"*Si John ay* ***na****kuha ng pagkain sa kusina.*"
(John gets food in the kitchen.)

The prefix *na* in the word *nakuha* is combined with the verb *kuha* (get). This aspect inflection follows the *um* pattern in Standard Tagalog as in the word *kumukuha* stating similar meaning and function.

In Western Marinduque, native speakers use the prefix *naga* to indicate similar function and meaning:
"*Si John ay nagakuha ng pagkain sa kusina."*
(John gets food in the kitchen**.)**

Both prefixes, when combined with the base verb are used as transitive verbs in the given sentences.

In the following examples, however, the verbs combined with the same prefixes function as intransitive. Native speakers in the East say "*Naulan na naman."*(It is raining again.) whereas those in the West say "*Nagaulan na naman."* (It is raining again.) The use of the prefix *na* in the word *nakuha* resembles the use of the prefix *naga* in the word *nagakuha* in the previous example**.** Both prefixes correspond to the infix *um* in Standard Tagalog as in the word *kumukuha* and *umuulan* formed by the reduplication of the first syllable of the root word which states the same meaning and function. The prefix *na* is in the repetitive or habitual mode because the action happens regularly or repeatedly. These affixes, when combined with a transitive verb, are categorized as actor focus and goal focus when combined with an intransitive verb. The verb is in the progressive aspect as the action is/was still being performed or is/was usually in progress at the time referred as the subject performs the action. In these examples, the prefixes *na* and *naga*, when combined with verb roots, do not require an object.

Likewise, native speakers in Eastern Marinduque use the prefix *naga* to denote progressive action as in the example below:

"*Si Rona ay nagahanda ng pagkain."*

(Rona prepares food.)

The word *nagahanda* **(**prepares**)** is used as a transitive verb in the sentence. *Rona* is the doer of the action whereas its direct object is *pagkain* (food). The speakers in Western Marinduque also use the same prefix to denote the same intention, except in a few cases like the one earlier discussed for the verbs *nagakuha* and *naga-ulan*. In some instances, the two groups of native speakers use *naga* by reduplicating the first syllable of the verb base as in *naga+ku+kuha* and *naga+u+ulan* which indicate a habitual or repetitive action.

The prefix *naga* corresponds to the prefix *nag* in the word *naghahanda* **(**prepares) formed by reduplicating the first syllable of the verb base in Standard Tagalog**.** The action is usually deliberate or purposive at the time the speaker speaks. When the action is already concluded, the same prefix is attached to the base verb with no more reduplication as in *naghanda*. Native speakers share in the use of the prefix *na*. However, it has been noted that speakers in Eastern Marinduque also use the prefix *nang* to indicate plural subjects at the time the action was completed as reflected in the example below:

Tapos na ang palabas ng nangdating ang mga bisita.

(The program was already finished when the visitors arrived.)

In contrast, native speakers in the West say '*Tapos na ang palabas ng nagdating ang mga bisita'*, using *nag+* base verb to express concluded action.

In some instances, however, the prefix *nag* is used by the native speakers in the West in lieu of the affix *um* as in *nagdating* for *dumating* and *nag-alis* for *umalis* for singular subjects and the prefix *na+ ngag* for *nangagdating* for plural subjects. Both groups of native speakers, however, also use the affix *um* in *kumain, sumulat, bumasa* to indicate similar purpose with singular and plural subjects.

It should also be noted that in the two language areas, speakers share in the use of the prefixes, *ma, ga,* and *maga* to denote intentional or voluntary actions that occur in the future. Examples are the following:

Mapunta ako sa bayan mamayang hapon.

(I will go to town this afternoon.)

Si Precious ay gatanim ng gulay sa likod bahay.

(Precious will plant vegetables in the backyard.)

Sila ay magabakasyon sa Maynila ngayong darating na Disyembre.

(They will take a vacation in Manila this coming December.)

*Maga*laba *ako ay bukas na lamang*.

(I will wash clothes tomorrow.)

From the cited examples, it can be noted that native speakers still use the *ay* structure in forming sentences which no longer occurs in the everyday speech of Manila Tagalog speakers. On the contrary, such structure is still very common in the local language.

However, in Western Marinduque, it can be noted that the second syllable of the base word is enunciated with a glottal stop as in *ma/**pun**/ta, ga/**la**/ba* and maga*/**la**/ba*. It is illustrated that the prefix *ma* is combined with both transitive and intransitive verbs. The prefixes *ga* and *maga* on the contrary, when attached to base verbs, are used as transitive verbs thus, the action concludes with an object. This pattern applies to the prefix *mag* inflection in Standard Tagalog
which appears in the future tense combined with verbs formed by reduplication like *maglalaba* that may or may not take an object.

It was also found that speakers in Western Marinduque combine the prefix *naga* and *pang* with a base verb and the word formed is used as an intransitive verb. Examples are the following:

Si Thess ay ***nagapang****-anyaya sa kasal ng pinsan niya.*
(Thess invites us to her cousin's wedding.)
Nakakauyamot si Marissa, ***nagapang****-abala kahit marami akong inagawa*.
(I'm annoyed with Marissa; she disturbs me even if she sees that I'm busy.)

It can be seen that the prefix *naga* is attached to another morpheme *pang* and combined with a verb as its base word to denote an intentional condition which is actually in progress at the time it was referred to. The actor or the doer of the action is capable of performing the action expressed by the verb. Such usage is commonly used by the speakers in Western Marinduque while speakers in Eastern Marinduque prefer to use the prefix *naga* or *nang* such as in the structure*: Si Thess ay* ***naga****yakag/****nang****yayakag sa kasal ng pinsan niya. Nakakainis si Marissa,* ***nang****-aabala ay marami akong inagawa*.

Furthermore, the prefix *naga* is combined with another morpheme *pa* plus its base verb: ***Naga****padala ng pera ang ate ni Sam buwan-buwan/Ang ate ni Samay* ***naga****padala ng pera buwan-buwan.*
(Sam's sister sends money every month.)

The prefix *naga* and its base verb as in *nagadala* and *nagapadala* take an object and is used as a transitive verb in the sentence**.** It indicates an action that happens regularly or repeatedly**.** It was found that the speakers in the two language areas share in the use of the prefix *mag* combined with base words used as transitive or intransitive verbs to denote command towards an object external to the doer of the action. Some examples are the following sentences:

Mag*linis ka ng bahay.*
(You clean the house.)
Nag*linis si Tony ng bahay.*
(Tony cleaned the house.)

When the action is already concluded, the prefix *nag* is prefixed with the same base or root words indicating that the action expressed by the verb has been completed before the time of reference:

*Si Tony ay naglinis ng bahay***.**
(Tony cleaned the house.)

Native speakers in the two language areas share in using these prefixes. The prefix *mang* is a verbal affix used to form the verb when the actor complement is focused. The actor is capable of performing the action expressed by the verb and the action expressed is subordinate to another action. In Marinduque Tagalog, verbs with the *um* affix use the *mang* form like *humingi – manghingi* as seen in the example below:

Ang kapitan ng barangay ay kailangang manghingi ng pondo para ipatayo ang health center.
(The barangay captain should solicit funds for the construction of the health center.)

It was also observed that speakers use the prefix *maka* to signify ability on the part of the actor. It indicates that the actor is capable of performing the action expressed by the verb which is desired, being planned or is the result of another action as used in the following sentence:

Si Gabby ay gumawa ng hagdan para ***maka****akyat sa mataas na puno.*
(Gabby made a ladder to be able to climb the tall tree.)

Native speakers use the prefix *maki* to imply that the actor joins someone in performing the action expressed by the verb:

Gusto ni Daisy ***maki****tanim ng mga halaman sa paligid ng paaralan.*
(Daisy wants to help plant trees around the school area.)

This prefix is also used to suggest a social action as in the example below:

Madaling ***maki****bagay si Joan*.

(Joan easily gets along with.)

The prefix *naka* also indicates that the actor or the doer of the action is capable of performing the action that has been completed as in the sentence below:

"***Naka****dalo siya ng party kagabi."*

(She was able to attend the party last night.)

It also indicates that the action happens regularly by reduplicating the second syllable of the prefix as seen in the example below:

"***Naka****kabenta siya ng mas malaki tuwing Sabado*."

(She is able to sell twice during Saturdays.)

Similarly, the prefix *naki* indicates that the actor joins someone in performing the action that has been completed:

"***Naki****tulog si Beth sa apartment ni Julia kagabi."*

(Beth slept at Julia's apartment last night.)

To indicate an action that happens regularly, *ki* is also reduplicated:

"***Naki****kigamit siya ng sasakyan ng kanyang pinsan kapag di niya ito ginagamit."*

(He uses his cousin's car when the latter does not drive it.)

Another prefix in the actor focus category is the prefix *ka* used to signify a past progressive action. In Eastern Marinduque, the prefix *ka* is combined with the verb reduplicated in the first component as in:

"*Maya-maya ako makain***,** *ka****dada****ting ko pa."*

(I will eat later; I have just arrived.)

Native speakers in the West express a similar purpose in "*Maya-maya ako makain, ka****da****ting ko pa."* In this case, there is no reduplication in the same verb signifying a past progressive action.

In the local language, there are nine affixes that were identified that belong to the goal topic category and in the external mode except the infixes *um* and *in* which denote internal mode. The prefix *a* forms the verb when the goal complement is focused:

"*Ang pamamaraan ng paggawa ng pasta ay* ***a****sulat mo sa notebook para madaling matandaan."*

(Copy the procedures of pasta making in your notebook so you won't forget it.)

"A*sulat ng sekretarya ang agenda ng meeting sa blackboard bago magsimula ang meeting."*

(The secretary will write the agenda on the blackboard before the meeting starts.)

The prefix *a* combined with the verb *sulat* in the first example focuses on the object *procedures* in pasta making. It is clear that the verb states a command. The subject is not specific but is understood to be addressed to the second person *you*. In the second example, the prefix *a* combined with the same verb also focuses on the object *agenda* which receives the action that is concluded prior to the other action indicated by the verb *starts.*

Other examples are the following:

"***A****pakita ko sa iyo ang mga litrato ko na kinunan sa Australia."*

(I will show you my pictures shot in Australia.)

A*balita ni Sam ang pagkapanalo ng kanyang anak sa contest.*

(Sam will tell us about his son who won the contest.)

The prefix *a* combined with a verb denotes an action that will terminate in the future and focuses on the direct object. The prefix *a* corresponds to the prefix *i* with a verb formed by the reduplication of the component that follows as in *ipapakita* and *ibabalita.* In some cases, the prefix *a,* when combined with a verb root, is joined with the suffix *in* as in *asulatin* which is also categorized as goal topic affix. The focus is addressed to the subject complement of the sentence. The morpheme *pa* can also be combined with the prefix *a* as in *apasulat* which has a similar function and meaning.

The native speakers of Marinduque Tagalog use the prefix *ika* on the same form and meaning as it is used in Standard Tagalog to denote a causation action of the prefix *ma.* Circumstantial verbs like *ma+tuwa* (to be happy) and *ika+tuwa* (cause happiness) signify that something accomplished was performed in favor of another person as in the sentence:

"*Pinagsikapan kong manalo para **ma**tuwa ka o para **ika**tuwa mo."*

(I did my best to win to make you happy.)

Another prefix mostly used in the province is the prefix *ina.* It could also be noted that the verb is in the passive formation similar to the prefix *a* when combined with a verb:

"*Ang mga halaman ay **ina**dilig ni Eleanor tuwing umaga."*

(Eleanor waters the plants every morning.)

The prefix is again focused on the object and indicates external mode. The prefix *ina* corresponds to the infix *in* followed by a reduplicated vowel or with the first syllable repeated/reduplicated after the infix which indicates a habitual action e.g. *dinidilig*, *sinusulat,* and *binabasa*. The prefix *ina* as used in other cases by the native speakers is added to other morphemes as in:

"***Inapa**dilig ko kay Eleanor ang mga halaman tuwing umaga."*

(I asked Eleanor to water the plants every morning.)

The use of the morpheme *pa* changes the meaning and function of the word. It focuses both on the instrument *Eleanor* asked to perform the action regularly on the direct object. Another morpheme that can be added to the prefix *ina* as used by the native speakers is *pag* as in *ina+pag+dilig.*

"*Si Eleanor ang ina**pag**dilig ng mga halaman tuwing umaga*."

(Eleanor is asked to water the plants every morning.)

In the preceding sentence, the focus is given to *Eleanor,* the doer of the action.

As regards the infixes found in Marinduque Tagalog, there are two which share the same structure /form, meaning and function with Standard Tagalog. First is the infix *um* which forms the imperative aspect by infixing *um* after the first consonant of the base like "*K**um**anta ka."* (Please sing.) More often than not, the action is usually casual: "*K**um**anta siya."* (He sang.) Unlike Standard Tagalog, Eastern Marinduque Tagalog's perfective aspect is formed by prefixing *ma* to the base like *ma+kanta = makanta* (will sing.) In Western Marinduque, native speakers use ***nag**kanta* **(**past action**)** for *kumanta* and *magkanta* for *kumanta* **(**a command**).**

The other infix is *in* which forms the perfective aspect similar to the infix *um* by infixing *in* after the first consonant of the base like *d**in**ala (*brought) in the sentence:

"Dinala ng tiya mo ang mga maruruming damit sa laundry.

(Your aunt brought your dirty clothes to the laundry shop.)

Unlike in Standard Tagalog, Marinduque Tagalog's perfective aspect is formed by prefixing *na* to the base like *na+dala* – ***na**dala* as used in the following sentence:

"Nadala na ng tiya mo ang iyong marurumi damit sa laundry."

(Your aunt has brought your dirty clothes to the laundry shop.)

The suffix *a* forms the imperative aspect by suffixing *a* to the base like *linis-linisa: "Linisa ang buong paligid**."***

(Clean the whole surroundings.)

In some cases, particularly with verbs suffixed by i*n*, there is a shift from the suffix *in* to the suffix *a* by replacing the last two letters of the verb with the suffix *a* like *dalhin – dalha* **(**bring**)** *bilhin – bilha* **(**buy**).**

Another suffix is *i* which also forms the imperative aspect by suffixing *i* to the base like *sulat – sulati* (write):

*Sulati na ang kaibigan mong nasa States***.**

(*Write your friend in the States***).**

Verbs suffixed by *in* shift from *an* to *i* like *buksan – buksi* **(**open**)** *bigyan – bigi* **(**give.) It is interesting to note that the native speakers find it easier to suffix verbs with *i* and *a* in expressing a command rather than suffixing it with *in* e.g. *kun**in*** and *an e.g. tingn**an*** in Standard Tagalog. There are instances where the native speakers suffix verbs with *in* and *an* to denote an imperative action related to the base or root verb. They occur only in formal conversations particularly in the school and church domains.

Western Marinduque	**Eastern Marinduque**
ka-'external' 'past'	ka- + reduplicated syllable
'past progressive tense'	'past progressive tense'
naga + pang-'abilitative mode' 'progressive'	nang-'external' 'past'
naga-'abilitative mode' _'progressive'	na- 'abilitative mode' 'progressive'
nag-'past' 'external'	'um' 'past'
mag-'external' 'infinitive'	'um- 'present'

According to Cruz (1975), a verb in Tagalog is composed of a stem and a verbal affix. In addition, a verbal stem is either a simple stem or a derived stem. A simple stem is a root consisting of one morpheme. A derived stem consists of a derivational affix and a root. In this study, only the simple verbal stems are highlighted, referred to as the affix and the root of the lexical items identified in the local language. The following table illustrates the verbs composed of verb roots and verbal affixes. The verb roots simply denote actions and movements.

Table 3. Distinctive Verbal Affixes

Table 3 illustrates the noted differences in the affixation of verbs in the two languages in the province. The prefix *ka* + verb root as in '*ka*dating' is used in Western Marinduque whereas in Eastern Marinduque, it is formed by reduplicating the first syllable of the verb root as in 'ka*da*dating' to denote past progressive action. The prefix *naga* added to another morpheme *pang* as in '*nagapang*-anyaya' is commonly used by the native speakers in Barangays Dos, Yook and Daykitin in the municipality of Buenavista located in Western Marinduque shown in Figure 4. In Eastern Marinduque, specifically barangay Lipa, Landy, Napo, and Pag-asa located along the national road and barangay Alobo, Ipil, and Balogo near the seaside, the native speakers prefix the verb with *nang* or *naga* as in '*nang*-aanyaya' or '*naga*-anyaya'. The same prefix is also used by the speakers in barangay Kayduke and Bonliw in Torrijos.

The tense formation of verbs denoting past action is infixed in the first component of the word as in 'p*um*arito' in Eastern Marinduque whereas in Western Marinduque the verb is prefixed on the first component of the word as in '*nag*parito'. In the case of a plural subject, the prefix *nang* is combined to a verb in '*nang*dating' in Eastern Marinduque while the prefix *na+ngag* is used in Western Marinduque in '*nangag*dating'. In denoting present action, the prefix *mag* is combined with verb root as in '*mag*kanta' in Western Marinduque, while the verb is infixed with affix *um* as in 'k*um*anta' in Eastern Marinduque.

Table 4. Affixation of Verbs with Verb Roots

Affixes	Roots	Verbs	
na	kain	nakain	
naga	luto	nagaluto	
ma	tulog	matulog	
ga	sulat	gasulat	
maga	linis	magalinis	
naga +pang	hamon	nagapanghamon	
nag	lakad	naglakad	
nang/na+ngag	dating	nangdating/nangagdating	
Mag	plantsa	magplantsa	
mang	imbita	mang-imbita	
maka	abot	makaabot	
maki	sakay	makisakay	

Table 4 shows the verbal items identified with verb roots taken from the oral language samples. Most of these affixes are identified in Marinduque Tagalog. Some of these affixes are the same affixes in Standard Tagalog. Most of the verb roots denote actions except the roots combined with affixes *maka* and *maki* which illustrate processes as used in the following sentences:

"*Kailangan kong umalis* ng *maaga para* ***maka****abot sa unang biyahe ng barko."*

(I should leave early to catch the boat on its first trip).

Gusto kong ***maki****sakay sa jeep mo papunta sa pier*.

(I want to join in your jeep going to the port.)

In the examples above, the action denoted by the verb is finished when the doer has accomplished other tasks prior to his/her ultimate desire. For instance, in using the verb *makaabot* (to be able to catch), the doer performs related tasks like planning for the travel, preparation, and route going to the port. For these words, the core of each process is already an existing word to which affixes are added. It should be noted that the meaning of the whole expression is determined by the meaning of its parts. The affix and the root combined have a nuance of meaning that is not identified from the meaning of their parts.

Table 5 below presents the verbal items identified with noun roots. Most of the noun roots identified are common nouns and abstract nouns.

Table 5. Affixation of Verbs with Noun Roots

Affixes	Roots	Verbs
na	ganda	naganda
ga	kaingin	gakaingin
ma	hapon	mahapon
maga	lukad	magalukad
ika	unlad	ikaunlad
um	timbang	tumimbang

It can be gleaned from Table 5 that some affixes identified with verb roots are also combined with noun roots. The following prefixes are all added to nouns to form verbs: *na* + *ganda* (beauty) = *naganda* (blooming), *ga* + *kaingin* = *gakaingin* (will clear the forest), *ma*+ *hapon* = *mahapon* (will leave at night), *maga* +*lukad* = *magalukad* (will make copras), *ika* + *unlad* = *ikaunlad* (to cause progress), and *um + timbang* = tumimbang (weighed.) The verbs combined with these affixes denote present tense, future tense, and past tense aspects. The prefix *ika* denotes causation and takes place in the future.

Note that the root word, when separated from the verbal item, is either an abstract or a common noun. This signals difference in the grammatical category of the verb when combined with an affix and a noun when taken as a separate unit.

Finally, verb affixation can also be identified with adjective roots. Below is a listing of these affixes:

Table 6. Affixation of Verbs with Adjective Roots

Affixes	Roots	Verbs
naka	Isa	nakaisa
naki	bagay	nakibagay

Table 6 shows the only two affixes identified in verbs with adjective roots. The prefix *naka* is combined with a cardinal number classified as a numerical adjective as *naka + isa = nakaisa* (took advantage) and *naki + bagay = nakibagay* (dealt along with). Note the changes in the meaning of the verb denoting the past tense aspect. The differences in word category of the verb and adjective root signal differences in grammatical meaning.

Table 7. Analysis of Variance for Difference in the Use of Affixes by Age Group

Age Group		**N**	**Mean**	**Std. Deviation**	**F Statistic**	**P-Value**
Verb Prefix	Teen	52	14.25	8.577		
	Adult	52	27.04	17.942		
	Middle Age	52	29.04	12.946		
	Senior Citizen	52	27.98	15.916	12.246	0
Verb Infix	Teen	52	5.48	5.575		
	Adult	52	6.06	3.664		
	Middle Age	52	7.69	4.587		
	Senior Citizen	52	7.31	6.723	2.026	0.111
Verb Suffix	Teen	52	2.69	3.052		
	Adult	52	3.06	2.733	4.331	0.004

	Middle Age	52	4.62	3.587		
	Senior Citizen	52	4.25	3.366		

Table 7 shows the difference in the use of verbal affixes by age group. The P-value at less than *0.05* level of significance illustrates that the difference in the use of language features according to age of the respondents is significant. This is exemplified in the use of verb prefix and verb suffix. The average number of times the verb prefix is used is significantly higher if used by middle-aged belonging to age category of 40-59 than by other groups of speakers like the teens, adults and senior citizens. These verb prefixes are *na, naga, ma, mag, mang, nag, nang, naga+pang, maka, maki, naka, naki a, ina,* and *ika.* Among the four groups of respondents, they are more expressive and communicative as they are active in their social lives and at the height of their career. They would like to share their experiences and motivations in life. From their utterances, more oral language samples were picked up particularly on verbs, hence, the greater number of prefixes.

The average number of times the verb suffix is used is significantly lower with *p-value 0.004* as used by the middle-aged group than the other groups of respondents. These verb suffixes are *a, i, a, n,* and *in*. This clearly manifests that middle-aged speakers are also expressive of the things they perform themselves than in revealing actions directed to another person or groups of persons. Likewise, the average number of times the adjective prefix is used is significantly lower with *p-value* of *0.004* if used by the teens. The teens in the age category of 10-19 are not expressive of their experiences, hence, the infrequent use of descriptive words that can be identified with prefixes denoting qualities and characteristics compared to the middle-aged group who are 40-59 years old and the elderly (60 years old and above) who are enthusiastic in sharing the pleasant experiences they have. Both groups of respondents showed enthusiasm in their conversations. Similarly, they are expected to be more communicative.

Table 8. T-test for Difference in the Use of Affixes by Gender

	Gender	N	Mean	Standard Deviation	T-statistic	P-value
Verb Prefix	Male	74	22.16	17.05	-1.687	0.093
	Female	134	25.91	14.31		
Verb Infix	Male	74	7.24	6.08	1.152	0.251
	Female	134	6.3	4.81		
Verb Suffix	Male	74	3.88	3.71	0.733	0.464
	Female	134	3.53	3.02		

Table 8 presents the t-test for difference in the use of verbal affixes according to gender per P-value result. From among the identified affixes in verbs, there is no significant difference in any of these affixes used by both male and female respondents. This goes to show that both groups of respondents in the two speech communities share similarities in the use of affixes regardless of the type of conversation in different domains. Hence, it may be inferred that gender is not a factor that causes variation in the use of a language feature in a given communicative situation in different domains.

This could be justified by what Hudson (2000) claimed that gender is rarely a basis for marked linguistic differences. However, Labov in his study of the language use of the speakers in New York and Trudgill in his study of the language use of the speakers in Norwich (as cited in Mesthrie et al 2000) within each social class group and across each stylistic context in these countries, female informants tended to use more 'prestige' or high status language features, and their male informants use more vernacular language features.

The affixation of the local language under investigation are similar to each other as used by both male and female respondents, no distinguishing feature to signify differences in the lexical items identified in the oral language samples. This could be associated to the geographical location of the province, an island with mountain ranges and that is agriculturally situated, people are united. Even in the kind of language structure, they manifest strong local ties.

The table below indicates the differences in the use of affixes in the family, school and church domains. The affixes were grouped into verb, adjective and adverbial prefixes, infixes, and suffixes.

Table 9. Analysis of Variance for Difference in the Use of Verbal Affixes by Domain

Domain		N	Mean	Std. Deviation	F Statistic	P-Value
Verb Prefix	Church	24	25.83	13.409		
	Family	92	25.61	16.734		
	School	92	23.22	14.53	0.642	0.527
Verb Infix	Church	24	14.71	8.1		
	Family	92	4.51	3.434		
	School	92	6.65	3.713	52.88	0
Verb Suffix	Church	24	4.13	4.297		
	Family	92	3.33	3.325		
	School	92	3.86	2.915	0.887	0.423

The p-value less than *0.05* level of significance means that there is a significant difference in the use of affixes by domain. This can be observed in the use the of verb infix in the church domain. The average number of times the verb infix is used is significantly higher with p- value *0.000* if used in church than in other domains. The respondents in the church domain, when they meet together, are very affectionate in sharing their activities in the church, group involvement outside the church, daily adventures and practical knowledge about everyday events. These intentions are indicated by the infixes *in* and *um.*

Table 10. T-test for Difference in the Use of Verbal Affixes by Area

Marinduque Area		n	Mean	Standard Deviation	T-statistic	P-value
Verb Prefix	**Eastern**	88	**28.88**	15.34	3.54	**0**

	Western	120	21.43	14.737		
Verb Infix	Eastern	88	7.05	5.791	0.957	0.34
	Western	120	6.33	4.913		
Verb Suffix	Eastern	88	3.57	3.457	-0.322	0.748
	Western	120	3.72	3.152		

The t-test for difference as shown on table 30 illustrates the use of affixes by language area. The p-value *.000* indicates that the use of verb prefix is significantly higher in Eastern Marinduque. The difference in the use of the prefix *ka* combined with a verb base could be noted. The speakers in the East combine a prefix with a syllable reduplication like *ka+da+dating* (has just arrived) whereas respondent speakers in the West do not reduplicate syllable and say *ka+dating* (has just arrived) to express similar purposes.

Points of Convergence

For the linguistic component of the study, structural features of verbal affixes which were common to Standard Tagalog are noted in the prefixes *maka, maki, naka, naki, and ika* which have vowel lengthening rather than reduplication of the second syllable of the prefix. The infixes *in* and *um* and the suffixes *an* and *in* have similar form, meaning and function in the norms of the language.

The use of prefixes *paka* and *pagka* are identical with their use in Standard Tagalog including the infix *in* which indicate how the action of the verb is performed.

Points of Divergence

Differences between Marinduque Tagalog and Standard Tagalog involved the use of the infix *um* which is substituted in lieu of the following variants: *nag, nag,* and *na* . The variants, *ma, ga* and *maga* are substituted for the prefix mag plus reduplication of the verb root in Standard Tagalog. The infix *um* is also used for the prefix *nag* with a singular subject *nang* and *nangag* with a plural subject. There are instances that these prefixes are also substituted to the prefix *mang* to denote present tense aspect. The prefix *ka* is simply combined to a verb root e.g., *kadating* to indicate an action that has just happened as the speaker speaks.

The prefixes *a* (goal focus) and *ma* (actor focus) have no affix equivalent in Standard Tagalog since the first syllable of the verb is reduplicated to denote future tense aspect e.g., *akunin – kukunin and makuha- kukuha*. This structure is similar to the formation of words with the infix *in* which is formed by reduplicating the second syllable of the verb like pinaluluto in the Standard Tagalog. The prefix *ina* is used instead of the infix *in* e.g., *inapaluto* or *inapagluto.* Marinduque Tagalog has less formal command forms in the use of prefixes *a* and *i* e.g., *bilha, bigi* in lieu of the suffixes *an* and *in* e.g., *bilhin* and *bigyan* in the Standard Tagalog**.**

The most distinguishing variation of Marinduque Tagalog with the Standard Tagalog is noted in the use of '*ay'* in active sentence construction. "*Ako ay mapunta sa bayan mamaya"* (I will go to town this afternoon) *or "Mapunta ako sa bayan ay mamaya na laman* (I will go to town this afternoon). In some cases, however, *ay* is used in the beginning of the sentence in Eastern Marinduque and in the ending of the sentence in Western Marinduque. *Ay inapasabi mandin pala ni Mam na may miting kita bukas. Napag-usapan naman talaga yun ay*. (Our dean told me to inform you of our meeting tomorrow). (It was discussed and approved.) Six adjectival forms differentiate Marinduque Tagalog from Standard Tagalog. Marinduque Tagalog has *ka, pagka, maka, a, amaka* *and naga* whereas their equivalent affixes in Standard Tagalog are prefixes *ma and pinaka* to denote quality and *nag* to indicate how many objects are indicated.

In contrast to Standard Tagalog, Marinduque Tagalog has the prefix *ipag – ipagluluto* which indicates when the action of the verb will take place which is simply denoted by the prefix *mag* vice-versa *magluluto*. The prefix *pakapag – pakapagpaluto* is used instead of the prefix *paka – pakaluto* in Standard Tagalog to denote an action that will be perfomed when finish with the previous task.

Conclusion

1. Native speakers of all ages in the two language areas in the province speak two variants of Marinduque Tagalog. The variant in Eastern Marinduque as spoken by the group of native speakers residing in the area was clintified of affixes combined with verbs different from the affixes attached to verbs used by the speakers in Western Marinduque.

2. A fresh look into the morphological features of Marinduque Tagalog on the basis of the data from the oral language samples focusing only on its affixation, points of similarities and differences were noted when it is compared to Standard Tagalog. Observed similarities are due to the exposure of the native speakers as this language is used in domains like the school and the church, and other social factors like educational attainment of the native speakers, and contact with non- native speakers. Contrasting items, however, are results of culture influences of neighboring provinces.

3. While these variants have unshared morphological and syntactic features, they likewise have shared attributes. What is fascinating is the fact that even in an island, where the same local language is spoken, variants can still exist as proven by its kind of Marinduque Tagalog spoken in the Eastern and Western parts of the island.

4. The local language of Marinduque are almost similar to each other. They only differ in characteristic intonation, the presence or absence of glottal stop, a few items of vocabulary and morphological items. With respect to glottal stop, it was noted that the native speakers in Eastern Marinduque lengthen the vowel on the first component of some nouns and verbs which is not heard among the speakers in Western Marinduque. This glottal stop thus becomes not only a characteristic feature of the native speakers 'speech , where it persists, but also incidentally, a feature of Western speakers' speech, and is used only in this place. Further, when a speaker in Western Marinduque speaks, a speaker in Western Marinduque speaks, a speaker in Eastern Marinduque can easily identify that the speaker comes from the other languages area in the province.

5. The local languages in Marinduque, rich as they are, proved to be a fertile area of research as other morphological features are worth investigating particularly in the case of other parts of speech like adjectives and adverbs.

6. There are significant differences in the affixes used by the four groups of speakers at different ages. More middle-aged speakers use verbal prefixes, hence, the hypothesis is rejected.

7. As to gender, no differences in the affixation were identified as used by the two groups native speakers. Both male and female respondents use the same morphological features of the local language.

8. By domain, difference in the use of verb infix <u>in</u> in the church domain was noticed but none in the family and school domains.

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Perceived Education Barriers and Academic Self-efficacy of Pre-service Teachers

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ABSTRACT

This exploratory case study assessed and correlated pre-service students' perceived barriers to learning and their self-efficacy beliefs in dealing with the barriers. A convenience sample of 46 participants: 28 females and 18 males, answered a questionnaire measuring perceived education barriers and academic self-efficacy, respectively, on identical tasks categorized into five domains, namely, financial issues; academic ability; family related issues; separation/anxiety and discrimination. The overall mean scores for the two scales were 1.873 and 1.747, respectively. The financial issue ranked high both as a perceived education barrier as well as the perceived difficulty to deal with. Other issues of note were perceived under-preparedness for the course, a lack of support from lecturers, support staff, parents and friends. The paper argues that for quality education to be achieved, the pre-service students, especially first year students need information about financial assistance, preferably while still at high school. Furthermore, they need emotional as well as social support.

KEYWORDS: academic support, educational barriers, financial assistance, self-efficacy beliefs

1 INTRODUCTION

South Africa is a country with diverse cultures and languages. It has the elements of both developed and developing countries. In line with the layout of the country, some schools are located in affluent suburbs, some in semi-urban areas, while the majority are in the under privileged rural areas, where electricity, water and proper sanitation facilities are still a dream. When looking at the transition from high school to university education and the barriers that students face in such a transition, we should take cognisance of, and address the different cultures and backgrounds that are at play. As McKenzie and Schweitzer (2001), note, students from different social and cultural backgrounds, with different experiences and varying levels of education bring with them different needs and academic potential. McKenzie and Schweitzer (2001) further argue that home environments differ in providing resource-rich educational backgrounds for their children. Some homes contain materials such as computers, books, and puzzles that stimulate children's thinking while others do not have such resources. Since research has established a direct relationship between educational background and self-efficacy development, it is important to look into problems students entering tertiary education experience as well as the nature of social and emotional support the students might need. The educational background of students could be traced to their home environments, parents, members of the community as well as peers. The problems related to transition from high school to College and university have been reported (Eccles & Midgley, 1989; Eccles, Midgley, & Adler, 1984). However, few or no studies have related these problems to students' self-efficacy beliefs in South Africa.

This paper is a follow up on two other papers which focussed on perceived barriers to learning, and academic self-efficacy of first year university students, respectively (Matoti and Lekhu, 2015). This particular paper juxtaposed the students' responses on the two scales mentioned, to study the association or relationship between perceived barriers and the level of difficulty in dealing with them. As indicated in the earlier papers, the transition from high school to university is reported to have been marked with many problems. Looking at the problems, Farrell and Farrell (2003) argue that a problem arises when students feel that they are treated as adults at the university while still being treated as children at home. Dassah (2003) blames the language of instruction as responsible for first year students taking longer to complete their courses than the stipulated time. This transition as observed by Darlaston-Jones, Chen, Drew, Haunold, Pike and Young (2002:1) "is often associated with stress, anxiety and tension and in many cases can lead to students failing or withdrawing from university".

Matlala (2005) having reviewed international literature came up with the following barriers to students' academic achievement: financial problems, language, psycho-social barriers (which include an inability to form good social relationships), cultural issues, lack of conducive learning environments, secondary schooling, lack of time management and orientation. From the national literature, Matlala (2005) identified almost similar problems, that is, financial problems (including education system policies), language, psychosocial barriers (which include the inability to form good social relationships),stress, coping processes, cultural issues, a lack of time management and ineffective secondary education. Brussouw (2007) included in her long list of problems first year university students encounter, lack of self-efficacy. This is what prompted the study which examined first year university students' perceived education barriers as well as their perceived ability to deal with them. The study sought to answer the following research questions:

- What type of a relationship exists between first year university students' perceived education barriers and their self-efficacy in dealing with them?

- What are the educational implications of the relationship between students' perceived education barriers and their self-efficacy?

2 THEORETICAL FRAMEWORK AND RELATED LITERATURE

The study is informed and guided by the Social Cognitive and Self-efficacy Theories.

2.1 The Social Cognitive Theory

Albert Bandura's Social Cognitive Theory emphasises how cognitive, behavioural, personal, and environmental factors interact to determine motivation and behaviour (Crothers, Hughes, & Morine, 2008). According to Bandura, human functioning is the result of the interaction among all three of these factors (Crothers et al., 2008), as embodied in his Triadic Reciprocal Determinism model (Wood & Bandura, 1989). Numerous factors play a role in human behaviour. Reciprocal causation does not mean that the different sources of influence are of equal strength. Some may be stronger than others. Nor do the reciprocal influences all occur simultaneously. It takes time for a causal factor to exert its influence and activate reciprocal influences. For example, employee performances (behavioural factors) are influenced by how the workers themselves are affected (cognitive factors) by organizational strategies (environmental factors).

The Social Cognitive Theory is composed of four processes of goal realization: self-observation, self-evaluation, self-reaction and self-efficacy. These components are interrelated, each having an effect on motivation and goal attainment (Redmond, 2010).For purposes of this paper focus will be on self-efficacy.

2.2 Self-efficacy

Self-efficacy, "refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1995:2). In other words, self-efficacy is what an individual believes he or she can accomplish using his or her skills under certain circumstances (Snyder & Lopez, 2007). Self-efficacy is the conviction that one can successfully accomplish the behaviour required to produce a particular outcome. It is a judgment about how well one can organize and implement effective strategies in a situation that may include novel and often stressful elements (Snyder & Lopez, 2007).Self-efficacy has been viewed to be a task-specific version of self-esteem (Lunenburg, 2011). The basic principle behind Self-Efficacy Theory is that individuals are more likely to engage in activities for which they have high self-efficacy and less likely to engage in those they do not (Van der Bijl and Shortridge-Baggett, 2002). According to Gecas (2004), people behave in the way that executes their initial beliefs; thus, self-efficacy functions as a self-fulfilling prophecy. Self-efficacy has influence over people's ability to learn, their motivation and their performance, as people will often attempt to learn and perform only those tasks for which they believe they will be successful (Lunenburg, 2011). Judgements of self-efficacy are generally measured along three basic scales: magnitude, strength, and generality.

Self-efficacy measures can focus on the magnitude, strength and generality of the belief about the task at hand. Self-efficacy magnitude measures the difficulty level (e.g. easy, moderate, and hard) an individual feel is required to perform a certain task (Van der Bijl & Shortridge-Baggett, 2002). Self-efficacy strength refers to the amount of conviction (confidence) an individual has about performing successfully at diverse levels of difficulty (Van der Bijl & Shortridge-Baggett, 2002). Generality of self-efficacy refers to the "degree to which the expectation is generalized across situations (Lunenburg, 2011).

For the purpose of this study we focus on the first measure, that is, the level of difficulty an individual feel is required to perform a task.

3 RESEARCH METHODOLOGY

3.1 Research design

This is a descriptive and exploratory case study using a questionnaire as a data gathering instrument.

3.2 Participants

The participants were 46 first-year university students enrolled for the undergraduate degree at an institution of higher learning in South Africa. Their ages ranged between 18 and 20.

3.3 Instrument

An instrument adapted from McWhirter, Rasheed and Crothers (2000) was used as the data gathering instrument for this study. The questionnaire is made up of two parts. The first part measured biographical variables such as: gender, course, home language, home area, staying at a university residence, staying alone, staying with others. The second part measured perceived barriers and self-efficacy of the students on identical tasks. The items on the two sub-scales were categorised into five domains namely, financial issues; ability and motivation; separation anxiety; family related issues; and discrimination. The scale was used as it had been tested for reliability and validity. It was used to test its suitability in a South African context.

3.4 Ethical issues

Permission to conduct the study was granted and the consent of the student was sought. The aims of the study were discussed with the students and they were assured of the anonymity with which their responses would be treated.

3.5 Data Analysis

The Statistical Package for the Social Sciences (SPSS) version 23 was used to analyse the data. Both descriptive and inferential statistics were used to analyse and present the data.

4 FINDINGS

Table 1 gives presents data on respondents' gender, their place of residence and mode of transport they use to travel between their residences and the university campus.

Table 1 Biographical data of respondents (N=46)

Respondents by gender		
Gender	**Frequency**	**Percentage**
Male	18	39.1%
Female	28	60.9%
Total	46	100%
Respondents by gender and place of residence (N=46)		
Males	**Frequency**	**Percentage**
Home	11	23.9%
Not at home (Hostel/Flat)	7	15.1%

Females	Frequency	Percentage
Home	18	39.1%
Not at home (Hostel/Flat)	10	21.7%
Respondents by gender and mode of transport (N=46)		
Males (n=18)	**Frequency**	**Percentage**
Walk	9	19.6%
Taxi	2	4.3%
Bus	6	13.0%
Car	1	2.2%
Females (n=28)	**Frequency**	**Percentage**
Walk	11	23.9%
Taxi	7	15.2%
Bus	10	21.7%

As indicated in Table 1, (60.9%) of the respondents were females, while 39.1% were females. Most of both males (23.9%) and females (39.1%) stay at home and not at university residences. Students either walk to school or use public transport.

Table 2 presents data on perceived education barriers and academic self-efficacy by categories, while Table 3 presents summary descriptive statistics for the two

Table 2 Perceived Education Barriers and Academic Self-efficacy by Categories

		Barriers		Self-efficacy	
Category	**Statement**	**Mean**	**SD**	**Mean**	**SD**
Financial	The university education is very expensive	3.5	1.0	3.4	1.0
	Not having enough money	3.0	0.8	2.6	0.9
	Having to work whilst going to varsity	1.7	1.1	1.8	1.0
		2.7	**0.96**	**2.6**	**0.8**
Ability/ Motivation	Lack of study skills	2.4	1.1	2.3	1.1
	Not being able to get into the programme that I want	2.3	1.2	2.1	1.1
	No one to help me understand planning for varsity	2.3	1.2	2.2	1.1
	Lack of motivation	2.2	1.1	2.1	1.0
	Not knowing exactly what to study	2.2	1.1	2.1	1.1
	Not being prepared enough	2.1	0.9	2.0	0.9
	Takes a long time to finish the course	2.0	1.2	1.6	0.8
	Not smart enough	1.9	0.9	1.7	0.9
	Pressure to not pay attention at school	1.9	1.0	1.8	1.0
	Lack of academic support from lecturers	1.9	1.0	1.8	0.9
	Not confident enough	1.8	0.9	1.7	0.9
	Not understanding what university life is all about	1.8	0.8	1.7	0.8
	Not talented enough	1.7	0.9	1.4	0.6
	Not being interested in classes	1.6	0.9	1.5	0.9
	Not fitting in my new program	1.5	0.9	1.5	0.9
		1.97	**0.3**	**1.8**	**0.3**
Separation/ Anxiety	University is very stressful	2.7	1.0	2.6	1.1
	Others do not think that I can do it	2.5	1.1	1.7	0.9
	Not wanting to move away from home	2.1	1.3	1.9	1.2
	Concerned about feelings of safety	2.2	1.1	1.9	1.1
	Not feeling safe in my neighbourhood	1.9	1.1	1.8	1.1
	Not being like other students at university	1.4	0.7	1.3	0.5

	Feeling guilty about being at university	1.4	0.6	1.3	0.7
	The qualification I want is not available here	1.4	0.9	1.3	0.9
		1.95	**0.5**	**1.7**	**0.4**
Family/ Relational	My parents do not have knowledge about university	2.2	1.2	2.0	1.0
	No one in my family has gone to varsity	2.2	1.4	1.9	1.2
	People in my neighbourhood do not go to university	2.2	1.3	1.8	1.0
	None of my friends are doing the course that I am doing	2.1	1.3	1.5	0.8
	Family responsibilities	2.0	1.2	1.8	1.1
	Having a child to look after	1.7	1.2	1.6	1.1
	Pressure to get a job rather than being at university	1.6	1.0	1.7	1.1
	Getting in trouble with the law	1.5	1.1	1.6	1.1
	Parents do not support my career plans	1.5	0.9	1.7	1.0
	My friends do not support my future career plans	1.3	0.7	1.1	0.3
	Pressure from boy/girlfriend	1.2	0.6	1.1	0.4
	Not taking right courses in high school	1.4	1.0	1.6	1.1
		1.74	**0.4**	**1.6**	**0.3**
Discrimination	People believing that students of my race do not do well at university	1.8	1.1	1.6	0.9
	Being treated differently because of my ethnicity or race	1.4	0.7	1.2	0.5
	Racial / ethnic discrimination	1.3	0.7	1.4	0.8
	Not having enough people of my ethnicity or race at the university	1.3	0.5	1.3	0.6
	Being treated differently because of my gender	1.2	0.6	1.2	0.5
	Sex discrimination	1.1	1.0	1.1	0.3
		1.35	**0.2**	**1.3**	**0.2**

Table 3 Summary Descriptive statistics for the two scales

Barrier Scale	**Mean**	**SD**	**Max**	**Min**	**Range**
Financial	2.7	0.9	3.5	1.7	1.8
Ability/Motivation	1.97	0.3	2.4	1.5	0.9
Separation/Anxiety	1.95	0.5	2.7	1.4	1.3
Family/Relational	1.74	0.4	2.2	1.4	0.8
Discrimination	1.35	0.2	1.8	1.1	0.7
Self-efficacy Scale	**Mean**	**SD**	**Max**	**Min**	**Range**
Financial	2.6	0.8	3.4	1.8	1.6
Ability/Motivation	1.8	0.3	2.3	1.4	0.9
Separation/Anxiety	1.7	0.4	2.6	1.3	1.3
Family/Relational	1.6	0.3	2.0	1.1	0.9
Discrimination	1.3	0.2	1.6	1.1	0.5

Figure 1 shows the correlation between the two scales. The scatterplot approximates a straight line which shows a direct relationship between the two scales. This means that the higher the item is perceived to be a problem, the higher is the level of difficulty in dealing with it, and therefore the lower the self-efficacy

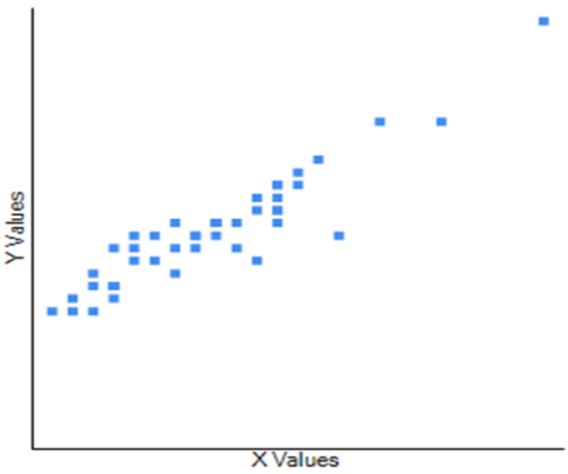

Figure 1: Correlation between the two scales

A computed Pearson Correlation Co-efficient (R) between the mean scores for the Potential Barrier Scale and the Self-efficacy scale was found to be 0.9272, which indicates a strong positive correlation. This means that the high values of perceived barrier items go with high values of the level of difficulty in dealing with them and vice versa. The value for Pearson Product Moment Correlation (Rho) was found to be0.9 and it indicates that the association between the two is statistically significant.

5 DISCUSSION

5.1 Financial matters

Financial matters ranked high as potential barriers (average mean score of 2.7, SD=0.96) as well as the perceived level of difficulty (average mean score of 2.6, SD=0.8), in dealing with them. The main barrier in this category is that university education is very expensive, and that the students do not have enough money to pay for their studies. This finding on financial problems experienced by university students and which hinders students from pursuing with their studies resonates with the findings of Matlala, (2005), Steyn and Kamper (2011) as well as McWhirter, Torres and Salgado (2007).

5.2 Ability/ motivation

The second ranked category was the ability or motivation of the students as a potential barrier to their learning and the level of difficulty with which to deal with items in this category. There is a pattern that is evident between the perceived barriers related to ability and the students' level of difficulty in dealing with them. It is only in the case of the two statements: takes a long time to finish the course and not talented enough, where the difference in the mean scores between the perceived barriers and perceived level of difficulty is 0.3 and 0.2 respectively. The highly ranked items within this category, as shown in Table 3 are: lack of study skills, not being able to get into the programme that I want, no one to help me understand planning for varsity, lack of motivation, not knowing exactly what to study, not being prepared enough, and takes a long time to finish the course. The mean scores in the barrier scale for these seven items are, 2.4, 2.3, 2.3, 2.2, 2.2, 2.1, and 2.0, respectively. The corresponding levels of difficulty are: 2.3, 2.1, 2.2, 2.1, 2.1, 2.0, and 1.6 respectively. For these statements we can still say that the self-efficacy of the students is low as the rating scale is 1 to 4. For the remaining eight statements in this category we can say the self-efficacy level of students is moderate (between 1.9 and 1.4).

Matlala (2005) identified ineffective school education in South Africa as one of the problems affecting academic performance at universities. The effects of under-preparedness of high school learners in different subjects including the language of instruction is cause for concern in South African universities. Students become aware of their shortcomings and that affect their performance. Hence they need support from both lecturers and support staff especially the staff at the university libraries. At our institution there is supplementary instruction, academic advising and English proficiency course which is compulsory for all first-year students. The questions to ask are: to what extent do these services help the first-year students? Are the students at the beginning of their first year aware of such services?

Research on academic advising shows that there is a relationship between academic advising and student development. The more a student and his or her advisor discussed personal and school-related issues, academic deadlines, and study skills and tips, the more likely it was that the student positively developed and had a higher level of satisfaction with college (Pargett, 2011; Arms, Cabrera and Brower, 2008). Also, the studies by Aldahadha and Al-Bahrani (2012) and that of Banat (2015) concluded that academic advising services emerged as a significant predictor of academic achievement.

5.3 Separation/Anxiety

The third ranked category is on separation from parents or anxiety. The highly ranked items in this category are the following: university is very stressful, others do not think that I can make it, not wanting to move away from home, concerned about feelings of safety, and not feeling safe in my neighbourhood. As far as the barrier scale is concerned, the mean scores for these items ranged from 2.7 to 1.9. The mean scores for the level of difficulty scale range from 1.3 to 2.6. The statement which indicates that university is very stressful had a higher mean score (2.6) for the level of difficulty than the barrier scale (2.6). This means that the students have difficulty in dealing with academic stress. The other items to note are not wanting to move away from home, concerned about feelings of safety, not feeling safe in my neighbourhood, and others do not think that I can do it. The level of difficulty in the remaining three statements in this category are low that is (1.3). These are low as potential barriers as well as being difficult to deal with.

5.4 Family/relational matters

There are five statements here that are a cause for concern as potential barriers, namely, my parents do not have knowledge about university, no one in my family has gone to university, people in my neighbourhood do not go to university, none of my friends are doing the course that I am doing, and family responsibilities. The mean scores for these statements range from 2 to 2.2. With the exception of the statement: my parents do not have knowledge about university, the level of difficulty in this category is lower than 2.0.

5.5 Discrimination

Discrimination did not pose problems to the students.

6 CONCLUSION

First year university students do experience barriers to learning. They need to be aware of financial support before they come to universities and not after they had enrolled or when they apply. Career guidance services and academic advising should be strengthened so that students choose the right qualifications to follow carefully. They should choose qualifications that match their ability and interests and not follow their friends or parents' wishes. Monitoring mechanisms should be in place to help students throughout the academic year.

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Physical Science Teachers'
Sense of Efficacy: The Impact of Educational Background on Teaching Efficacy

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ABSTRACT

This study examined the relationship between the educational background and teaching efficacy beliefs of Physical Science teachers in the Free State Province of South Africa. The participants completed a Science Teaching Efficacy Belief Instrument (STEBI-A), consisting of two sub-scales: the Personal Science Teaching Efficacy (PSTE) and the Science Teaching Outcome Expectancy (STOE) scale. The results of the PSTE sub-scale were related to the participants' academic qualifications. MANOVA (multivariate analysis of variance) showed a statistically significant difference in teachers' academic qualifications in terms of their PSTE scores ($p<0.05$). In contrast, a statistically significant difference was found in teachers' professional qualifications in terms of their STOE scores ($p < 0.05$). The study concluded that educational background has an effect on the teaching efficacy beliefs of Science teachers in the Free State Province. This has implications for in-service training programmes offered to teachers.

KEYWORDS: Educational qualifications, Science teachers, STEBI, teaching efficacy beliefs

1 INTRODUCTION

Science teaching has been found to be fraught with problems that could render it ineffective in many countries, including South Africa. Some of such factors include a lack of a strong background in Science content, poor preparation in Science content, inadequate facilities and equipment, poor instructional leadership, and teacher attitude (Clark, 2009; Howie, 2006; Komakech & Osuu, 2014; Ogunmade, 2005). More recently, teaching efficacy beliefs have been found to affect the teaching of Science (Henson, 2001; Tenaw, 2014; Wheatley, 2005) and learner outcomes (Goddard, Hoy & Woolfolk Hoy, 2000; Mojavezi & Tamid, 2012; Tai, Wang & Chen, 2012).

Teachers' self-efficacy beliefs refer to their beliefs in their capabilities to perform specific teaching tasks at a specified level of quality in a specified situation (Bobbet, Olivier & Ellett in Eren, 2009). Teacher efficacy is the form of self-efficacy that is referred to as teachers' beliefs about their ability to influence students' outcomes (Sridhar & Badiei, 2008).

In line with the United Nations Educational, Scientific and Cultural Organizations (UNESCO) (2005), teacher education "addresses environmental, social, and economic contexts to create locally relevant and culturally appropriate teacher education programmes for both pre-service and in-service teachers". Thus, the Science teacher preparation programme's main goal must be to prepare Science teachers so that they are able to respond in a variety of ways to the instructional decisions they may face in the process of transforming and representing subject matter so that it is comprehensible to learners (Gess-Newsome, 2002).

Teacher education generally includes four elements: improving the general educational background of trainee teachers; increasing their knowledge and understanding of the subjects they are to teach; pedagogy and understanding of children and learning; and the development of practical skills and competences. The balance between these four elements varies widely (Perraton, 2010). Teacher training education has to develop competent and confident teachers. Pre-service teachers may lack a sense of efficacy due to a lack of teaching experience; therefore, their programmes need to be structured in a way that promotes mastery of the subject content knowledge and pedagogical knowledge. Two components are critically important in teacher preparation: teacher knowledge of the subject to be taught, and knowledge and skill in how to teach that subject (NCATE, 2005). Research (Houck, 2008; Mji & Makgato, 2006; NCATE, 2005; Saavedra & Opfer, 2012) shows that subject matter knowledge is necessary for effective teaching. But, there is a second part of the equation: knowledge and skill in how to teach is also imperative.

Effective teachers understand and are able to apply strategies to assist learners to increase their academic achievement. They understand and apply knowledge of child and adolescent development to motivate and engage learners. They are able to diagnose individual learning needs. They also know how to develop a positive climate in the classroom in order to make it a stimulating learning environment (NCATE, 2005). However, if teachers are to be effective their initial training will have to be effective (Pretorius, 2012). Hence, this study relates teachers' qualifications to Science teaching efficacy beliefs.

Teacher preparation/knowledge of teaching and learning, subject matter knowledge, experience, are all leading factors in teacher effectiveness. Not only does the lack of content knowledge and pedagogical content knowledge inhibit conceptual change, create an over-reliance on didactic and rote learning, and restrict curriculum choices, it also causes teachers to lack confidence in their ability (Lanier, 2009; NCATE, 2005). Silva purports in Yeseul, (2011), that teacher qualification is cited as the major concern in the South African education system, especially in the field of Mathematics and Science, where teachers are mostly under-qualified. Improving the quality of education is of utmost importance to the economic and human development of nation states, and of pertinence in the developing world. There is strong evidence that links economic growth in terms of the Gross Domestic Product (GDP) in developing countries to growth in both spending and participation in schooling (Yeseul, 2011).

While content knowledge is important and necessary, it alone cannot determine whether the teacher is able to teach so that learners learn. That is why NCATE requires the parallel development of teaching knowledge that is specific to the content being taught, as well as general pedagogical knowledge and knowledge of child and adolescent development as applied to teaching. With specific reference to the Science Teaching Efficacy Belief Instrument (STEBI) that involves Personal Science Teaching Efficacy (PSTE) and Science Teaching Outcome Expectancy (STOE), it is thus important to balance the content knowledge that will enhance teachers' PSTE with the pedagogic knowledge that will enhance STOE on the other hand. In the South African context, a minimum qualification to teach is an undergraduate teachers' qualification that takes a minimum of four years, where content and pedagogy are emphasized. This is the case when a student chooses education as his/her professional qualification, not an academic qualification. Therefore, there should be a clear distinction between a professional teacher and an academic teacher, where a professional one must always be encouraged and prioritized.

2 RELATED LITERATURE

2.1 Bandura's Social Cognitive Theory

This study was grounded on Bandura's Social Cognitive Theory, which is the overarching theoretical framework of the self-efficacy construct (Bandura, 1986; 2000). Through the Social Cognitive Theory, Bandura advanced a view of human functioning that accords a central role to cognitive, vicarious, self-regulatory, and self-reflective processes in human adaptation and change (Pajares, 2002). People are viewed as self-organising, proactive, self-reflecting and self-regulating, rather than as reactive organisms shaped and shepherded by environmental forces or driven by concealed inner impulses. From this theoretical perspective, human functioning is viewed as the product of a dynamic interplay of personal, behavioural and environmental influences. Bandura (1986, 2000) calls this three-way interaction of behaviour, personal factors (in the form of cognition, affect and biological events), and environmental influences or situations the "triadic reciprocality".If this template is used when writing the full paper, headers and footers will be set automatically. Authors are asked not to use header, the technical committee, when preparing the proceedings for publication will assign footer and numbering of the pages, as these.

2.2 The concept of self-efficacy

Central to Bandura's Social Cognitive Theory is the concept of self-efficacy. Self-efficacy beliefs are defined as "people's judgements of their capabilities to organise and execute courses of action required to attain designated types of performances" (Bandura, 1986: 391). Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment. It is also a critical determinant of self-regulation.

Bandura (1995: 2) defined self-efficacy as "the belief in one's capabilities to organise and execute the courses of action required to manage prospective situations", while Pajares (2000) defined it as people's confidence in their ability to do the things that they try to do. The ideas that come through in these definitions are one's judgements, beliefs and confidence in one's abilities to perform a particular task. Bandura's (1997: 2) key contention regarding the role of self-efficacy beliefs in human functioning is that "people's level of motivation, affective states and actions are based more on what they believe than on what is objectively true". How people behave can often be predicted by the beliefs they hold about their capabilities, rather than by what they are actually capable of accomplishing, as these self-efficacy perceptions help determine what individuals do with the knowledge and skills they have (Pajares, 2002).

Self-efficacy beliefs are believed to predict future behaviour (Hoy, 2004). If a teacher believes that he or she can manage his or her classroom and conducting meaningful lessons, he or she will more likely do just that. In line with this thinking, schools of education in general, and teacher preparation programmes in particular, need to be aware of the factors associated with increased levels of self-efficacy, in order to produce the most capable, innovative, and dedicated teachers possible. The effective learning of science by learners is directly influenced by teacher confidence and competence (Ashton & Webb, 1986 in Schriver, 1993; Taimalu & Oim, 2005).

2.3 Aim of the study

The aim of this study was to assess the effect of teachers' educational background on Science teaching efficacy in secondary schools of the Free State Province.

Research questions:

- What are the efficacy beliefs of science teachers?
- To what extent do teachers' educational qualifications influence their efficacy beliefs?
- What are the implications in-service teacher programmes?

3 METHOD

3.1 Research design

A survey using a mixed methods approach was undertaken to investigate the relationship between Physical Science teachers' educational qualifications and their teaching efficacy beliefs.

3.2 Population and sample

The sample for this study was drawn from all secondary school Physical Science teachers in the Free State Province of the Republic of South Africa. The Free State Province had 324 secondary schools that offered Physical Science and 426 Physical Science teachers during the time of this study. Cluster sampling was used to select 100 schools to represent the different geographic locations (urban, semi-urban and rural) of the schools of the five districts of the Free State Province. From the 100 schools that were selected, 190 teachers were selected using stratified random sampling to constitute the sample for the study.

3.3 Instrument

An open-ended questionnaire was used as the data-gathering instrument in this study. It comprised of the STEBI-A and the self-constructed questions that required information on teachers' biographical data and their level of preparedness in teaching Physical Science. The STEBI was designed by Riggs and Enochs in 1990 and was tested for validity and reliability.

The STEBI-A asks for a self-report of teacher efficacy beliefs and is constructed using a five-point Likert-type response scale with the options of strongly agree, agree, uncertain, disagree, and strongly disagree, according to the scale 1 to 5, respectively. It has two sub-scales, namely, the Personal Science Teaching Efficacy Belief (self-efficacy dimension) and Science Teaching Outcome Expectancy Scale (outcome expectancy dimension). The long version of the STEBI-A consists of 25 items, 13 positively written and 12 negatively. The Cronbach alpha of the Personal Teaching Efficacy Belief is 0.92, while the alpha for the Science Teaching Outcome Expectancy Scale is 0.77 (Riggs & Enochs, 1990). The total composite PSTE score and STOE score was 65 and 60, respectively.

3.4 Data analysis

The Statistical Package for the Social Sciences (SPSS version 20) was used to analyse the data gathered both descriptively and inferentially. In order to find the answers to the research questions, multivariate analysis of variance (MANOVA) was conducted.

4 RESULTS

Table 1 shows the teachers' specific academic qualifications and indicates that 72 (37.9%) of the teachers have qualifications in pure Sciences. It is worth noting that the 19 (10%) teachers with postgraduate degrees in Science might either have their undergraduate degrees in Science or in Science Education. In this study, 91 (47.9%) respondents did not respond to the question on academic qualification; it might be because most of them studied towards their professional qualifications by initially pursuing the field of Education.

Table 1 Respondents by specific professional and academic qualification

Academic Qualification	**Frequency (%)**	**Professional Qualification**	**Frequency (%)**
Bachelor of Science (BSc)	53 (27.9%)	Bachelor of Science in Education (BSc:Ed)	23 (12.1%)
Bachelor's degree other than Science	27 (14.2%)	Bachelor of Education in Further Education and Training (B.Ed:FET)	34 (17.9%)
Advanced studies	19 (10%)	Diploma in Education	57 (30.0%)
		Certificates in education (PGCE)	28 (14.7%)
Total	99 (52.1%)	Total	142 (74.7%)

Table 1 further reports on the respondents' specific professional qualifications; it shows that 142 (74.7%) of the respondents attended a course in Science teaching methods and thus are qualified to teach Science. Forty-eight (25.3%) teachers did not respond to this question, probably because their main field of study is not in Education. A total of 114 (60%) teachers have specific professional qualifications to teach Science, i.e. B.Sc (Ed), B.Ed (FET), or a Diploma in Education. The study found that 28 (14.7%) of the teachers have a Postgraduate Certificate in Education (PGCE). This 14.7% might account for the 27 teachers whose undergraduate degrees were not in Education. PGCE is a one-year full-time certificate intended to equip candidates with a qualification in Education.

4.1 Relating the STEBI-A to educational background

The relationship between the respondents' academic qualifications and their PSTE and STOE scores is shown in Table 2.

Table 2 Mean PSTE and STOE scores per respondents' academic qualification.

Respondents' specific academic qualification	PSTE	STOE
Bachelor of Science (B.Sc)	54.11	40.00
Bachelor's degree other than Science	51.07	39.37
Bachelor of Science (honours)	53.50	38.86
Master of Science (MSc)	52.80	42.20

It is important to note that the respondents in possession of a bachelor's degree, other than Science, had the lowest PSTE (51.1) score, and those with a Master of Science degree scored the highest on STOE (42.2). For the purpose of this study, an academic qualification is any qualification that does not have any specialisation in the field of Education.

The next section looks at the respondents' professional qualifications against PSTE and STOE.

As shown in Table 3, respondents who are in possession of a PGCE tend to have the lowest PSTE (51.5); the lowest STOE of 38.7 is scored by respondents with national diplomas. The high PSTE and STOE scores are observed in the B.Sc (Ed) and B.Ed (FET) respondents.

Table 3: Mean PSTE and STOE scores by professional qualifications

Respondents' specific professional qualification in education	PSTE	STOE
Bachelor of Science in Education: BSc (Ed)	52.87	41.26
Bachelor of Education: B.Ed. (FET)	52.88	41.12
Postgraduate Certificate in Education: PGCE	51.48	39.11
Diploma in Education	53.60	38.72

MANOVA was conducted to determine if there was a difference in teaching efficacy beliefs (PSTE and STOE sub-scales) between teachers with different educational backgrounds. Tables 2 and 3 present the relevant descriptive statistics. All the MANOVA assumptions were tested. The results of MANOVA determining the difference in teaching efficacy between teachers with different educational backgrounds showed that there were significant differences on the combined dependent variable for both teachers with different academic qualifications ($F=2.610$; $p=0.020$), and teachers with different professional qualifications in Education ($F=2.849$; $p=0.012$). There was, however, no significant interaction effect between academic and professional qualifications ($F=0.770$; $p=0.681$).

To determine which of the two sub-scales of teaching efficacy differed between the different professional and academic qualifications, further analysis was done. The results revealed that teachers with different academic qualifications differed in terms of their PSTE scores only ($F=4.748$; $p=0.005$). In contrast, teachers with different professional teaching qualifications differed in terms of their STOE scores only ($F=3.088$; $p=0.033$). In order to determine exactly which of the qualification categories differed in terms of PSTE scores and STOE scores, post-hoc analysis was conducted. Even though the significant ANOVA result showed that there are probably differences in the PSTE scores between the different academic qualification groups, no significant differences could be detected with the post-hoc analysis. Due to the sensitivity of the ANOVA test statistic, it is possible to sometimes detect significant differences in the ANOVA, but not in the follow-up post-hoc analysis. Thus, it is difficult to draw a conclusion as to which of the academic qualifications the teachers differed on, according to the PSTE scores.

The next multiple comparisons test looks at the professional qualification and the differences in STOE sub-scale scores. There are significant differences in STOE sub-scale scores between teachers with a BSc (Ed) degree, and individuals with a PGCE certificate (p=0.049). There were also significant differences in STOE scores between teachers with a Diploma in Education, and teachers with a BSc (Ed) degree (p=0.039). In each instance, teachers with a BSc (Ed) degree obtained significantly higher STOE sub-scale scores. The means can be seen in Table 4.

Table 4: Respondents' professional qualification on STOE

	Respondents' specific professional qualification in education			
	BSc (Ed)	BEd (FET)	PGCE	HED, UED, HUD
STOE sub-scale total	41.26	41.12	39.11	38.72

5 DISCUSSION

The aim of this study was to establish a relationship between the Science teachers' educational qualifications and their teaching efficacy beliefs. The results from the qualitative data indicated that 74.7% of the teachers have qualifications in Science Education, whereas only 37.9% of the teachers have qualifications in pure Sciences, and 10% thereof with postgraduate degrees in Science. This accounts for the teachers' high scores in science teaching efficacy beliefs. This finding resonates with the conclusion of Pretorius' study that if teachers are to be effective their initial training will have to be effective (Pretorius, 2012).

Research (Gopal & Stears, 2007; Joseph, 2010; Mji & Makgato, 2006; Omolara, 2008) has shown that academic and professional qualifications influence teacher competence. In a study by Udeani and Ejikeme (2011), teachers indicated that the Education courses they took at university or college prepared them adequately to handle their classes; in this study, though, as seen in Tables 1 and 2, the respondents in possession of a Bachelor's degree, other than Science, had the lowest PSTE (51.1) score, yet the higher STOE score (39.4). However, respondents with professional qualifications in Science (e.g. a B.Sc (Ed), B.Ed (FET) and national diplomas) had higher PSTE and STOE scores, as seen in Tables 2 and 3.

A striking finding is that the respondents in possession of a PGCE qualification scored the lowest in both PSTE and STOE (see Tables 2 and 3 for PSTE and STOE respectively). Moreover, there were significant differences in STOE sub-scale scores between teachers with a BSc (Ed) degree, and individuals with a PGCE qualification (p=0.049). Similarly, the Department of Higher Education and Training (2010) confirmed that "Many students, especially in PGCE programmes, are not given sufficient opportunity to engage in practice learning and this problem is compounded by weak institutional-school relationships, poor communication, few and inadequate supervision and mentorship arrangements and sometimes no deliberate student placement policies" (DHET, 2010).

There were also significant differences in STOE scores between teachers with a Diploma in Education, and teachers with a BSc (Ed) degree (p=0.039). In each instance, teachers with a BSc (Ed) degree obtained significantly higher STOE sub-scale scores. Similarly, studies by Gassert, Shroyen and Staver (in Sünger, 2007) showed that PSTE correlated positively with variables, such as educational degree level and self-rated effectiveness in Science teaching. These researchers further probed the possibility that the relation between PSTE and educational degree level was linked with teachers' beliefs to continue learning Science with the purpose of teaching Science effectively. Continuous Professional Development (CPD) has to be encouraged because as teachers grow in their careers, and become more experienced, they are expected to make increasingly greater contributions to the collective expression of the roles in the school, both quantitatively in relation to the range of roles that they contribute to, and qualitatively in relation to the kind of competences they are able to display in relation to the different roles (DHET, 2010).

Cripe (2009), on the contrary, found that there was no relationship between self-efficacy and teacher qualification status in Science. However, DHET emphasises that formal qualification based CPD learning programmes should provide teachers with opportunities to strengthen or supplement existing, or develop new, specialisations and interests. CPD qualification programmes should, in general, include aspects of professional and practical learning including WIL at the appropriate level (DHET,2010).

Respondents who were in possession of a PGCE qualification tended to have the lowest PSTE (51.5) and lowest STOE (39.1) score. It is not surprising that their STOE score is this low as one year is inadequate to undergo a four-year programme that prepares a teacher in the various disciplines of Education and subject methodologies. These are the respondents for whom teaching was not their first choice as a career.

6 CONCLUSION

This study reported on the relationship between the educational background and teaching efficacy beliefs of Science teachers of secondary schools of the Free State Province of South Africa. A questionnaire was administered to the participants to determine the impact of their qualifications on their self-efficacy beliefs. Even though the teachers showed high efficacy beliefs, PSTE alone cannot be used as a yardstick to determine the teachers' beliefs; STOE as well plays a critical role in determining whether the set goals have been achieved with regards to bringing about desired changes to learners' learning. It can thus be concluded that there is a relationship between teaching efficacy and educational background. While content knowledge is important and necessary, it alone cannot determine whether the teacher is able to teach so that learners can learn.

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Storytelling as a Tool for Instilling Multicultural Pre-Service Teacher Practices at a South African University

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ABSTRACT

The aim of this paper is to ascertain pre-service teachers views of the pedagogical approach of storytelling as a means of promoting inclusive classroom practices. *"Storytelling can be a unique form of the learning experience for both the teacher and the students. It can help teachers learn from their students' cultures and experiences- they also convey values, beliefs, attitudes and social norms which, in turn, shape children's perceptions of reality"* .

A qualitative research methodology via a constructivist theory was employed to reflect on pre-service teachers' feedback of their experiences of a storytelling session, facilitated by an Early Childhood practioner/researcher from Thailand and lectures, attached to two South African universities. The three lecturers' from South African reflected on pre-service teachers ' views of storytelling as a means of instilling inclusive practices for multicultural school settings. Four themes, emerged from the data, namely: Cultural experiences; differentiation through the accommodation of different learning styles; language development for inclusion and a conducive learning environment to foster inclusion. Key findings further revealed that pre-service teachers have an understanding of how inclusive, multicultural classroom practices and the subsequent value of storytelling could possibly affect their teaching. This study therefore recommends the use of storytelling as pedagogical tool for multicultural schools in South Africa.

KEYWORDS: Storytelling, inclusive multicultural practices, pre-service teachers, lecturer reflections

1 INTRODUCTION

The purpose of this paper is to explore pre-service teachers ' views of the pedagogical approach of storytelling as a means of promoting multicultural classroom practices. This was done through university lecturers' reflection on their student's narratives after they participated in a presentation on oral storytelling, facilitated by an Early Childhood. Storytelling can be a unique form of the learning experience for both the teacher and learners. It can help teachers learn from their learners' cultures and experiences- they also convey values, beliefs, attitudes and social norms which in turn, shape children's perceptions of reality. The art of storytelling is an asset to the Thai society, more especially to communities confined to the north eastern region of Thailand. Storytellers assist in educating listeners about ways of life, beliefs, customs and culture inherent in the stories they convey [1].

It is especially important for pre- service teachers to hold high expectations of all their learners, irrespective of culture and socio-economic backgrounds. Classroom teaching in multicultural school contexts is enhanced when it deliberately involves children in learning about themselves first. In this regard, oral history via a storytelling methodology could be used to relate information about family backgrounds, histories and cultures. A deeper understanding of diversity, mutual acceptance, respect and human difference can be instilled by exposing learners to stories which uphold commonly shared values and active citizenship [2]. A multicultural learning environment in which diversity is embraced is further characterised by inclusion. In terms of South Africa's Education White Paper 6 (IE WP6), Inclusive Education is about ensuring access, active participation for all learners, irrespective of difference, nationality, language, various abilities and different cultures. IE WP6 acknowledges that all children have the potential to learn with the necessary support [3]. Enabling learning methodologies, such as storytelling could be used by teachers as an enabling pedagogical strategy to meet the needs of all children. In this way, even learners with barriers to learning can reach their full potential.

2 LITERATURE OUTLINE OF THE PAPER

Under this heading, the aim and theoretical framework for this study will be discussed. An explanation will also be rendered to specific aspects confined to storytelling.

2.1 Aim of the paper

The aim of this paper is to explore pre-service teachers' views of storytelling as a pedagogical strategy in instilling multicultural pre-service practices.

2.2 What is storytelling all about ?

By using stories and storytelling techniques, the teacher introduces a creative teaching tool during the delivery of his/her subject contents. By 'storying' the content in images and narratives, the transfer of knowledge improves considerably. Introducing storytelling by themselves (learners and teachers) is a great way to improve creativity, literacy, social, emotional and artistic competencies. Storytelling is an age-old custom that transcends time, culture and language and as such it fulfils a cardinal role in the lives of people and more particular, assist in shaping the lived experiences and world view of learners [4 and 1].

According to Miller and Pennycuff, storytelling as a pedagogical strategy can be used to enhance the literacy development (oral language, reading comprehension, and writing) of all learners [5]. Storytelling may serve as an effective pedagogical tool to enhance learners' abilities in various aspects of their development and learning. Our contention is that teachers, especially preservice teachers should be exposed to digital and oral storytelling.

Digital storytelling tools such as cellular phones, cameras or the written word are viewed by educationists as appropriate tools which have the potential to motivate and engage learners, promote self-expression and creativity and instil collaboration among learners [6]. Storytelling has also found a new space in the digital world giving root to what is known as "digital storytelling"[4]. Learners will take responsibility for their own learning if they are given opportunities to take pictures with digital cameras, develop their stories based on the pictures taken, produce a film based on the pictures by adding subtitles and present their stories as such [7]. Learners have been routinely exposed to computers, electronic games, digital music players, video cameras and mobile phones. They are immersed in instant messaging, emails, web browsing, blogs, wiki tools, portable music, social networking and video sites [8].

On the other hand, oral storytelling (which is the focus of this working paper) is more than the story, the music, the images or the interaction with the medium- it is about what happens between people while they are sharing the story. Engaging the imagination of learners through oral story is perceived to be at the heart of learning. This pedagogical and teaching tool has proven to hold extra benefits. The oral story teller focuses his or her attention on the listeners, (eye to eye, mind to mind and heart to heart). Story tellers brings not only their undivided attention but their own unique personality to the storytelling context. During oral stories learners must exercise their imaginations, create the pictures in their minds with words, facial expressions, tone and gesture [9]. Oral storytelling dates back to over 30.000 years ago, where even in the earliest civilizations, groups of people would gather around small spaces to tell oral stories that have passed down cultural beliefs, familial memories or creative fantasy. These stories were told in circles, maintaining eye contact and human connectedness that have bonded groups of people and assisted people in recognising the truths about their own reality [10].

Within the South African school context, storytelling is included in the NCS CAPS as a content aspect for primary school learners. The National Curriculum Statement Grades (NCS), grades R-12 gives expression to the knowledge, skills and values worth learning in South African school multicultural school settings.

2.3 Theoretical framework

Meanings and understandings grow out of social encounters and how people interact and understand certain realities. Vygotsky's theory of **sociocultural learning** highlights the role of **social** and **cultural interactions** in the learning process. Constructivism as a learning theory prongs the creation of knowledge in learning environments that's supported by active and reflective learning; the creation of authentic tasks, contextual learning, and collaborative learning [11]. Various paths for learner interaction are explored under the guidance of teachers who act as facilitators during the teaching and learning process [11]. It is in this context, where storytelling could be effectively used as a pedagogical tool in establishing platforms for active learning in inclusive, multicultural classroom settings [12].

Pre-service teachers need to be armed with the knowledge and skills in dealing with the multicultural classroom situation in South Africa [13]. Empowering teachers in various social, language and pedagogical skills so that they may effectively respond to diversity is ideal for multicultural school contexts. Skilling pre-service teachers in the use of storytelling as pedagogical is cardinal in promoting a culture for human rights, inclusion and social justice in their classrooms. Pre-service teachers should acquired the relevant competencies of interpreting and restructuring curricula and as such adopt multicultural practices which are focussed on developing democratic and critical thinking citizens [14 & 2]. Constructivism is about meaning making, hence the social realities learners face on a daily basis, may be gauged through storytelling. It is therefore important that pre-service teachers in South Africa are appropriately trained in the use of both digital and oral storytelling teaching methodologies.

3 RESEARCH METHODOLOGY

A qualitative research method employed for this study. Thematic analysis was used to interpret the written texts of pre-service teachers' narratives and reflective skills on inclusive, multicultural education practices. The Inclusive Education module outcomes for pre-service teacher training at the university where storytelling workshop was done, are set as follow: *Structure a comprehensive understanding of inclusive education to address diverse barriers to learning. Incorporate appropriate learning opportunities into lesson plans and make use of strategies from an asset based perspective to accommodate learners in the multicultural classroom.*

The short narratives of 294 students were studied and analysed as to ascertain pre-service teachers' understanding of the use of the storytelling as a pedagogical strategy in promoting inclusive multicultural practices. The task given to pre-service teachers was therefore based on their observations of the video recording produced during the story telling workshop session with Dr Prasong Saihong. This task was guided by the following question: ***Write a short narrative of 10 sentences on how storytelling can be used to promote inclusive, multicultural practice in the classroom. Provide examples from the video.***

4 DISCUSSION OF RESULTS

Four preliminary themes were identified during the first wave of data analysis, namely: cultural experiences; differentiation through different learning styles**;** language development for inclusion and conducive learning environment to foster multicultural practices.

Theme 1: Cultural experiences

According to pre-service teachers, storytelling is and should be perceived by communities as a fundamental approach for transferring knowledge and culture from one generation to the next. Fables, fairy tales, poems and nursery rhymes are more than just mere vehicles for providing entertainment, they communicate important cultural information in a memorable way.

Pertaining to the theme, ***cultural experiences,*** the cultural dimensions portrayed through the stories told by the storyteller (Dr Prasong Saihong), pre-service teachers articulated the following sentiments:

”Storytelling is a meaningful and accessible way to teach all learners, no matter what their culture or the type of learning difficulty they may have – it includes everyone”
..”explore their (learners’) own cultural roots”
…”Dr Prasong included the audience by having them bring in the lullabies they know in their language to help them relate within their context.

The manner in which communities from diverse cultures develop a specific story line could be viewed as an attempt to increase comprehension is particularly embedded in the way they organise their events around topics rather than a main idea. In certain cultures, storytelling engagements tend to be more chronicle of particular relationships that focus on the humour of a situation or shares the feelings of another person, rather than a sequence of events. It also needs to be noted that students with learning barriers may often be referred for professional services that may not be the result of a disability but it may be perceived as being inherent to these learners cultural experiences and the use of language [15]. These are issues pre-service teachers and in particular, practising teachers of multicultural schools need to take into cognisance when they engage with learners during storytelling sessions.

Theme 2: Differentiation through different learning styles

Storytelling in preschool settings fulfils a critical role in various aspects of learners cognitive developmental domains [16]. Aspects confined to learners, linguistic/verbal intelligence, spatial intelligence, bodily-kinaesthetic and naturalist intelligence appear to be more developed during exposure to storytelling activities than that of learners’ logical-mathematical intelligence, musical intelligence, interpersonal intelligence and intrapersonal intelligence development.

Pertaining to the theme, ***Differentiation through different learning styles*** as portrayed through the stories told by the story teller (Dr Prasong Saihong), pre-service teachers articulated the following expressions:

“He made use of different hand gestures and body movements to demonstrate what he was talking about and this is an advantage to visual learners, kinesthetic and auditory learners”
“If storytelling is regularly practiced in a classroom context all learners can feel included because there is something that suits each of them”
“Picture books accommodates especially the visual learners”
“In storytelling you can effectively include different learning and teaching styles and include all learners in your classroom”

In a study conducted on the use of storytelling, the results indicated that the preschool learners achieved a high level of development in linguistic/verbal intelligence, spatial intelligence, bodily kinaesthetic and naturalist intelligence areas [16]. In multicultural schools, storytelling could also be used by teachers to mould learners’ emotional intelligences. Learners, whether from deprived challenge homes and those from affluent households require certain life skills to manage their emotions. The manner in which the story teller reacts to the story, his tone of voice and facial expressions, model certain emotions [9].

Theme 3: Language development for inclusion

According to the pre-service teachers, storytelling can be used as a pedagogical tool/teaching method to develop and enrich learners oral language usage, written language, literacy competences, communication and social skills. Storytelling is of value to learners who appear not to be ready to read or are having reading difficulties- this strategy assist their vocabulary and teaches them the sound and form of narratives without focusing on the written word. Oral storytelling, has the added benefit of guiding learners in co-creating stories and instilling an eagerness amongst them to learn more literacy skills [9].

Pertaining to the theme, ***Language development for inclusion*** as portrayed through the stories told by the storyteller (Dr Prasong Saihong), pre-service teachers expressed the following views:

"He made use of repetition of information which makes the learning of new words easier"
"…enables learners to use their imagination"
"Repetition in a story can be used to introduce new concepts, new dimensions of language: tenses, prepositions, and nouns"
"All learners will be able to remember something…Dr Prasong made us repeat phrases
"Sing along in a different language is positive for the inclusion"
"The storyteller used his own language and made use of other languages and in this way students learned something new"

Literacy instruction is most effective when developed through social interaction and collaboration with others [17]. Storytelling as a pedagogical tool enhances the relationship between language in an interactive way and as such improves the literacy learning and development of learners [18]. In terms of language development, learners who listens to the stories aloud, without visual stimuli, appear to be activating their auditory system and their language processing system. Information is conveyed through verbal prompts and gesticulation which assist learners to understand the content of stories. Learners are also exposed to comprehending language as a combination of words, tones, and physical gestures, new vocabulary, grammar, and syntax. In the final analysis, learners appear to be telling their own stories via their expressive language skills and as such seem to be practicing their own narratives [10].

Themes 4: Conducive learning environment to foster multicultural practices

Various aspects such as socio-economic conditions, developmental needs, social and lived experiences, gender and culture influence students' learning progress in multicultural schools, accordingly. Teachers in multicultural schools should fulfil a critical role in establishing a conducive multicultural classroom atmosphere. Therefore, establishing a democratic classroom environment conducive to teaching and learning is a process that entails staging the physical space, getting the students to cooperate, creating a communal environment, and finally maintaining a positive classroom climate and culture [20]. By using a teaching strategy such as storytelling, teachers could possibly contribute to multicultural practices, such as improving the quality of education and the rendering of equal education opportunities for all learners.

Pertaining to the theme: ***Conducive learning environment to foster multicultural practices*** as portrayed through the stories told by the storyteller (Dr Prasong Saihong), pre-service teachers, expressed the following views:

"…creates a space for enthusiasm and make them willing to listen"
"Allow learners to feel that their stories are important"
"An easy way to capture learners' attention"
''Increases learners' participation…and feeling of relaxation and well-being"
"Can be used to promote inclusive education because it requires everyone to participate – he allowed learners to sing the welcome song in their mother tongue which promoted inclusion"
"Storytelling encourages participation and interaction with the storyteller and also amongst each other"

Storytelling is a powerful tool to integrate teaching messages with learning activities- this is central in creating engaging and conducive multicultural teaching and learning practices in schools. Within a constructivist learning environment, storytelling has the potential to enhance learning engagement, promote healthy social interactions and provide better educational outcomes for all learners [20]. .

5 CONCLUSION

Oral storytelling has the potential to promote inclusive multicultural practices through an awareness of learners' cultural experiences; personal background realities and lived experiences. Studies reinforce the value of oral storytelling in the development of learners' social and emotional abilities, cognitive growth, as well as their language skills. Oral storytelling is much more personal than telling a story using a book. Therefore, pre-service teachers should be educated about having a democratic point of view and should make an attempt to include all learner voices in engagements as well as supporting learners from diverse backgrounds with well thought inclusive multicultural classroom practices. The Department of Education should also provide training opportunities for practising teachers to be skilled in the art of oral storytelling.

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STRESS VULNERABILITY AND ACADEMIC PERFORMANCE AMONG MANAGEMENT STUDENTS OF UM TAGUM COLLEGE: BASIS FOR ENHANCEMENT PROGRAM

An Institutional Research
Presented to the Research and
Publication Center
University of Mindanao

RAIZA MAE C. NARCISO

ABSTRACT

The main objective of this study was to investigate if there is a significant relationship between stress vulnerability and academic performance among management students of UM Tagum College. Random sampling technique was used in identifying the respondents and sample size of this study. This study used the quantitative non-experimental research design using correlational technique with mean and Pearson-r as statistical tools. A validated survey questionnaire was used as principal data collection instrument. Results revealed that the level of stress vulnerability was moderate, while the level of academic performance was low. Meanwhile, findings showed that there was no significant relationship between stress vulnerability and academic performance. This means that, there might be other factors aside from stress that relates to the increase or decrease of the academic performance of the management students. Finally, though there's no correlation that exist, the researcher still proposed an enhancement program that will target on lessening stress and improving the academic performance of the students.

Keywords: *Human Resource Management, Stress Vulnerability, Academic Performance, Enhancement Program, Philippines*

INTRODUCTION

Schools, universities, and colleges have no value without students. Learners are the most basic resources for any institutional organization. The social economic and financial advancement of the nation was explicitly connected with learner's academic performance. The academic achievement of students shows vital part on becoming effective and efficient graduates which subsequently become an asset in this country which can be beneficial in this nation’s social and economic development (Ali et al., 2009).

Furthermore, it was emphasized in the Organizational Behavior book of Robbins (1998) that a high-stress level or even an adequate amount sustained over a long period eventually takes its toll, that may result in the decline of the performance. Also, it was mentioned that stress experienced by the students in the school are the following: bombarded homework, student competition (peer pressure), teacher’s failure to monitor student progress, financial constraints, poor relationship with other students, poor teaching strategy, and family problems among others. These stressors were categorized as environmental, economic, family and school factors (Fairbrother & Warn, 2003; Taylara, 2012).

In the academe, the faculty members are the ones who have direct contact with the student, and each of them can detect the stress level of the students through observation in school. Causes of it may not all school related but can be from different factors other than academics. The study also shows that the degree of stress of college students vary by year level and gender that is why the interpersonal relationship of the faculty-student should be taken consideration because teachers are said to be their second parents. As the students step up every semester, the stress level also increases due to numerous academic commitments, financial constraints and being preoccupied with many things yet with poor time management. But, to other studies, this increase in stress can be addressed and reduced through effective time management and organized study habits (Misra et al., 2000). Thus, the faculty member's perception of student academic stress is important because they can help to be one of the stress relievers of the students.

A lot of college student find the academic experience very stressful, and one way for them to cope is by having a university counseling service and time management. In the research conducted abroad, 165 students completed a survey questionnaire measuring their level of stress and grade point average (GPA) and two significant findings were found: Excellent Time Management was seen to be correlated with high academic performance, more excellent work and life satisfaction. Also, the positivity and self-efficacy of a students in school may lead them to become more loyal and committed to study and excel. Furthermore, an improved mood of the students can also lead to enhanced academic performance (Chemers, Hu & Garcia, 2001; Lumley & Provenzano, 2003).

On the other hand, student academic performance assessment has gotten important consideration in past researches. It is a testing part of scholarly writing, and educational literature since learner's performance is influenced by social, mental, financial, environmental and individual elements. UM Tagum College students are not exempted from this issue. Indeed, as per observation, a large portion of every class was working poorly in their performance, particularly in the department of business administration (as based in their final grades). Furthermore, in the study conducted by Akgun and Ciarrochi (2003) results revealed a negative correlation between stress and academic performance and by this, UM Tagum College students maybe right on blaming stress as one of the reasons for the decline in their performance.

Therefore, in this context, the researcher feels the need to conduct the study particularly assessing the level of stress vulnerability and academic performance of management students since it was directly observed that problematic students exist in this department, the basis was manifested in their grade/scores or through informal consultation or conversation. Proposal for appropriate interventions was also one of the main goals to address the problems. Performance usually is connected with burnout, and something must be done to realize what caused it and in how to oversee it legitimately.

In the light of these concerns, this study is undertaken. The primary objective of this study was to establish the significant relationship between stress vulnerability and academic performance among management students of UM Tagum College. Specifically, it aimed to answer the following sub-questions:

1. To assess the level of stress vulnerability among management students of UM Tagum College in terms of:
   1.1 family factors;
   1.2 financial factors;
   1.3 school factors; and
   1.4 environmental factors.
2. To determine the level of academic performance among management students of UM Tagum College using GPA.
3. To ascertain if there is a significant relationship between stress vulnerability and academic performance among management students of UM Tagum College.

The outcome of the study would give pertinent data to the entire UMTC students especially the *School Administrators* in implementing suitable enhancement program that encourage students to be progressive in their academic performance.

Also, the results of the study enable *Faculty members* to have a deeper understanding of the student's family, environment, monetary and school-related issues which distress them. This study will likewise save as a basis for possible interventions intended to change learner's attitude, hence helping them adjust or adapt to the challenges of higher education. Ultimately, this study enables *Students* to realize how to manage their pressure and to appreciate the value of study habits and time management as espoused by their teachers.

METHOD

Presented below are the research steps and procedures that were taken by the researcher in this study. These include the Participants, Research Instruments, Design, and Procedure.

The respondents in this study were three (out of six) of the management classes during S.Y. 2014-2015. Random sampling was used wherein 95 management students participated as respondents.

The primary tool used in the data gathering process was the survey questionnaire adapted from Taylara (2012). To acquire data efficiently that the level of stress vulnerability of management student can be measured, the researcher contextualized the questionnaire that will fit the college students, since initially it was intended for elementary students. The said questionnaire dealt with four stressors (family, financial, school and environment) that student may experience. The management student's academic performance was measured based on its Grade Point Average (GPA) of the class.

The questionnaire consisted of statements measuring the respondents' stress vulnerability. The respondents checked the scale that expresses how they feel about the statements. Dawes (2008) mentioned that using 5-point Likert scale in this type of study can help the respondent easily assess the accounts based on their experiences. The Five-Point Likert Scale used by the researcher is presented herein:

Range of Means	Descriptive Level	Interpretation
4.20 – 5.00	Very High	This means that the stress-vulnerability among management students of UM Tagum College is very much experienced.
3.40 – 4.19	High	This means that the stress-vulnerability among management students of UM Tagum College is much experienced.
2.60 – 3.39	Moderate	This means that the stress-vulnerability among management students of UM Tagum College is moderately experienced.
1.80 – 2.59	Low	This means that the stress-vulnerability among management students of UM Tagum College is less experienced.
		6
1.00 – 1.79	Very Low	This means that the stress-vulnerability among management students of UM Tagum College is not experienced.

For the Academic Performance, the following Five-Point Likert Scale was used in the measurement of the Grade Point Average (GPA).

Range of GPA	Descriptive Level	Interpretation
4.20 – 5.00	Very High	This means that the academic performance among management student of UM Tagum College is excellent.

3.40 – 4.19	High	This means that the academic performance among management student of UM Tagum College is very satisfactory.
2.60 – 3.39	Moderate	This means that academic performance among management student of UM Tagum College is satisfactory.
1.80 – 2.59	Low	This means that academic performance among management student of UM Tagum College needs immediate improvement.
1.00 – 1.79	Very Low	This means that academic performance among management students of UM Tagum College is unsatisfactory.

This study utilized quantitative non-experimental design employing the correlational technique. This method helps to identify the relationship between two variables at least, and tries to examine the degree to which at least one or many relationships of some sort exist (Fraenkel, 2003).

The following steps were followed in gathering the data: Upon approval, the questionnaires were presented to the experts (at least a Master's degree holder in a related field) and grammarian for the modification and content validation of the survey questionnaire. Afterward, the questionnaires were administered personally by the researcher to the respondents of the study. Lastly, after the questionnaires were accomplished, they were tallied, analyzed and subjected to statistical analysis. For the Academic Performance data, the researcher used the Grade Point Average (GPA) of the students in her class.

The statistical tool utilized in the research were: the Mean which was used to measure the stress-vulnerability level and the academic performance among the management students and the Pearson-r which was used to ascertain if correlation exists between stress vulnerability and academic performance of the students

RESULTS

Table 1.1 shows the level of stress vulnerability in terms of family factors. As being stated below the overall mean for this indicator is 3.12 and described as moderate. The result means that the stress vulnerability among management students of UM Tagum College in terms of family factors is moderately experienced.

Results showed that students much experienced stress when people in their home were noisy. However, students occasionally experienced stress when there are some household chores to do; when one at home is sick or when they heard their parents had a conflict. On the other hand, students less experienced stress even when their brothers and sisters were fighting with each other.

Table 1.2 depicts the data on the level of stress vulnerability in terms of

Table 1.1 *Level of stress vulnerability among management students of UM Tagum College in terms of family factors*

Statements	Mean	Description
1. Students feel stress when they heard their parents had a conflict.	2.83	Moderate
2. Students feel stress when their brothers & sisters were fighting with each other.	2.48	Low
3. Students feel stress when people in their home were so noisy.	3.78	High
4. Students feel stress when there were a lot of household chores to do.	3.05	Moderate
5. Students feel stress when one at home is sick	2.86	Moderate
OVERALL	**3.12**	**Moderate**

financial factors. The overall mean for this indicator is 3.21 and described as moderate. The result means that the stress vulnerability among management students of UM Tagum College in terms of financial factors is moderately experienced.

Results revealed that students much experienced stress especially when there was an increase in tuition fee. But then again, students sometimes suffered stress if they can’t go somewhere due to the transportation problem, can’t buy school projects and forced to change their lifestyle due to financial constraints. In contrast, students felt less stress if they don't have an allowance for snacks or meals in school.

Table 1.3 presents the data on the level of stress vulnerability in terms of school factors. The overall mean for this indicator is 3.32 and described as moderate. The result means that the vulnerability of stress among management students of UM Tagum College in terms of school factors is experienced.

The data results showed that students much experienced stress when they have a lot of projects. While, a moderate amount of pressure experienced even if their teacher announces examinations, quizzes or drills, gives many

Table 1.2. *Level of stress vulnerability among management students of UM Tagum College in terms of financial factors*

Statements	Mean	Description
1. Students feel stress when they don't have an allowance for snacks or meals in school.	2.50	Low
2. Students feel stress when there was an increase in tuition fee.	4.11	High
3. Students feel stress, when they can’t buy school projects.	3.15	Moderate
4. Students feel stress, when they were forced to change their lifestyle due to financial constraints.	3.05	Moderate
5. Students feel stress when they can't go somewhere due to a transportation problem.	3.22	Moderate
OVERALL	**3.21**	**Moderate**

assignments, calls their attention to recite and even during school activities and presentations.

Shown in table 1.4 is the data on the level of stress vulnerability in terms of environmental factors. The overall mean for this indicator is 2.96 and described as moderate. The result means that the vulnerability of stress among management students of UM Tagum College in terms of environmental factors is moderately experienced.

Table 1.3. *Level of stress vulnerability among management students of UM Tagum College in terms of school factors*

Statements	Mean	Description
1. Students feel stress when they have a lot of projects.	3.95	High
2. Students feel stress when their teacher called their attention to recite.	3.19	Moderate
3. Students feel stress when their teacher announced examinations, quizzes, and drills.	3.33	Moderate
4. Students feel stress when they were given many assignments.	3.22	Moderate
5. Students feel stress when they were part of school activities and presentations.	2.88	Moderate
OVERALL	**3.32**	**Moderate**

The result indicated that students experienced stress the most when they experienced flood in their community. While, students moderately experienced stress even if the environment is so messy and dirty; when their neighbors are quarreling or when they heard loud music from their neighbors. On the other hand, student less experienced stress when they experience drunken persons annoying neighbors.

Table 1.4. *Level of stress vulnerability among management students of UM Tagum College in terms of environmental factors*

Statements	Mean	Description
1. Students feel stress when their neighbors were quarreling.	2.91	Moderate
2. Students feel stress when they see drunken persons annoying neighbors.	2.36	Low
3. Students feel stress when the environment was so messy & dirty.	3.39	Moderate
4. Students feel stress when they hear loud music from their neighbors.	2.66	Moderate
5. Students feel stress when they see flood in their	3.51	High

community.		
OVERALL	**2.96**	**Moderate**

Table 1.5 is the data of the summary of the level of stress vulnerability among management students of UM Tagum College. The overall mean is 3.12 and described as moderate. The result means that the vulnerability of stress among management students of UM Tagum College is moderately experienced.

Data presented in Table 2 contains the academic performance result of the management students. The lowest possible rate that a student earned was 75 with a descriptive equivalent of *Low* and the highest rate was 100 with a descriptive level of *very high*.

Table 1.5**.** *Summary of the level of stress vulnerability among management students of UM Tagum College*

Indicators	Mean	Description
Family Factors	3.00	Moderate
Financial Factors	3.21	Moderate
School Factors	3.32	Moderate
Environmental Factors	2.96	Moderate
OVERALL	**3.12**	**Moderate**

Moreover, professors of UM Tagum College compute the academic performance (GPA) of the students by weighting the following criteria: 30% for the final examination, 10% each for 3 major examination (1st-3rd exam), 15% for research, 10% for Quiz, 10% for Participation and 5% for Assignment.

It is important to ensure that the scaling of the two variables matched, since academic performance originally used 100 scales, converting it to 5-point Likert type is a must. To convert the scale for this variable the researcher used the formula below:

$$F(x) = \log(\text{value})$$

The overall mean for the academic performance of management students was 1.90 and described as low. The result means that the academic performance among management students of UM Tagum College needs immediate improvement.

Table 2. *Level of academic performance among management students of UM Tagum College*

Variable	Mean	Description
Academic Performance	1.90	Low

Table 3 shows the data on the result of the correlation between stress vulnerability and academic performance. Pearson-r was used to determine the significance of the relationship.

Since the p-value is more than the .05 level of significance, the null hypothesis is therefore not rejected. Hence, we can say that there is no significant relationship between stress vulnerability and academic performance among management students of UM Tagum College.

Table 3. *The significance of the relationship between stress vulnerability and academic performance among management students of UM Tagum College,*

Paired Variables	r-value	p-value
Stress Vulnerability Academic Performance	.125	.229

Decision on H_o = not rejected
n=95

DISCUSSIONS

The level of stress vulnerability was described as moderate. The following are the specific results of the four indicators under this variable: All of the indicators:

school factors, family factors, financial factors, and environmental factors have moderate results. This means that the stress vulnerability among management students of UM Tagum College is experienced. The result affirms the study of Fairbrother and Warn (2003) who emphasized that stress experienced by the students in the school are the following: bombarded homework, student competition (peer pressure), teacher's failure to monitor student progress, financial constraints, poor relationship with other students, poor teaching strategy, and family problems among others. These stressors were categorized by Taylara (2012) as environmental, financial, family and school factors.

The level of academic performance was low which means that the academic performance among management students of UM Tagum College needs immediate improvement. The result confirms the proposition of Misra et al. (2000) who mentioned that as the students step up every semester, the stress level is predicted to increase due to academic commitments, financial constraints and being preoccupied that lead to poor time management. But to other studies, this increase in stress can be addressed and reduced through effective time management and organized study habits. Misra et al. (2000) emphasized that academic achievement of students shows vital part on becoming effective and efficient graduates which subsequently become an asset in this country which can be beneficial in this nation's social and economic development. Thus, this issue of low academic performance must be prioritized.

Using Pearson-r to testing the relationship, results did not reject the null hypothesis since the p-value is greater than .05 level of significance. Therefore, we can say that there is no significant relationship between stress vulnerability and academic performance among management students of UM Tagum College. The result of the study debunks the framework of Robbins (1998) expressing that an elevated level of stress or even a moderate sum continued over a significant period, in the long run, incurs substantial damage, and execution decays. The result suggests that other factors aside from stress may contribute to the increase or decrease of the student's performance. However, it must be noted that sample size isn't sufficient to represent the entire populace; thus, increasing the sample size in future research is highly suggested.

Given the findings of the study, the researcher recommends the following:

Foremost, since the level of stress vulnerability is moderate, as much as possible, it must be kept at the lowest level. To lower it down the researcher recommends to conduct the departmental academic competition, this can be initiated at least once every semester wherein there would be an interdepartmental competition to release them from distress while helping them enhance their academic performance. Presented in Appendix A is the enhancement program design for the proposed academic Olympics.

Further, school administrators may give more training to the faculty members through annual retooling particularly addressing communication competency, management of lesson delivery, teaching strategies, and methodologies and classroom management of the faculty. This is suggested to be conducted annually. Moreover, faculty members are also encouraged to improve their work performance by employing new teaching strategies that utilize multiple intelligence like seeing, hearing, kinesthetic or interpersonal. The annual retooling is also suggested to re-train professors on modern ways of teaching that satisfies varied students way of learning.

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APPENDIX A

PROGRAM DESIGN

I. Program Title:

"Academic Olympics"

II. Rationale:

The Academic Olympics is a departmental academic competition that focuses on making learning fun and exciting. It is evident that on the result of the study school factors contributed the most in the level of stress vulnerability and this includes stress in academic requirements, school activities and teacher factor. To continue promoting leadership education being sensitive to their difficulties must be a top priority.

Thus, this program can be a tool in enhancing the level of creativity, quick thinking, and confidence building. This serves as a new way of learning, breaking away from the usual activity in class. This is proposed to be done once every semester to allow students to rest for a bit and experience something new.

III. Program Objectives

This program aims to:

1. decrease the level of stress vulnerability among students of UM Tagum College.
2. increase the level of academic performance among students of UM Tagum College.
3. experience a fun and exciting way of learning academics.
4. introduce something new to the students that can later contribute in improving their academic performance.
5. release student from distress that can help enhance their academic performance

IV. Target Participants/Beneficiaries

The target participants for this activity are the students of UM Tagum College.

V. Schedule and Matrix of the Activity

The Activity will be conducted on the second week of December, second semester school year 2018-2019. For each activity there will be a sponsor that will facilitate the event as specified in the matrix.

Each Department will identify their participants for each event. This is an enhancement program activity that can help students rest, enjoy and lessen their stress in the classroom. Presented in the table is the schedule and Matrix of the Activity. Table 4 below shows the matric of the academic Olympics.

Table 4. *Schedule and Matrix for the academic Olympics*

Semester (2018 – 2019)	Program Title	Specific Activity	Time Frame	Sponsor
2nd semester	**Academic Olympics**	Best out of Waste: An Eco-Booth Making Contest	8:00-5:00 pm	Arts and Science
		Book fair: A fund raising project	8:00-5:00 pm	All department
		Elocution	8:00-9:00 am	Education
		Pinoy Henyo	9:30-12:00 pm	Criminology
		Group Mimic (Teleserye lines)	1:00-3:00 pm	Business Administration
		Awarding	3:00-4:00 pm	OSA

Best out of Waste: An Eco-Booth Making Contest. The mechanics for this event is that for each department they will make an eco-booth where each department is required to use a recycled material. This event will measure the level of creativity, initiative and resourcefulness of the students. Also, this activity will not require big expenses for the department since the materials are recycled.

Book fair: A fund raising project. This activity will serve as a fund raising project, where department leaders will take initiatives on collecting a secondhand book donated from its fellow students and sells it for a very affordable price. The book will be displayed and open for selling at the Eco-booth made by the different department. This activity will enhance students' initiative and engage others to read books than going online.

Elocution. This activity will showcase the student's skills on clear and expressive speech considering its pronunciation and articulation. The students have to create a self-composed content and within 3 minutes time he/she will be able to deliver its speech considering these criteria: Exression, Articulation, Diction, Delivery and Style.

Pinoy Henyo. As everybody know pinoy henyo will measure the student's quick thinking and ability to easily comprehend the description of the one described by the other student.

Group Mimic (Teleserye). In this event, a certain group of students will try to mimic some of the famous teleserye scenes in Philippine television. Each group will be given 10 minutes to prepare for the scene. This will measure the students quick thinking ability, memorization and acting skills.

VI. Budget for Academic Olympics

The budget for this program will be cared of by the Office of the Students Affairs.

VII. Expected Outcomes

The activity will benefit the following entities:

UM Tagum College. This will possibly generate an increase of student satisfaction which will later help entice prospect enrollees of the school.

Faculty. The faculty members will be given a day of rest from its usual classroom teaching activity. This will help them re-energize and get some ideas from the activity that can help make learning fun and exciting. Also, this can help the faculty members assess the student's co-curricular skills.

Students. This can help decrease student's level of stress from classroom activity. This can also give them a sense of excitement on a day of fun and learning.

Future Researchers. This study could be a useful source of data for school management. A new research may be conducted that will target on measuring or evaluating this program if this is effective or not.

APPENDIX B

STRESS VULNERABILITY SURVEY QUESTIONNAIRE

Name: ____

INSTRUCTION: Base your answers on your actual situation. Indicate what is true and relevant to you by checking the number which indicates the reaction which you may or may not have under each situation. Please refer to the scale below:

5	**Always True**	If the statement definitely expresses how you feel about the situation.
4	**Often True**	If the statement often expresses how you feel about the situation.
3	**Sometimes True**	If the statement somehow expresses what you feel but not in the most situation.
2	**Seldom True**	If you are not definite, but think that the statement seldom expresses how you feel about the situation.
1	**Never True**	If the statement definitely does not express how you feel about the situation.

A. FAMILY FACTORS	**5**	**4**	**3**	**2**	**1**
I feel stress, when…					
1. I hear my parents are having a conflict.					
2. My brothers & sisters are fighting with each other.					
3. The people at home are so noisy.					
4. There are a lot of household chores to do.					
5. One at home is sick					
B. FINANCIAL FACTORS					
I feel stress, when…					
1. I don't have an allowance for snacks or meals in school.					
2. There’s an increase in tuition fee					
3. I can’t buy school projects.					
4. I was forced to change my lifestyle due to financial constraints.					
5. I can’t go somewhere due to transportation problem.					

C. SCHOOL FACTORS					
I feel stress, when…					
1. I have a lot of projects.					
2. My teacher call my attention to recite.					
3. My teacher announces examinations, quizzes, and drills.					
4. I am given many assignments.					
5. I am part of school activities and presentations.					
D. ENVIRONMENTAL FACTORS					
I feel stress, when…					
1. Our neighbors are quarreling.					
2. I see drunk persons annoying neighbors.					
3. The environment is so messy & dirty.					
4. I hear loud music from our neighbors.					
5. I see flood in our community.					

Adopted from: Taylara, L. J.(2012). *Stressors and coping approaches of students of Sto. Tomas East district.* UM Tagum College.

APPENDIX C
CURRICULUM VITAE

RAIZA MAE C. NARCISO, MM
UM Tagum College
raiza_mae30@yahoo.com
09338201418

PERSONAL DATA

Age	:	28 years old
Date of Birth	:	April 30, 1991
Place of Birth	:	Davao City
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July 31 – August 1, 2010	16th Rotaract/Interact District Assembly at Mikos Brew Ballroom, Apokon Road, Tagum City
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RESEARCH PUBLICATION

Work Stress and Performance among UM Tagum College Faculty
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Structuring a Postgraduate Diploma to Target Knowledge and Enable Access

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In line with the directives of the Higher Education Qualifications Sub-framework (2013) the department of Business and Information Administration aimed to determine the need for the development of a level 8 Postgraduate Diploma qualification. This paper focuses on the development of the Postgraduate Diploma in Business and Information Administration to establish the knowledge base of the curriculum. The problem being investigated is whether the knowledge base of the curriculum supports the provision of access to professional knowledge. The study drew on Maton’s (2011) Semantic dimension which was employed to examine the knowledge areas identified in the development of the Postgraduate Diploma. The subjects of the Postgraduate Diploma were analysed to determine the stronger practical and contextual curriculum components (stronger semantic gravity SG+) as well as the stronger theoretical and conceptual (stronger semantic density SD+) components in order to understand the logic of the curriculum. A multi-method research design was used to determine the knowledge base of the Postgraduate Diploma. Data was attained by undertaking a documentary analysis, workshops with employers, graduates, students and academics, interviews, and a national and international benchmarking exercise. The feedback from employers, graduates, academics and students highlighted the knowledge bases which should be included in the curriculum. The findings show that there is a need for a level 8 Postgraduate Diploma in Business and Information Administration. This qualification aims to develop professionals who possess higher order cognitive skills to apply specialist knowledge and research in the field of business and information administration in order for them to cope with the demands of an uncertain future.

STUDENTS' DISSATISFACTION IN OPEN AND DISTANCE EDUCATION: Experiences of IGNOU

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STUDENTS' DISSATISFACTION IN OPEN AND DISTANCE EDUCATION: Experiences of IGNOU

Abstract

Learning and education have been part and parcel of life since the beginning of time, and have transformed and improved alongside culture, geopolitics and technology. In the present world scenario, education is all about access to information, opportunities and resources irrespective of geopolitical location of learner, their economic conditions or ethnicity. In India Distance Education now plays an important role in teaching students. So, the level of satisfaction among students is one of the important issues in distance education programme. In this study an attempt had been made to understand the reasons for students' dissatisfaction in IGNOU. The major purpose of the study was to identify the factors responsible for dissatisfaction of the students studied at IGNOU and how to remove the dissatisfaction level. We have used both primary and secondary sources of data. For secondary data a number of relevant books, IGNOU publications like Profile, Prospectus, Annual Reports etc. and other published and unpublished documents relating to the study have been consulted. The data regarding the profile of successful students of IGNOU are collected from the IGNOU H.Qtr. as well as Regional Centre. For the study to be maximally informative, it was decided to use the qualitative survey method during the initial stage of the study and the quantitative survey during the final stage of the study. Data was collected from 543 students who have completed the academic programme have the adequate and complete experiences of study under Distance Mode as they have successfully completed the academic programme from IGNOU are considered as targeted population. The responses of the respondents are sought in a 5 point Likert Scale: extremely dissatisfied, very dissatisfied, moderately dissatisfied, slightly dissatisfied, not at all dissatisfied. To understand the reasons of dissatisfaction among students, factor analysis has been carried out using SPSS 20 software for extracting the factors. Before conducting the factor analysis the reliability of the questionnaire has also been checked. Sample adequacy has been checked using KMO and Bartlett's test. As a result it has found that (i) guidance and assistance from study centre regarding rules, regulations and other activities of the programme; (ii) response to queries sent through e-mail, fax letter, phone; (iii) delivery of study materials on time and (iv) conduct of counseling session were the most responsible factors for accelerating the process of student's dissatisfaction in IGNOU. Therefore it must be required to take necessitating serious attention of the above mentioned four major responsible factors.

Key Words: Distance Education, Dissatisfaction, IGNOU

STUDENTS' DISSATISFACTION IN OPEN AND DISTANCE EDUCATION: Experiences of IGNOU

Learning and education have been part and parcel of life since the beginning of time, and have transformed and improved alongside culture, geopolitics and technology. In the present world scenario, education is all about access to information, opportunities and resources irrespective of geopolitical location of learner, their economic conditions or ethnicity. Learning is first and foremost about the learners' will to learn such goes the maximum of the 21st century, leading to the advent of Open and Distance Learning (ODL) or Distance Education (DE). The broadcasting of education through the use of media, the reaching of the printed word to the farthest corner of the earth, and the development of the microprocessor and internet communication have developed Distance Education as a means of taking education from the realm of the elite to the reach of the masses, thereby proving to be the biggest agent of social change and development in the history of human civilization. Distance Education is an approach which seeks to optimize the flexibility of education to a diversity of learner types, locations, timetables and type of access to educational support. But is such an amorphous dynamic approach easy for the students to work along with? Why the dissatisfaction level of students of Distance Education is high in comparison to the students of conventional mode of learning? Let us try to understand the issue.

About Distance Education and IGNOU

It perhaps requires no mention that Open and Distance Education in its earlier form of correspondence education started in the West in mid-19th century. In India however, it began almost a century later in the form of correspondence education through commercial institutions. Within a short span of 50-60 years distance education in India has become the second largest system in the world. Open University was thought of as a viable strategy to meet challenge of spreading higher education, especially when the potential of the electronic media in spreading mass education was realized. And the first Open University was established in 1969 in the United Kingdom.

In the last decade of the 20th century, several innovations have taken place in operation management. All sectors are gradually absorbing the sweeping changes of the 21st century innovations in their own pace and fashion. ODL, however, has been faster in adopting these innovations compared to other systems of higher education. The adaptability of ODL to innovations has shown impressive results. The system has emerged as an appropriate tool for enhancing access to higher education to all at different levels with special attention on disadvantaged groups. It has also succeeded in relating the development needs of the nation as a whole designing various programmes for individualized study and growth. Due to the application of modem communication technology it has become possible for ODL to innovate and enjoy the benefits of a flexible approach.

In India Distance Education as a system received recognition and status only when the Andhra Pradesh Open University (now Dr. B. R. Ambedkar Open University) and later the Indira Gandhi National Open University(IGNOU) were established. With the establishment of 14 other state levels Open University and more than 200 Distance Education Unit of conventional universities, the Open and Distance Learning system has got more encouragement.

Since it's establishment in the year 1985, IGNOU, a central university under the Ministry of

Human Resource Development, Government of India, has undergone rapid expansion and emerged as an international institution in the field of Open & Distance Learning. This indicates its wide acceptability and credibility among the seekers of Higher Education in the World. IGNOU is playing a leading role in redefining education to ensure its sustainability. Meeting the aspirations and expectations of learners from all sections of the society is a challenging task, which requires dynamic repositioning of approaches and strategies. IGNOU have grown at a fast pace and in the right direction to meet the set targets for implementing major plans and projects in collaboration with national and international organizations. The task of education, its span and mode of delivery are perceived differently in IGNOU. The design, development and launch of academic programmes are significantly focused on the well-being of the community and national development. Thus, many programmes of IGNOU aim to fulfill visible gaps in contemporary human resource requirements (IGNOU Profile).

IGNOU is catering for a cumulative strength of over 3 million learners, offering 241 academic programmes at different levels, ranging from Certificate to Doctoral level. In terms of mode of delivery, the university provides support to learners through high quality Self Instructional Materials, face-to-face contact with Academic Counsellors of 60,256, practical experience in work places or laboratories, video conferencing, interactive counselling through Gyan Darshan - a network of educational TV Channels and Gyan Vani network of FM radio stations. Our network of Student Support Services comprising of 56 Regional Centre and more than 3,500 Learners Support Centres provides effective services to the learners (IGNOU Profile).

Rationale and Research Gap

An educational system which is almost universal in scope in term of the location and diversity of its disseminators and recipients, available content and modes of its delivery, is bound to have some problem concerning all components. It is important that studies are conducted on the various levels to be better able to summarize and explain these problems. Only when there is a clear cut identification of what the weaknesses are, can we hope to create a system that is reasonably consistent in delivering quality education to an optimum number of students with minimum attrition rate, failure and stress. But studies which highlight the shortcomings of the Distance Education system and criticize it are few and far between. This is because a large portion of the available literature is written from the vantage point of those who have a stake in its success.

It is ironical that the bringing is by quoting one the very researches that is being reviewed but its somehow most apt, “A large proportion of literature is written from the vantage point of those who have a stake in its (Distance Education) success, so they tend towards promotion”. (Eimicke & Pearson, 1995) Thus it was found that studies highlighting student dissatisfaction and problem areas in Distance Education are less no. Still, the following studies are relevant as they point out some of the existing gap.

Cohen, S., Eimicke, W., Kamlet, M., & Pearson, R. (1998) opined that the programme, conducted by the collaboration aforementioned universities in the Distance Education format is designed to strengthen managerial and analytical skills and improve understanding of the role of IT in work, home and society. The study brings out the following distinct points of dissatisfaction; i. Frustration by technical glitches while lading software, remote hook up and assignments; ii. Students felt isolated and deprived of the informal.
Study reveals that teachers in Distance Education system are frustrated to and they have their own take on the causes of students’ dissatisfaction. Networking facilities, internet availability and management related flaws which lead to student dissatisfaction. The cultural tendency of

Distance Education students from countries following a more structure, conventional traditional education with well-defined authority figures, to treat Distance Education as inferior, something to be achieved with minimal effort. Unsuitable and inefficient learning materials with low relationship and compatibility between modules of the same course or across courses (Nart & Altunicik,2000)

The study of Noriko Hara and Rob Kling (1998) offers insights not only into the causes of frustration but also the problems associated with research regarding the same. Students frustration in Distance Education course stems from 3 inter-related sources: i. Lack of prompt feedback and effective advice; ii. Technological problems which inhibit their learning and educational opportunities; iii Ambiguous instruction by teacher as well as management.

The study of Atrtri (2000) provides a detailed account of the various causes of student dissatisfaction in Distance Education and also suggests corrective measures. The various causes may be summarized as follows: i. The personal insecurities of the students due to a perceived irrelevance of Distance Education course vis a vis the traditional universities, leading to a certain denial of belonging to a scholarly community; ii. Financial constraints, a strain on personal life and lack of employer support in case of working people; iii. Gaps in multimedia instruction and continuity of study material; iv. Minimal interaction with teachers and among learners; v. Lack of administrative support and services, with no clear cut role of Distance Education departments.

A brief review of related literatures reveals the most of the related to regional experiences and focused on online education. Some studies have focused on the technological issues relating to assessment of dissatisfaction of students. Almost no systematic study has ever been undertaken in India in the context of understanding students 'dissatisfaction. Whatever reports have been prepared by many organizations on distance education have only made passing references instead of any in-depth analysis. The present study seeks to make an attempt to provide a complete on students' dissatisfaction in India. It is hoped that present study will go a long way in providing relevant pointers to all the various components of Distance Education to be more effective, efficient and resilient to disturbances.

Objectives of the Study

Students' satisfaction is one of the important issues in distance education. An attempt had been made in this study to understand the reasons for students' dissatisfaction in IGNOU. The objectives of the study are to identify the factors responsible for dissatisfaction of the students studied at IGNOU how to remove the dissatisfaction level. However in specific term the following objectives are pursued in the study.

1. To understand the reasons of dissatisfaction among the students of Distance Education.
2. To identify areas of negative impact creating dissatisfaction and frustration among the students of Distance Education;
3. To find out the possible solution to decrease the level of dissatisfaction.

Method of Enquiry

Based on a preliminary survey of literature and collection of information from IGNOU, an analytical method of enquiry has been adopted for the study backed by appropriate statistical techniques wherever needed.

The purpose of this study, as has already been indicated is to find out the various reasons of students dissatisfaction within all dimensions of Distance Education programmes. For the study to be maximally informative, it was decided to use the qualitative survey method during the initial stage of the study and the quantitative survey during the final stage of the study. The passes out students of IGNOU who have been conferred degrees during 30th – 32th convocation of the university are considered as respondents. 543 students who are dissatisfied during their study at IGNOU are identified through discussion from the successful students of 30th – 32th convocation. The responses of the respondents are sought in a 5 point scale: extremely dissatisfied, very dissatisfied, moderately dissatisfied, slightly dissatisfied, not at all dissatisfied. Each describes the perceived intensity of each factor in the level of dissatisfaction. Issue of dissatisfaction is dealt with the students of IGNOU only.

The qualitative survey was used for interviewing students, listening about their positive and negative experiences during the course of their pursuit of some Distance Education progrmames. Pass out students of IGNOU were interviewed and on the basis of their observations dissatisfied students are identified, and broad categories of the areas of dissatisfaction were also identified. These categories were used to create the IGNOU 5 point dissatisfaction scale for Distance Education students. When a quantitative fist is initially developed, it needs to be put through a rigorous process of reliability and validity testing before it can be considered a useful measure.

Data Source

We have used both primary and secondary sources of data. For secondary data a number of relevant books, IGNOU publications like Profile, Prospectus, annual reports etc. and other published and unpublished documents relating to the study have been consulted. The data regarding the profile of successful students of IGNOU are collected from the IGNOU H.Qtr. as well as Regional Centre.

The Sample

The students who have completed the academic programme have the adequate and complete experiences of study under Distance Mode as they have completed the journey. Therefore the students successfully completed the academic programme from IGNOU are considered as targeted population. Again to maintain homogeneity among the sample only Master's Degree holder of IGNOU during the awardees of 30th – 32th convocation are considered for the study. Furthermore, practical based Master's Degree and professional Master's Degree holders are also excluded from the study because of nature and purpose of the academic programme. Thus 543 dissatisfied students have been selected as sample for the study.

Statistical Tools Used

To understand the reasons of dissatisfaction among students, factor analysis has been carried out using SPSS 20 software for extracting the factors. To avoid the cross loading among the factors of the variables Eigen Value criteria (greater than one) and Varimax Rotation criteria has been used. Before conducting the factor analysis the reliability of the questionnaire has also been checked. Sample adequacy has been checked using KMO and Bartlett's test.

Results and Discussion

Based on literature review and discussion with the dissatisfied students a few factors responsible for creating dissatisfaction among the students, a questionnaire was prepared on 5 point Likert Scale which is depicted in Table 1. It is found that response to queries sent through e-mail, fax letter, phone; delivery of study materials on time; guidance and assistance from study centre regarding rules, regulations and other activities of the programme and conduct of programme related academic counseling are the important factors for dissatisfaction among the students. It is observed that out of 543 respondents, 506 respondents are extremely dissatisfied for the reason not getting response to queries sent through e-mail, fax letter, phone. While issues related to conduct of counseling session are the main reasons of 450 students for dissatisfaction at extreme level and 409 students are also extremely dissatisfied for delivery of study materials on time.

Table 1

Factors Responsible for Students' Dissatisfaction in IGNOU

	Factors Responsible	Extremely Dissatisfied	Very Dissatisfied	Moderately Dissatisfied	Slightly Dissatisfied	Not at all Dissatisfied	Total
1.	Delivery of Study materials on time	409	52	43	28	11	543
2.	Support of Regional Centre during the period of study	211	70	160	73	29	543
3.	Response to queries sent through e-mail, fax letter, phone	506	09	10	14	04	543
4.	Guidance and assistance from study centre regarding rules, regulations and other activities of the programme	448	49	29	08	09	543
5.	Conduct of Programme Related Academic Counseling	450	31	43	05	14	543
6.	Review of answer scripts/ photocopies of answer scripts of TEE	319	77	26	100	21	543
7.	Declaration of TEE results	70	404	39	21	09	543
8.	Provisional certificates and grade cards on time	133	302	40	62	06	543

9.	Conduct of Counseling on Assignment Writing/Examination/Admission/Placement etc.	31	80	215	150	67	543

Extremely dissatisfied (5), Very dissatisfied (4), Moderately dissatisfied (3), Slightly dissatisfied (2), Not at all dissatisfied (1)

For examining the factors responsible for student's dissatisfaction in IGNOU we have again used the factor analysis. Before conducting factor analysis we have checked the reliability of questions asked in the particular sections. The reliability statistics Cronbach's Alpha for the parts came to be 0.801 shows it quite satisfactory for the further proceedings (Table 2)

Table 2

Reliability Statistics	
Cronbach's Alpha	N of Items
.801	9

Source: Computed by Statistical Tool, IBM SPSS Version 20.

After that we have done factor analysis, it has been carried out using SPSS 20 Version software for extracting the factors. For avoiding the cross loading among the factors of the variables Eigen value criteria (greater than one) and Varimax Rotation Criteria has been used respectively. First of all we will present sample adequacy result. Sample adequacy has been checked using KMO and Bartlett's Test which is satisfactory it came as more than 0.6. This shows that number of sample collected is enough for study. Table 3 shows the summary results of the sample adequacy.

Table 3

Result of KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.625
Bartlett's Test of Sphericity	Approx. Chi-Square	191.359
	df	36
	Sig.	.000

Source: Computed by Statistical Tool, IBM SPSS Version 20.

For further analysis and validation, the data reduction technique called, Factor Analysis is used. The output of factor analysis is examined after validating the variables using the communalities. Table 4 provided the communalities extracted for the factors responsible for student's dissatisfaction in IGNOU.

Table 4

Communalities Extracted for the Factors Responsible for Student's Dissatisfaction in IGNOU		
Factors Responsible for Student's Dissatisfaction	Initial	Extraction
Delivery of Study materials on time	1.000	.433
Support of Regional Centre during the period of study	1.000	.571
Response to queries sent through e-mail, fax letter, phone	1.000	.493
Guidance and assistance from study centre regarding rules, regulations and other activities of the programme	1.000	.517
Conduct of Counseling Session	1.000	.386
Review of answer scripts/ photocopies of answer scripts of TEE	1.000	.588

Declaration of TEE results	1.000	.563
Provisional certificates and grade cards on time	1.000	.485
Conduct of counseling on Assignment writing/Examination/Admission/Placement	1.000	.958
Extraction Method: Principal Component Analysis.		

Source: Computed by Statistical Tool, IBM SPSS Version 20.

It can be seen that communalities show sufficiently larger values suggesting that the variables were equally important for the contemplated problem. (Communalities with values more than 0.3 may be taken as important as a thumb rule when the sample size is sufficiently large). Since the lowest communality is 0.386 and all other communalities were fairly large (> 0.386), it is suppose to be good set of variables for further analysis.

In the second step, summary of the extracted factors and the total variance explained by total number of extracted factors have been presented. It may be noticed here that these extracted factors were obtained after avoiding the cross loading. We found that three factors were loaded and it explains 55.488 percent variance. This shows that the variables included in the questionnaire were able to explain only 55.488 percent of the total variation and rest is unexplained. Table 5 shows the result of the total variance explained.

Table 5

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.724	19.156	19.156	1.724	19.156	19.156
2	1.191	13.233	32.389	1.191	13.233	32.389
3	1.073	11.920	44.309	1.073	11.920	44.309
4	1.006	11.179	55.488	1.006	11.179	55.488
5	.943	10.473	65.961			
6	.853	9.473	75.434			
7	.842	9.361	84.795			
8	.718	7.975	92.770			
9	.651	7.230	100.000			

Extraction Method: Principal Component Analysis.

Source: Computed by Statistical Tool, IBM SPSS Version 20.

We have named the four factors on the basis of the nature and importance of the variable loaded under each factor as factor 1 (guidance and assistance from study centre regarding rules, regulations and other activities of the programme; Response to queries sent through e-mail, fax letter, phone; delivery of study materials on time and conduct of counseling session), factor 2 (support of Regional centre during the period of study; provisional certificates and grade cards on time), factor 3 (review of answer scripts/photocopies of answer scripts of TEE; declaration of TEE results) and factor 4 (conduct of counseling on Assignment writing/examination/admission/placement etc.). Table 6 showing the summary result of the factors loaded under each factors. It may be noted from the factor analysis that

(1) Guidance and assistance from study centre regarding rules, regulations and other activities of the programme, (2) Response to queries sent through e-mail, fax letter, phone, (3) Delivery of study materials on time and (4) Conduct of counseling session were the most responsible factors for accelerating the process of student's dissatisfaction in IGNOU. Therefore it must be required to take necessitating serious attention of the above mentioned four major responsible factors.

Table 6

Rotated Component Matrix

Variables	Component			
	Factor-1	Factor-2	Factor-3	Factor-4
Guidance and assistance from study centre regarding rules, regulations and other activities of the programme	**0.710**			
Response to queries sent through e-mail, fax letter, phone	**0.654**			
Delivery of Study materials on time	**0.648**			
Conduct of Counseling Session	**0.593**			
Support of Regional Centre during the period of study		**0.737**		
Provisional certificates and grade cards on time		**0.681**		
Review of answer scripts/ photocopies of answer scripts of TEE			**0.725**	
Declaration of TEE results			**0.707**	
Conduct of counseling on Assignment writing/Examination/Admission/Placement				**0.978**
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 4 iterations.				

Source: Computed by Statistical Tool, IBM SPSS Version 20.

Concluding Remarks

Distance Education has the capacity to realize every statesman's dream of universal education. That Distance Education is somehow for the perusal of the non-serious, slightly inferior in eminence and scholarship. This perception has to be challenged negated, and this will happen, if the various issues, particularly from the perspective of the recipients, are adequately addressed. One ends with the hope that the present study will spur further investigation in the field, particularly going into each of the problem areas in more details taking into account the viewpoints of all the participants in the distance education system, so as to suggest viable solutions and innovations.

The review of literature on this subject reveals that the dimension of students' satisfaction in distance education is quite different from the students in conventional education. It is observed that students' satisfaction of ongoing students may also be different from the pass out students even in distance education. It is found that the delivery of study material on time on the major factors responsible for student's dissatisfaction. It is seen that out of 543 students, 409 respondents strongly and 52 respondents fairly believe, delay in delivery of study material is the main reason of their dissatisfaction. Keeping that point in mind IGNOU has introduced the mechanism of delivery of Self Learning Study Materials in soft copy. Any students can download his/her study materials in soft copy from the IGNOU website, even through mobile apps.

Looking into the problem of dissatisfaction among the students IGNOU has created a online platform known as Grievance Redress And Management (iGRAM). The object of developing iGRAM is to create a platform for quick resolution of students' problems. IGNOU strongly believe that students of the world's largest University are entitled for reliable & accurate information and timely service.

For addressing another core issue, it is important that the Distance Education system shed off their image of what may be termed as 'technological utopianism' which is essentially the disproportionately high expectations of technology to transform higher education. It is also felt that a loss of morale in Distance Education students due to feeling of isolation and too much focus on outcomes without taking into account their unique strength and capabilities.

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Teachers and Teacher Education in Poland: Contemporary Challenges

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ABSTRACT

This paper focuses on the current situation of teachers and at selected aspects of teacher education policy in relation to the recent changes that were implemented at different levels of the system of education in Poland. A specific concern of this paper is policies that contribute to raising teacher education quality in a way which responds to the challenges of teachers preparation, recruitment, work and careers, and especially teachers' lifelong learning. It is argued that changes in the system of education should include a central place for the teacher and the quality of teacher education.

The implications of the presented analysis are that teacher education policy development in Poland should focus on futher actions for raising the quality of the conditions of teachers' work and teacher education quality. A special concern should be to recruit and educate teachers in the light of teaching as high quality profession. Some measures for achieving these goals are proposed.

KEYWORDS: teachers, status of teaching profession, policies in recruiting and educating teachers, high-quality profession, Poland

1 INTRODUCTION

The need to make the teaching profession more attractive, and to ensure the supply of well-qualified, highly motivated and supported teachers has been advocated in Europe and beyond [1]. It is argued that teachers matter [2], and that the role of teachers in this changing context to ensure equity and inclusion, in harnessing new technologies to offer meaningful learning, and in engaging with ongoing professional development is invaluable. Quality teacher education is perceived as an important asset to improve the quality of teachers, and consequently of teaching, in classrooms [3]. The need to look at teacher and teacher education quality with comprehensive understandings of quality itself which take into account contextual, professional, political, and personal dimensions is discussed at the same time [4]. Added to this is also the importance of attracting the most talented candidates and to invest more in policies that aim to improve teacher education and recruitment.

This paper looks at selected aspects of teacher education policy issues in initial teacher education, in-service teacher education and continuous professional development of teachers in Poland in the context of policy development in response to the Bologna Process that has been introduced in Europe in 1999. Some examples of school and teacher-oriented reforms are presented in order to illustrate the changes that have been introduced in the education system in Poland to work on the quality of education and shaping of the teaching profession.

A specific concern of this chapter is policies that contribute to raising teacher education quality in a way that responds to the challenges of teachers preparation, recruitment, work and careers, and especially teachers' lifelong learning. The term "teacher education" is used to refer to both pre-service/initial and in-service teacher education.

It is argued that changes in the system of education should include a central place for the teacher and the quality of teacher education. The implications of the presented analysis are that teacher education policy development in Poland should focus on further actions for raising the quality of the conditions of teachers' work and teacher education quality. A special concern should be to recruit and educate teachers in the light of teaching as high quality profession. Some measures for achieving these goals are proposed.

2 TEACHERS AND TECHER EDUCATION IN POLAND – THE CONTEXT

In Poland attention is often drawn to the fact that the educational acts and in the social-public opinions teaching profession is highly regarded. In the Preamble to the Teachers' Charter one can read that: Bearing in mind the role of education and upbringing in the Republic of Poland, wishing to express the special social rank of the teaching profession in accordance with needs and expectations, intending to open the way to further legal regulations of the national education system by this Act, the following is stated. In light of the social placement of this profession, the teaching profession still ranks behind a fireman, university professor, skilled laborer, miner, engineer and nurse in opinion polls, but nevertheless – despite quite frequent media complaints – before a doctor, farmer, officer, accountant, lawyer, entrepreneur, IT specialist or judge.

At the same time, we can observe among teachers the feeling of the decline in the prestige of the teaching profession, and it is primarily due to low wages and erroneous government policy towards education. Data connected with the teachers' salaries between 2007–2015 show that the average teacher salary in Poland froze in 2012 and therefore the average teacher salary and the one in the national economy equalized in 2017. Another juxtaposition proves that over the past two decades, the actual minimum teacher earnings were at the national average level (nominated teachers), above it (chartered teachers) and below it (trainee teachers and contract teachers). Of course, it is difficult to say clearly that such salaries would meet the ambitions of one of the best-educated professional groups in Poland.

Teacher education is part of a Polish educational system, especially higher education system, and it reflects the characteristics of this system. The current context for teacher education in Poland is the result of a radical reform processes, driven by repeated state interventions, which are visible in changes within the legal environment of education.

Following the downfall of the socialist regimes in 1989, system transformations have taken place in political, social, cultural and economic areas across Poland. New political legislation became the basis for changes in Polish education. From being a centrally planned, hierarchical and closed educational system, it has been transformed into a more open and highly decentralised system of governance. In 1991 among the first new legislation introduced was the Educational System Act (introduced on 7. September 1991). It permitted the development of non-state schools (at all levels of education) and changes in the structure of enrolment at the upper secondary level (higher percentage of young people attending general secondary schools), as well as the doubling of the number of students attending higher education institutions [5].

The reform of the State administration system and the education reform assumed that only the national educational policy will be developed and carried out centrally, while the administration of education and the running of all types of schools, pre-school institutions and other educational establishments are decentralised: each school is administered locally and possesses a high degree of autonomy. Decentralisation of the management of the education system with a focus on local authorities stimulated local educational ambitions and helped to lift the burden of debts regularly incurred to finance educational tasks when these fell within the remit of central governmental administration. Decentralisation in the management of education has been reinforced by steadily increasing autonomy of schools and higher education institutions (HEIs). A policy based on learning outcomes has been introduced in school and higher education in line with the European Qualifications Framework, arguably providing schools, HEIs and teachers with greater autonomy in the organisation of the education process. Considering the implemented reforms of education and their impact, one can also state that the Polish education system moved from an emphasis on the transmission of information and on vocational education and training that prevailed under communism towards an education system that aimed to equip its citizens with a more rounded education focused on knowledge construction, development of skills and competences. The system of education has been constructed in such a way that it is intended to enable learners to adapt to a rapidly changing world, especially to adapt to the pace and scope of economic, social and cultural change.

Regarding the system of higher education and science in the current context, the issues connected with these systems are regulated in the university bill so-called ‘Constitution for Science’. The main assumptions of the Act on Law of Higher Education and Science from 30 August 2018, which came into force on 1 October 2018, is a pro-quality development and visibility of Polish science in the world. The law was introduced in order to release the potential of Polish science, increase the quality of education offered to students and doctoral students through provision of full support to students, as well as systematically raising the level of teaching in Polish universities. The Act pays attention to a sustainable development of Polish universities in the use of this potential depending on the capacity of the centres and it gives universities greater freedom in using funds, science and internationalisation in higher education are treated as inseparable terms in order to talk about the quality matching the best.

The solutions that are the base for this newest university bill are in line with the priorities of Bologna process and visible changes in the higher education in Europe.

The portrayal of Polish education in the context of Polish educational reality and proposed government's changes in higher education and science, not only in the aforementioned Constitution for Science, but in the previous legal regulations like Higher Education Act of 12 Sept. 1990, or the Act of 27 July 2005 Law on Higher Education, the Act of 1. October 2011 on Higher Education, and the Act on Scientific Degrees and Titles of 14 March 2003, indicates that the notion of quality is one of key ideas for debate on education as a whole in Poland [6].

On the basis of reforms that were introduced between 1990 and 2005 in higher education it is worth mentioning that the number of students has increased almost fivefold and more than one third of this rise consists of students from the non-public institutions of higher education. In total, over a half of all these students participate in commercial forms of education. This impressive and abrupt increase in the number of university and college students in Poland has brought about many various positive effects: made higher education more accessible, postponed introduction of great numbers of young people into a very difficult job market and improved the earnings of numerous university and college teachers. However, it has also produced negative outcomes: manifold and long-lasting overburdening of higher education teachers, delaying their development and constraining the level of their scientific work.

The absence of Polish institutions of higher education in the group of universities and colleges recognized worldwide for their high-quality research or teaching was the most visible result of the lack of policy in the past directed at improvement of qualitative indexes. Thus, according to the Ministry of Science and Higher Education, increasing the quality of studies and of efficiency of the higher education system and science becomes a priority. The legal regulations the Act on Higher Education introduced in October 2011 and the Law of Higher Education and Science from 30 August 2018 were needed for adjusting Polish higher education system to the developmental challenges of current and future context of education and also to harmonize it with the solutions introduced in the European High Education Area.

One of the key means aimed at achieving the efficient model of managing higher education, dynamic model of academic career, high quality higher education and science is to integrate curricula with the European High Education Area and thus increase students' and university teachers' mobility. The proposed systemic solutions endeavour to provide: (i) better quality for Polish students, thus better preparation for changing economy, (ii) opportunity for Polish scientists and researchers to participate in the greatest world research projects, (iii) prospects of steady development of Polish institutions of higher education and constant increase in their teaching and research potential.

3 TEACHERS AND TEACHER EDUCATION IN POLAND – GENERAL PICTURE

The number of teachers in Poland in recent years has been steadily increasing: from 650,000 teachers in 2006, by 665,000 in 2010, up to 702,595 in 2018, i.e. a total of 8%.

Among the teachers 82.3% of them are women. The teaching profession in Poland is therefore very feminized and at the same time with a high average of age. For example, in the school year 2014/2015, the largest percentage were teachers aged 46-50 (16.95% of all teachers), then teachers aged 51-55 (15.47%) and teachers aged 36-40 years (15.46%).

Teachers are one of the best-educated professional groups in Poland and teachers are the representatives of the professions of public trust; they constitute 1.8% of the entire population of Poles, and 2.7% of the professionally active population – almost three out of 100 employed are teachers working in the official education system. The teaching profession is dominated by teachers with higher education: bachelor's and master's - 97.5%, 0.8% of teachers (5 500 people) had a doctorate or habilitation, 0.9% had post-secondary education, 0.5% secondary and 0, 2% other.

It seems that the age of teachers is an issue to solve, and not only in Poland. In the school year 2014/15, the largest percentage were teachers aged 46-50 (16.95% of all teachers), then 51-55 (15.47%) and 36-40 (15.46%). And according to OECD, based on the Education at a Glance report from 2018 [7], 31% of Polish teachers were aged 30-39, the same share aged 40-49 and 24% aged 50-59, which makes their total seniority several dozen years (deducting studies), and the average age well over 40 years. This situation is a threat to the Polish school, of course, because we know that even now there is a shortage of teachers in such subjects as maths, physics or foreign languages, but it may also present an opportunity for generational exchange.

Research results on motives on choosing teaching as a career show that the motives for profession selection generally have not changed in the last 25 years in Poland [7]. Still the most dominant are the motives of internal nature, such as passion for work with children, vocation, interest in work at school. On further positions, but no less important, are motives connected to family traditions and the influence of the positive role models of teachers and homeroom teachers from earlier education, as well as the desire to work in a prestigious profession of high social importance. It should be noted that today when selecting an occupation its attributes are taken into account such as the opportunity for self-fulfilment, for constant intellectual development, auto-creation, creativity. This is perhaps connected to the emphasis put on the teacher's quality and his/her creativity, and on lifelong learning. However, prospective teachers still rely on common notions of this profession as an easy one, endowed with many privileges and ensuring work and employment – it is not favourable and in current situation it leads to many substantial disappointments. A peculiar novum in this research is quite a large number of pragmatic motives connected to the studies' values, e.g. a pursuit for possible establishment of own educational or care and education institutions.

Teacher education in Poland, especially Initial Teacher Education, is part of – as it was stressed before – higher education system. The rapidly changing context of education and higher education over the last thirty years has brought about significant changes in relevant legislation, which has become the basis for introducing important reforms in teacher education in order to make the system of teacher education in Poland more adapted to the challenges of the contemporary world. Teacher education was adjusted to more clearly align with the principles of pluralist democracy and a market economy. Initial teacher education institutions became more autonomous, centrally prescribed curricula were abandoned and changes in both methodology and content of study occurred. All teacher educational institutions operate in both the public and non-public education sectors.

In Poland, from 1990 up to 2015 initial teacher education was provided within two sectors of the education system: in the higher education sector and the school education sector. The degree programmes, including first-, second- and long-cycle programmes, were offered within university type HEIs, namely in universities, technical universities, polytechnics and academies. Non-degree postgraduate programmes were offered in non-university HEIs (with no rights to confer the academic degree of doctor). In the school education sector were offered the college programmes, including teacher training colleges and foreign language teacher training colleges. From 2015, initial teacher education has been offered only at higher education institutions.

Initial teacher education and training standards were formulated in the Regulations of the Minister of Science and Higher Education on initial teacher training standards (2012, 2019). This legislations regulate initial teacher education for school education teachers, thus defining training models or paths which lead to qualifications required to practice the teaching profession. However, with a huge autonomy leaving to the universities that were responsible for designing the whole program for prospective teachers.

In the current context the minimum qualification for teaching at pre-primary and primary level (the first stage: grades 1-3) is still a tertiary education degree at bachelor level, which lasts three years. However, pursuant to the regulation of the Minister of Science and Higher Education of 27 September 2018 the Regulations of the Minister of Science and Higher Education of 25 July 2019 regarding initial teacher education studies, studies in the field of pre-school and early school education are conducted - again as it was before 2005 – uniform 5-year master's studies. This has obvious consequences for teacher education in this field.

For those intending to work at primary schools (the second stage: grades 4 - 8) and at upper secondary level, the final qualification is a master’s degree. At present, teachers who hold a higher education diploma (a Bachelor’s or Master’s degree) represent 98% of all teachers working in the school education sector. Master’s degree studies seem to be the most popular route of training for teachers in school education of all levels. In Poland high quality of pre-school education is guaranteed by a very well-prepared teaching staff at nursery schools. Mostly they are university graduates holding a Master’s degree (84.0% of teaching staff), and less often holding a Bachelor’s degree (11.8%).

Reflecting international influences, the emergence of competence-based approaches to teacher education, not only to initial teacher education but across the continuum may be noted in Poland. Teacher competence frameworks have been introduced recently and they specify what candidates for teachers should know, understand and be able to do in the form of ‘learning outcomes’. They contain a description of skills and competences a teacher should have.

Initial teacher education is organised according to two models, i.e. a concurrent model and a consecutive one. The concurrent model of initial teacher education is a dominating model in Poland. Teachers for ISCED 0 and grades 1-3 of ISCED 1 are trained exclusively according to the concurrent model. The minimum requirement for professional workplace training in schools for future pre-primary teachers (ISCED 0), primary teachers (ISCED 1) and lower secondary teachers (ISCED 2) amounts to 13.8% of the whole programme (European Commission/EACEA/Eurydice, 2013, p. 26).

The part of professional workplace training in schools within initial teacher education for the lower secondary teachers is less than 10 % of the whole programme (around 8.3%). This proportion of professional training for upper secondary teachers in Poland is quite low in comparison with the average that is around 20% in a majority of EU countries. Only in Belgium (Flemish Community) we can find the same very limited time spending on professional training during initial teacher education. The amount of professional training provided for secondary teachers is more closely linked to the level prospective teachers are intending to teach (lower or upper secondary) than to the level of the programme and final qualification (bachelor’s or master’s). Reform of study programs at universities, developed and gradually implemented from October 2019, should provide internships lasting one semester as part of three-year bachelor studies, which gives 720 hours of professional workplace training in schools. Thus, it seems likely that practical education will become an important element of initial teacher education at the universities in Poland.

4 ADMISSION INTO INITIAL TEACHER EDUCATION

admission to initial teacher education is governed by the general entrance requirements for entry to tertiary education rather than by specific selection criteria for teacher education. The main prerequisite is holding the final upper secondary examination certificate. For access to masters' programs, the performance at bachelor level is taken into account. Alternative pathways to a teaching qualification are rare in Poland and are only available for future foreign language teachers. They have been introduced because of the shortage of qualified foreign language teachers and an urgent need for their recruitment. In order to become a language teacher, in this way, it is necessary to obtain a certificate confirming language skills at 'proficient' or 'advanced' levels as well as a certificate in foreign language teaching awarded upon completion of a non-degree postgraduate program or a qualification course.

No specific recruitment criteria for prospective teachers and no monitoring of the suitability of candidates for the teaching profession during education is one of the main concerns of the policy reforms connected with teacher education in Poland nowadays. In 2017 the report of The Supreme Audit Office on teacher education in Poland, indicated an emergency of a trend of negative selection for the teaching profession in Poland since the academic year 2012/2013 [8]. In total, more than nine percent of the total number of candidates admitted to faculties with teaching specialties (in the period covered by the audit) were upper secondary school graduates who obtained the lowest scores at the matriculation examination, i.e. from 30 to 49 points (University of Wrocław accepted 28 percent of people with this result).

As one can see, the admission to initial teacher education generally do not include in the recruitment process such skills or competences of the candidate as interpersonal competences, previous work with children in the form of volunteering (e.g. in a scout team or an artistic or tourist group), or acquired competences by the candidate in the after-school system or in the process of self-education.

Pursuant to the regulation of the Minister of Science and Higher Education of 27 September 2018 regarding studies, studies in the field of pre-school and early school education will be conducted as uniform 5-year master's studies. This has obvious consequences not only for teacher education in this field, but perhaps above all for the formation of new generations of teachers taking into account the ethos of the profession.

5 PASSAGE FROM THE UNIVERSITY LECTURE HALL TO THE SCHOOL CLASSROOM

In Poland, the right to employ teachers in a school is a privilege of the school principal, which is a solution not often practiced in most countries. Thus, the school principal is a person who recruits but also employs a new teacher. The Act – Educational Law decides that the school principal is the head of the workplace for teachers and non-teacher employees employed in the school or in other educational institution. The school principal decides in particular on the following matters:

1) employing and dismissing teachers and other school or institution employees,
2) awarding prizes and imposing ordinal penalties for teachers and other school or institution employees,
3) submitting motions, after consulting the teachers' council and school or institution council, in matters of national decorations, prizes and other distinctions for teachers and other school or institution employees.

Teachers are employed by the school principal in an open recruitment procedure. Entrants to the teaching profession are awarded the position of trainee teacher on the date of entering into an employment relationship with a nursery school or school.

Without a doubt, when choosing a candidate for a teacher at the school, the school principal is bound by the candidate's compliance with the statutory requirements for having the appropriate qualifications. Thus, in the case of several candidates who meet this condition, the school principal can use his or her experience in working with other teachers. It can therefore be assumed that the school principal is fully autonomous in making this decision. Importantly, the law does not provide for any appeal proceedings against a decision that is unsatisfactory for rejected candidates. From this point, the school principal's decision is final and indisputable.

Teachers are required to hold a qualification (degree) at a relevant level, and a teaching qualification confirming completion of initial teacher training (a diploma or certificate awarded by an HEI, a diploma from an initial teacher training institution, or a certificate of completion of a qualification course awarded by an in-service teacher training institution). Teachers working in special nursery schools and schools and integration schools are required to hold a qualification at a relevant level and a qualification corresponding to a given type of disability. Starting from the school year 2017/2018, teachers in preschool institutions and primary schools are required to hold at least a Bachelor's degree or a diploma from an initial teacher training institution. A Master's degree is required at all higher levels of education. At present, teachers who hold a Bachelor's or Master's degree represent 98% of all teachers working in the school education system. Apart from formal qualifications, teacher is required to observe the basic moral principles and meets the health conditions necessary to practice the profession.

A new national induction scheme was introduced in 2000 in Poland, designed to support newly qualified teachers during their first four years of teaching. The scheme is extensive, and it is school-based. Its introduction marks a shift in awareness of the continuing need of the newly qualified teacher for professional development and support, and a greater emphasis on the professional responsibility of established teachers towards newcomers to the profession.

Each newly qualified teacher in Poland is employed as a trainee teacher for the first nine months, and is supervised and mentored during this time by a mentor, an experienced teacher employed in the school at Appointed or Chartered Teacher level. A mentor is appointed providing personal, social and professional individualized support to the beginning teacher to help teachers overcome the difficulties they may experience as newcomers to the profession, and thus help to reduce the likelihood that they will leave the profession early. Support measures include regular discussions of progress and problems, assistance with the planning and assessment of lessons, participation in other teachers' class activities and/or classroom observations, special compulsory training and visits to other schools/resource centers. The next phase – contract teacher is again supervised and supported for 2 years and 9 months. This means that new teachers receive support throughout the first four years of teaching.

The induction phase is seen as a support program for beginning teachers. During induction, newly qualified teachers carry out all the tasks incumbent on experienced teachers, and they are remunerated for their work. Induction has important formative and supportive components for beginning teachers as they receive additional training, personalized help and advice at the school site. The function of this induction process is to help beginning teachers to construct their professional identity and develop professional practices suited to the realities of school and integrated into their conceptions of good teaching. The induction period encourages and motivates beginning teachers to be active agents instead of passively applying ideas or practices suggested by other people. Within schools, the most important elements of this induction procedure include peer coaching, quality evaluation, appraisal, portfolio evaluation and collaboration on practical tasks.

6 CONCLUSIONS AND RECOMMENDATIONS

In Poland the teaching profession is seen as a high qualified and valued profession, but teachers are not satisfied with their socio-economic status. Teaching is a very popular study choice, and motives entering the teaching as a career are mainly motives of internal nature. The crucial motives for choosing teaching as a career are as follow: vocation, passion for working with children, possibility of self-realization, desire to work in a profession where there is some place for creativity, reflection and constructive criticism. However, the candidates for teachers seem sometimes to be not well oriented in the reality of teacher's work and its conditions. The new phenomenon – ageing of the teaching workforce is one of the key features characterizing the Polish context.

The analysis of the current situation of teachers and their education in the context of recruiting and educating the best teachers allows to formulate some recommendations, regarding educational policies. In order to develop teaching as highly quality profession there is a need to:

- Make teaching a more attractive and rewarding profession by investing in education, teacher education and teachers working conditions (for example, teachers' salaries).
- Reinforcing the socio-professional position of a teacher – perceived as an actor on the educational stage, treated as a specific asset in education – is indispensable if we want to seriously discuss the quality of education in Poland.
- Revisit the process for selecting candidates for teachers at the teacher education programs at universities. The current solutions do not respond to the challenges and needs of schools and teachers. The specific recruitment criteria for prospective teachers and monitoring of the suitability of candidates for the teaching profession during education should be introduced.
- Pay attention to the further development of satisfying induction and mentoring programs in order to increase the quality of teachers and their teaching through intergenerational learning, the collaboration between new and experienced teachers, and among teachers in the teachers' team.
- Already in a high school, some kind of dependable, expert knowledge about the teacher and educator profession, about the culture of these occupations, their ethos and practice of these professions should be introduced in a specific form of professional pre-orientation.
- During the studies, already at the first year, an introduction into the reality of teaching as a profession should be done, which should be expanded on consecutive levels of studies: the master's degree and the doctoral degree.
- The studies programme should include more content representing economics and culture of the social and political transformations, and cultural period that we live in today. This would help the prospective teachers to deepen their awareness of the times and the world in which they live and work as teachers and as homeroom teachers. Thoughtfulness demanded today assumes critical knowledge of a person's self, his/her motives and desires in permanent confrontation with variable external, local, and global conditions.

While Poland clearly have its own distinct traditions, systems and policies in teaching and teacher education, it faces common challenges, such as ensuring sustainable transition from initial teacher education to the profession.

Summing up, the implications of the presented analysis and proposed recommendations show that a specific concern of the teacher education policies in Poland should focus on further actions for raising teacher and teacher education quality. A special concern should be to attract to the teaching profession the best candidates and to retain the best teachers in the school system in order to build a high-quality teaching profession. Teaching should be perceived as an attractive career choice – therefore, the improvement of the image and status of teaching, the improvement of teaching's salary and employment conditions is a vital issue for teacher education policy in Poland. This is crucial, especially in the context of the teacher strike of 2019 which is regarded as the largest strike in the history of Polish education since 1993 – this action was aimed at encouraging government to introduce salary increases for teachers and it was also a form of protest against some changes in education introduced after 2015.

Policies aimed at attracting and retaining effective teachers need both to recruit competent people into the profession, and also to provide support and incentives for professional development and on-going performance at high levels. Techers should be equipped with high-quality initial and in-service teacher education. Any educational offer directed to teachers who develop their career should meet the needs of teachers for professional development. At the same time teacher education is more likely to be effective in supporting high quality teachers who are dedicated to response to increasing demands on schools to prepare students for a changing world and foster holistic student learning and well-being when it also plays a powerful, deliberate, and consequential role in developing teacher professionalism. Teaching must become, and be seen to become, a well-rewarded and highly valued role that attracts some of the best graduates into a teaching career.

When it comes to systemic solutions regarding the selected aspects of the reforms in teacher education in Poland and teaching profession, if we would like to reinforce trust in teachers and work on teaching as high-quality profession, apart from the formulated recommendations for policies in recruiting and educating the best teachers, one should consider the following: what lies behind the concept of a good teacher, good school, good teaching? What challenges does the contemporary time pose to teachers and their education and their professional development? How can we consider the future of education, including teacher education? How do teachers perceive their own professional role; what are their values, motivations, aspirations and professional pursuits; and what is their professional satisfaction and self-evaluation? [9]

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The Development of Supplementary Communicative English Listening Exercises for 8th Grade-students

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ABSTRACT

The purposes of this research were: 1) to construct and test the efficiency of communicative English listening exercises for 8th grade-students, 2) to compare students' English listening ability before and after using the communitive English listening exercises, and 3) to study students' opinions toward the communitive English listening exercises and activities. The sample was selected from a purposive sampling of 38 8th grade-students of Phothawattanasenee School, during the first semester of academic year 2019. The instruments of this study were: 1) the six English listening exercises, 2) a listening comprehension pretest and posttest, and 3) the twelve questionnaires of students' opinions toward the communitive English listening exercises and activities. The statistics used to analyze the data were arithmetic mean $(\bar{x})$, percentage, standard deviation (S.D.), and dependent t-test. The results of the study were:

1. The efficacy value of the communicative English listening exercises for 8th grade-students was defined as 87.89/98.29 efficiency that was higher the expected standard of 75/75.

2. The result of students' English listening ability after using the communitive English listening exercises for 8th grade-students through the post-test score was higher than pre-test score at .01 level of significant.

3. The students' opinions toward the communitive English listening exercises and activities were highly positive.

KEYWORDS: Listening skill, Supplementary English Listening Exercises, Communicative English Listening, EFL

Introduction

Learning a foreign language is an inevitable necessity. English is not only a tool for studying and researching information, but also a tool for communication and making good relationships between people. Moreover, it is a universal language that is used to communicate almost all over the world. According from Yaowaluk and other (2006) [1], the age of communicative and transportable technology is growing rapidly. It effects with changing to information, accessing to knowledge, cooperating between each other. However, English which is a universal language is the best way to communicate with people from different linguistic backgrounds effectively. Nevertheless, using language to communicate effectively needs all four language skills; listening, speaking, reading and writing. Especially, listening skill that is used more than other skills is the first skill to use in communication. (Aungwattanakul, 1992) [2]

In order to be a competent listener, language learner must be able to function well in many subordinate listening skills such as listening form specific information, listening for main idea, and listening for detail. Then, listeners will be recognized as having the English listening ability. There are various skills; including perception skills is the ability to recognize various sounds and memorize the words that can be heard, analysis skill is the ability to identify grammatical units and to identify the language units that should be used, and synthesis skill.

From the results of the Ordinary National Educational Test (O-NET) in academic year 2015 at the lower secondary school level, it was found that the average score of language learning for communication was 30.45 which was lower than the national average. However, one of the problems is students that are unable to communicate in English, especially listening skills. (National Institute of Educational Testing Service, 2012) [3]

There are many listening problems that are encountered in English language teaching. The first one is cognitive problems such as the inability to remember vocabularies. The second one is grammar problems, included forgetting messages you listened to too quickly, and misunderstanding the supporting detail. The last problem is in using such as understanding words but cannot communicate with other and confusing about the main idea. The cause of these problems is listening teaching materials that are not suitable for listening in real life. Corresponding to Mc Keating (Mc Keating 1992) [4], he said that teaching listening skills is not given attention because learners consider listening to be more difficult than speaking and writing. There are few English listening exercises and conversations in real life.

For this reason, the researcher is interested in studying about development of supplementary communicative English listening exercises for 8th grade-students. The researcher aims to increase achievement in English language studying and to increase the efficiency of learning English in the classroom. Moreover, the communicative English listening exercises can improve students to communicate with other in daily life.

Research Hypotheses

1) The efficacy value of the communicative English listening exercises for 8th grade-students was equally efficiency the expected standard of 75/75.

2) The result of students' English listening ability after using the communitive English listening exercises for 8th grade-students through the post-test score was higher than pre-test score at .01 level of significant.

3) The students' opinion toward the communitive English listening exercises and activities was positive.

Population and Simple

The participants in this study were 8th grade-students from Phothawattanasenee School, Ratchaburi, Thailand and the sample was selected from a purposive sampling of 38 8th grade-students in the first semester of academic year 2019.

Methodology

For the purpose of the research, the researcher developed a listening skill by using the communitive English listening exercises for 8th grade-students. It included 1) the communitive English listening exercises which consist of six articles, an exercises and listening test of each article; 2) an English listening achievement test pretest and posttest for 8th grade-students which consists of a multiple choice 4 sections and ordering the evens with a total of 20 points, and 3) the twelve questionnaires of students' opinion toward the communitive English listening exercises and activities which consists of 3 parts; format, content, and activities. Data analysis and statistic include dependent t-test, and the developmental testing (E1/E2).

The procedures of the one-group pretest and posttest study design follow 6 steps. As following;

The first step was to prepare the material of this study. It included 1. Creating the communitive English listening exercises that consist of 3 steps of listening activities; Pre-listening, While-listening, and Post-listening (Adapted from: Underwood,1993) [5], 2. The English listening achievement pretest and posttest that was examined with Index of Item-Objective Congruence by the expert (IOC= 0.88), with difficultly (p) and discrimination (r) of the English listening achievement test at 0.29-0.79, and 0.2-0.6 respectively.

The second step was to use the English listening achievement pretest with the sample; 38 people of 8th grade-students in the class eight from Phothawattanasenee School in the academic year 2019.

The third step was to implement the communitive English listening exercises to develop students' listening skills. The study was administered within two weeks and two days (three periods totalizes 150 minutes per a week). It was started on September 2nd to September 17th. There are two periods for test and six periods for management the class with the communitive English listening exercises. Listening activities of this exercises included 1) to predict from the title or vocabularies in Pre-listening step, 2) to listen in while-listening step for answering the questions, sequencing, completing the blanks, picking the correct pictures and drawing, and 3) after listening completely to give information gap, do role-play, and design their work in post-listening step.

The fourth step was to collect raw scores of the communitive English listening exercises using a unit test at the end of each lesson and follow up students' efficiency.

The fifth was to use an English listening achievement posttest and questionnaires of students' opinion toward the communitive English listening exercises and activities with the sample.

Finally, the data of the study was analyzed using mean, percentage, standard deviation, t-test, and developmental testing (E1/E2). Look at the design of the study and variable of one-group pretest and posttest design below.

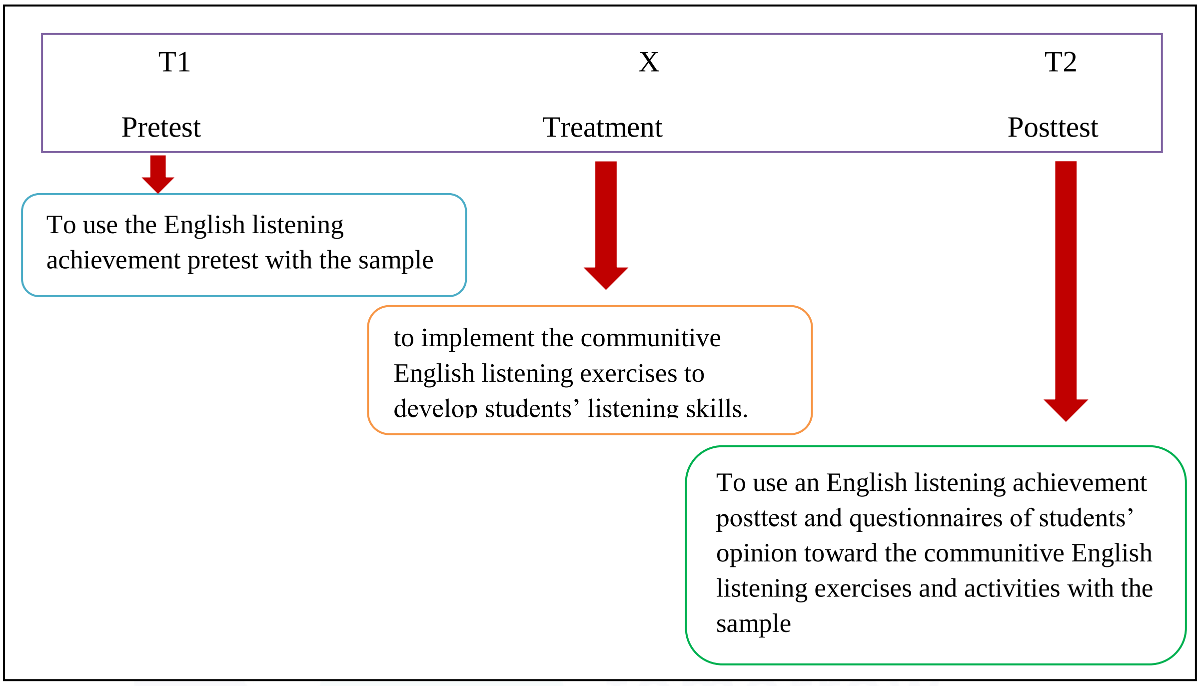

Figure 1: The design of the study and variable of one-group pretest and post-test design (Adapted from: Paul J. Lavraka, 2008) [6]

Formula and Equation

In this sample, the following equations are presented as illustration.

One-group pretest-posttest design: with this research design the test unit is measured twice, one before the test and the other after the test. There is still no control group; which not receiving the treatment. Here is the standard notation for a one-group pre-test – post-test study: (Paul J. Lavraka, 2008)

T1	X	T2
Pretest	Treatment	Posttest

The efficacy value of the communicative English listening exercises. The equation used to calculate is based on (Promwong, 1982) [7]

$$E_1 = \frac{\frac{\sum X_1}{N}}{A} \times 100$$

E_1 : Efficiency of the teaching process

$\sum X_1$: Sum of students' the communicative English listening exercises test scores

N : Total number of students

A : Total test score of the communicative English listening exercises

$$E_2 = \frac{\frac{\sum X_2}{N}}{B} \times 100$$

E_2 : Efficiency of product

$\sum X_2$: Sum of students' post-test scores

N : Total number of students

B : Total score of the post-test

t difference between two means, for Dependent Samples: the equation used to calculate is based on (Stephanie McCammon,2014) [8]

$$t = \frac{\sum D}{\sqrt{\frac{N\sum D^2 - (\sum D)^2}{(n-1)}}}$$

$\sum D$: Sum of the differences between students' pre-test and post-test score

$\sum D^2$: Sum of the squared differences (The differences between each student's pre-test and post-test score)

$(\sum D)^2$: Sum of the differences between all of students' pre-test and post-test score, squared

Result

The result of the communicative English listening exercises

Table 1 : The efficacy results of the communicative English listening exercises for 8th grade-students compared to the expected standard of 75/75 (E1/E2)

	Sample	**Standard of efficacy**	**Efficacy (E1/E2)**	**E_1/E_2**
During study score	38	75	87.89	higher than the expected standard
Post-test Score	38	75	98.29	

The data presented in table 1 showed that the efficacy results of the communicative English listening exercises for 8th grade-students was average of during study score 87.89 percent and average of post-test score 98.29 percent. It revealed that the efficacy value of the communicative English listening exercises as 87.89 / 98.29 efficiency that was higher than the expected standard of 75 / 75.

The result of students' English listening ability after using the communitive English listening exercises for 8th grade-students through the post-test

Table 2 : The results of comparing the difference between pre-test and post-test for 8th grade-students

Sample	N	$\bar{x}$	S.D.	t	sig
pre-test	38	14.82	1.52	21.54	0.000**
post-test	38	19.66	0.81		

**p - value ≤ 0.01

The data presented the mean and standard deviation of the difference between pre-test and post-test for 8th grade-students**.** The mean of the pre-test score was 14.82 and post-test score was 19.66 while the standard deviation of pre-test was1.52 and post-test was 0.81.

The result of students' English listening ability after using the communitive English listening exercises for 8th grade-students through the post-test for 8th grade-students showed that the sample's post-test was higher than their pre-test scores at the .01 level of significant. It meant the sample was developed in English listening ability after they were taught communitive listening by the communitive English listening exercises.

The students' opinions toward the communitive English listening exercises and activities

Table 3: The results of students' opinion by Likert 5 rating scales (Likert, 1967) [9] for 8th grade-students

No.	List of opinion	Level of opinion					$\vec{x}$	S.D.	Mean
		Extremely likely (5)	likely (4)	neutral (3)	unlikely (2)	Extremely unlikely (1)			
Format									
1	Sound of the speakers in this exercise is clearly.	0	8	18	7	5	4.37	0.79	Extremely likely
2.	Presenting the activities in this exercise followed on step-by-step clearly and understand easily	2	20	13	3	0	4.55	0.72	Extremely likely
3.	There are interesting activities in this exercise. It's beautiful formatted and motivated to study.	5	16	15	2	0	4.68	0.62	Extremely likely
The average of the format							4.53	0.71	

Content									
4.	Contents of this exercise supported students to communicate in daily life.	9	16	13	0	0	4.61	0.55	Extremely likely
5.	The content of this exercise was consistent with the learning objectives of the lesson.	11	14	9	2	2	4.71	0.52	Extremely likely
6.	The content is appropriate for learning.	5	19	11	2	1	4.53	0.69	Extremely likely
The average of the content							4.62	0.59	
Activities									
7.	Pre-listening activities helped students to learn the vocabulary and idioms that will be used in the next activities.	5	19	14	0	0	4.74	0.50	Extremely likely
8.	Learners can understand main idea of conversation in while-listening activities and learn the structure from dialogue.	2	12	18	4	2	4.63	0.63	Extremely likely
9.	Post-listening activities can train learners to use language for communication and apply to learners' real life.	5	16	15	2	0	4.74	0.45	Extremely likely
10.	All activities in this exercise can improve students for listening ability.	6	24	8	0	0	4.82	0.51	Extremely likely
The average of the activities							4.73	0.52	
Total							4.63	0.61	

The data presented the mean and standard deviation of the students' opinions in each side for 8th grade-students compare with the criterion of Best (Best,1986) [10]. The mean of the format score was 4.53, content score was 4.62, and activities score was 4.73 while the standard deviation of format was 0.71, content was 0.59 and activities was 0.52. The total mean of the students' opinion was 4.63 while the standard deviation of the students' opinion was 0.61.

The results of students' opinions toward the communitive English listening exercises and activities by Likert 5 rating scales for 8th grade-students showed that the sample was extremely likely in the communitive English listening exercises.

Conclusion

The conclusion of this study revealed that using the communitive English listening exercises were quite useful for students' listening communicative skill. Students also learn and practice their listening skill by using the communitive English listening exercises.

Furthermore, the communitive English listening exercises can improve students' listening communicative skill.

The result shows that the efficacy value of the communicative English listening exercises was higher than the expected standard. Moreover, students' English listening ability after using the communitive English listening exercises displayed that the sample obtained higher post-test scores at the .01 level of significant. After they were taught by using the communicative English listening exercises, the sample was extremely likely toward the communitive English listening exercises and activities.

Recommendations

The teacher who developed the communitive English listening exercises for being material in their teaching should learn about basic education core curriculum, school curriculum, activities in English teaching, and how to manage a class. Moreover, there is important to realize students' multiple intelligent and language acquisition because it will be able to increase students understanding what they listened completely.

Suggestions for further research

A teacher should advance these communitive English listening exercises by observing students' language and acquisition and collecting their raw data before using it into each class. Then, the teacher manages their class with suitable lesson plans for the growth of student achievement.

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The Development of Supplementary English Writing Skill Exercise Package for 8th-grade Students, Phothawatthanasenee School

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ABSTRACT

The purposes of this research were 1) to investigate the efficiency of the supplementary English writing skill exercise package for 8th-grade students, 2) to compare students' achievement before and after using the supplementary English writing skill exercise package, and 3) to study students' satisfaction towards the supplementary English writing skill exercise package. The samples were 40 8th-grade students selected by a purposive sampling from Phothawattanasenee School in academic year 2019. The research instruments were 1) the supplementary English writing skill exercise package including 3 lessons, 2) an English writing pretest and posttest, and 3) a satisfactory evaluation form. The statistics used to analyze the data were arithmetic mean ($\bar{x}$), standard deviation (S.D.), and dependent t-test. The results of the study were as follow;

1. The supplementary English writing skill exercise package for 8th grade-students was efficient at 71.58/75.88 that was higher than the expected standard of 70/70.
2. Students' achievement by using the supplementary English writing skill exercise package for 8th grade-students from the post-test scores was higher than the pre-test scores at .01 level of significant.
3. Students' satisfaction towards the supplementary English writing skill exercise package was at a high level with the average at 4.12.

KEYWORDS: Action research, Exercise package, English writing

1. BACKGROUND

1.1 Statement of the problems

English is an international language that is used widely around the world. It is an instrument for people to communicate across cultures, and learning English is essential for everyone to communicate in daily life, and use for the higher academic level.

According to the Basic Education Core Curriculum B.E. 2551 (A.D.2008), learners have to practice English on listening skill, speaking skill, reading skill, and writing skill in order to use it for communication as well as for easier and wider access to bodies of knowledge (Ministry of Education, 2008)[1]. English writing skill is particularly crucial in learning English, but being good at English writing is difficult even for native English users (Jetjamlong, 2000)[2]. Nevertheless, practicing English writing enables learners to develop other skills of English as well (Pinheiro, 1996)[3].

Although English writing skill is essential for learning English, in Phothawattanasenee school, many 8th-grade students have faced with English writing problems. They cannot spell the words, use appropriate punctuations, make grammatically correct sentences, and also have limited vocabulary knowledge. The causes of those problems are that 1) learning activities are boring 2) learning activities do not focus on English writing, and 3) there is no interesting learning material used to stimulate students' attention.

One of the effective methods to solve students' English writing problems is supplementary skill exercise package. From the study of researches and documents, for example, the research of Thipthiangthae (2014)[4] was about the development of a communicative English writing skill exercise using local information of Cha-am for fourth grade students. The results showed that the students' writing skill pretest and posttest outcome in English writing skill exercises was significantly different at 0.05, and the fourth grade students revealed their positive opinions about the communicative English writing skill exercises at the high level.

As a result, the researcher decided to use the supplementary English writing skill exercise package for 8th-grade students in order to solve their English writing problems. The researcher strongly believed that the supplementary English writing skill exercise package is able to help students in English writing for spelling the words, making grammatically correct sentences, and gaining more vocabulary knowledge.

1.2 Objectives

The research objectives were as follows:

1) to investigate the efficiency of the supplementary English writing skill exercise package for 8th-grade students
2) to compare students' achievement before and after using the supplementary English writing skill exercise package
3) to study students' satisfaction towards the supplementary English writing skill exercise package

1.3 Research hypotheses

1) The supplementary English writing skill exercise package for 8th-grade students was efficient at the expected standard of 70/70.

2) Students' achievement by using the supplementary English writing skill exercise package for 8^{th}-grade students from the post-test scores was higher than the pre-test scores at .01 level of significant.
3) Students' satisfaction towards the supplementary English writing skill exercise package was at a high level.

1.4 Scope of the study

1) Scope of populations

Populations used to study were 497 8^{th}-grade students from Phothawattanasenee school in academic year 2019.

Samples used to study were 40 8^{th}-grade students selected by a purposive sampling from Phothawattanasenee school in academic year 2019.

2) Scope of contents

Areas of content were grammatical rules which were present simple tense, present continuous tense, and adjectives. The contents were modified from the book 'Move it 2'. There were 3 units in the supplementary English writing skill exercise package which were 1) Daily routines 2) At the beach and 3) Movies. Each unit consisted of title, objectives and learning activities.

3) Scope of variables

An independent variable was the supplementary English writing skill exercise package, and dependent variables were 1) the efficiency of the supplementary English writing skill exercise package for 8^{th}-grade students 2) students' achievement after using the supplementary English writing skill exercise package, and 3) students' satisfaction towards the supplementary English writing skill exercise package.

4) Scope of time

This study had undertaken for four weeks (two periods per week).

2. RESEARCH METHODOLOGY

2.1 Populations and samples

Populations used to study were 497 8^{th}-grade students from Phothawattanasenee school in academic year 2019.

Samples used to study were 40 8^{th}-grade students selected by a purposive sampling from Phothawattanasenee school in academic year 2019.

2.2 Research instruments

The research instruments adopted in this study were as follows:

1) the supplementary English writing skill exercise package including 3 lessons
2) an English writing pretest and posttest including 20 questions which were 16 multiple choice questions and 4 subjective questions – short answer.

3) a satisfactory evaluation form towards the supplementary English writing skill exercise package including 10 rating scale questions

2.3 Data collection

The procedures of this research follow 5 steps as follows:

1) The researcher prepared the instruments of this study including the supplementary English writing skill exercise package with three lessons (IOC=0.93), and an English writing pretest and posttest that was inspected Index of Item - Objective Congruence (IOC=0.92). Both difficulty (p) and discrimination (r) of English writing test were 0.30 – 0.72, and 0.40 – 0.90 respectively. The other instrument was a satisfactory evaluation form towards the supplementary English writing skill exercise package (IOC=0.87).

2) Students conducted the English writing pretests including 20 questions which were 16 multiple choice questions and 4 subjective questions – short answer within 20 minutes.

3) Students had learned by using the supplementary English writing skill exercise package for 4 weeks (2 periods per week) with total 3 units in the exercise package. The number of teaching periods in each unit was as follow:

Table 1 The Number of Teaching Periods in Each Unit

Unit	Name of unit	The number of periods
1	Daily routines	3
2	At the beach	3
3	Movies	2

After finishing each unit, students had to take a unit test. There were 10 questions in each test.

4) Students conducted the English writing posttests that were the same as pretests within 20 minutes.

5) Students evaluated their satisfaction towards the supplementary English writing skill exercise package after finishing all the lessons.

2.4 Data analysis

1) The efficacy of the supplementary English writing skill exercise package was discovered by analysing the percentage of mean score during study compared with the first criteria of 70. Another criteria of 70 were from mean score after study.

2) Students' achievement before and after using the supplementary English writing skill exercise package was analysed the average mean ($\bar{x}$), standard deviation (S.D.), and dependent t-test.

3) Students' satisfaction towards the supplementary English writing skill exercise package was examined by finding the average mean ($\bar{x}$), and standard deviation (S.D.) in both statement and aspect. The average mean ($\bar{x}$) was calculated to find the satisfaction level following the criteria of Best (1986)[5] as follows:

$1.00 \leq \bar{x} < 1.50$ meant that students' satisfaction was in a lowest level.
$1.50 \leq \bar{x} < 2.50$ meant that students' satisfaction was in a low level.
$2.50 \leq \bar{x} < 3.50$ meant that students' satisfaction was in a medium level.
$3.50 \leq \bar{x} < 4.50$ meant that students' satisfaction was in a high level.
$4.50 \leq \bar{x} < 5.00$ meant that students' satisfaction was in a highest level.

3. RESULTS

Part 1: the efficacy result of the supplementary English writing skill exercise package

Table 2 The Efficacy Results of the Supplementary English Writing Skill Exercise Package for 8th-grade Compared with the Expected Standard of 70/70 (E_1/E_2)

Score	Samples	Criteria of the efficacy (E_1/E_2)	The efficacy of exercise package (E_1/E2)	Meaning
During study score	40	70	71.58	Higher than the expected standard
Post-test score	40	70	75.88	

From the table above, the efficiency of process (E_1) was 71.58, and the efficiency of product (E_2) was 75.88. Therefore, the efficacy of the supplementary English writing skill exercise package for 8th-grade students was 71.58/75.88 which was higher than the expected standard of 70/70.

Part 2: the comparison result of students' pretest and posttest score of using the supplementary English writing skill exercise package for 8th-grade students

Table 3 The Comparison of 8th-grade Students' Pretest and Posttest Score of Using the Supplementary English Writing Skill Exercise Package

Score	N	($\bar{x}$)	S.D.	t	Sig.
Pretest	40	11.45	2.37	8.522	.000**
Posttest	40	15.18	1.93		

**sig ≤ .01

The table showed that the average mean ($\bar{x}$) of pretest was 11.45, and the average mean ($\bar{x}$) of posttest was 15.18. The standard deviation (S.D.) of pretest was 2.37, and the standard deviation (S.D.) of posttest was 1.93.

The comparison of 8th-grade students' pretest and posttest score of using the supplementary English writing skill exercise package showed that students' posttest score was higher than the pretest score at .01 level of significant.

Part 3: the study result of 8th-grade students' satisfaction level towards the supplementary English writing skill exercise package

Table 4 The Study of 8th-grade students' satisfaction level towards the supplementary English writing skill exercise package

Item	Statement	$\bar{x}$	S.D.	Meaning
The aspect of content				
1	The contents are comprehensible.	4.19	0.74	High
2	The contents are appropriate for students'	4.38	0.72	High

	level.			
3	The figures used in the exercise package relate to the contents.	4.24	0.68	High
Total of content		**4.27**	**0.71**	**High**
The aspect of style				
4	An exercise package is interesting.	3.95	0.74	High
5	An exercise package consists of clear directions.	4.11	0.70	High
6	An exercise package allows students to practice English writing step by step.	4.14	0.63	High
Total of style		**4.06**	**0.69**	**High**
The aspect of usefulness				
7	An exercise package can improve students' English writing skill.	4.08	0.64	High
8	An exercise package promotes good attitude towards English writing.	4.03	0.76	High
9	Students can apply the knowledge from the exercise package to their learning.	4.22	0.58	High
10	An exercise package makes students want to learn English more.	3.89	0.74	High
Total of usefulness		**4.05**	**0.69**	**High**
Total		**4.12**	**0.70**	**High**

The table revealed that 8th-grade students' satisfaction level towards the supplementary English writing skill exercise package was high with the average mean ($\bar{x}$) of 4.12 and the standard deviation (S.D.) of 0.70. When considering each aspect, it was found that the average mean ($\bar{x}$) of content aspect was 4.27 that was in a high level and the standard deviation (S.D.) was 0.71. The average mean ($\bar{x}$) of style aspect was 4.06 that was in a high level and the standard deviation (S.D.) was 0.69. The average mean ($\bar{x}$) of usefulness aspect was 4.05 that was in a high level and the standard deviation (S.D.) was 0.69.

4. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

4.1 Conclusion

From this study, it is able to be concluded that

1. The supplementary English writing skill exercise package for 8th-grade students was efficient at 71.58/75.88 that was higher than the expected standard of 70/70. Moreover, this result meant that after learning by using the supplementary English writing skill exercise package, students' English writing skill was improved.

2. 8th-grade students' learning achievement in English writing after using the supplementary English writing skill exercise package was higher than before using at .01 level of significant. Students' average score after using the exercise package was 15.18 that was higher than before using the exercise package with the average score of 11.45.

3. 8th-grade students' satisfaction towards the supplementary English writing skill exercise package was high with the average mean of 4.12. When examining each aspect, it was showed that the average means of content aspect, style aspect and usefulness aspect were 4.27, 4.06 and 4.05 respectively and that were in a high level.

4.2 Discussion

1. The supplementary English writing skill exercise package for 8th-grade students was efficient at 71.58/75.88 that was higher than the expected standard of 70/70. Therefore, the supplementary English writing skill exercise package was able to improve students' English writing skill. This result conformed to the study of Wannapha Chaiwan (2006)[6]. It was said that the supplementary skill exercises can support students to improve their language skills and language uses. Moreover, they can use the supplementary skill exercises to review the lessons by themselves, and tend to have the good attitude towards learning any language. This result also conformed to the results of Srinoun Phothong (2009)[7] in the title of the development of supplementary English reading and writing skill exercise on specific Thai cultural events for matthayomsuksa 2 students, Watraikhing witthaya, Nakhon Pathom. It was found that the efficacy of the supplementary English reading and writing skill exercise on specific Thai cultural events was defined at 76.17/78.82 that was higher than the expected standard.

2. 8th-grade students' learning achievement in English writing after using the supplementary English writing skill exercise package was higher than before using at .01 level of significant. After using the supplementary English writing skill exercise package, students developed their English writing skill with the average mean of 15.18, and it was higher than the pretest mean of 11.45. This finding was related to the study of Supansa Thipthiangthae (2014) in the title of the development of communicative English writing skill exercise using local information of Cha-Am for fourth grade students. It was found that the students' writing skill pretest and posttest outcome in English writing skill exercises was found significantly different at 0.05. From the results and the review of literature, it can be concluded that the supplementary skill exercise package affected on students' learning and developing language skills.

3. 8th-grade students' satisfaction towards the supplementary English writing skill exercise package was high with the average mean of 4.12. This result corresponded with the results of Rattanaporn Soisena (2015)[8] in the title of the development of supplementary English reading and writing skill exercise on the title of our locality "Kalasin" for matthayomsuksa 3 students. It was discoved that students' satisfaction towards the supplementary English reading and writing skill exercise was high with the average mean of 4.32 (S.D.=0.51). It can be said that the supplementary skill exercise package supported students to have the positive attitude towards learning English, and caused them want to learn and practice English more and more.

4.3 Recommendations

The researcher has set the recommendations into two parts as follows:

1. The recommendations for using the learning materials
    1.1 Teachers should realize students' ability and their prior knowledge. It will help to manage learning activities in class.
    1.2 Teachers should provide interesting learning activities during class for example, the competition and game.
    1.3 Teachers should spend the appropriate time in each teaching step.
    1.4 Teachers should support students to think by themselves.
2. The recommendations for further study
    2.1 It should be added more lessons and time since English writing skill is hard. If there is appropriate time, it will be helpful for students to practice more, and the authors can get more accurate study results.

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The implementation of Teacher Learning Supervision in Education and Training of Principal Candidates at the Institute for Development and Empowerment of School Principals and School Supervisors

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ABSTRACT

This study aims to determine the implications of the implementation of teacher supervision in the education and training of prospective principals in the Institute for Development and Empowerment of Principals and School Supervisors. The object of the research was LPPKS of Sukabumi Regency, West Java and Bonang Regency, East Kalimantan. This study is intended to answer the problem: intends to conduct research aimed at finding out the implementation and implementation of teacher supervision in the education and training of school principals in the Institute for Development and Empowerment of School Principals and School Supervisors. This type of research is a qualitative study using a field research approach, sampling using the purpuve sampling method involving 2 LPPKS sites namely in Sukabumi and Bontang districts. There were 41 participants consisting of 17 participants in Sukabumi district and 24 participants in Bontang district. Furthermore, there were 17 widyaiswara who became respondents. The results showed that the supervision of teachers by supervisors in Sukabumi Regency, West Java and Bontang Regency, East Kalimantan was good, this led to the tests conducted which showed significant results based on the results of the pretest and posttest. Teacher professionalism is still lacking, this refers to the results of the supervision implementation report by Widyaiswara as the teacher supervisor. The programs that have been implemented so far have not shown any significant implications in providing an impact on improving teacher professionalism in Indonesia. Furthermore, based on 12 input points given by the respondent, it can be concluded that the majority of respondents agreed that if the teacher's supervision program was carried out simultaneously so that in the implementation of teaching and learning the instructor was indeed able to provide experiences that could really be implemented in on the job learning. So, if later they become headmasters, they will be able to practice with the right techniques.

KEYWORDS: Teacher Lerning, Supervision, Principal Candidates, Development and Empowerment, Supervisors

1. INTRODUCTION

In this globalization era, where the global economy is developing very fast. Competition does not only occur in business people who are struggling in the economic field, but also affects other fields, one of which is the field of education. The development of the world of education today is so fast. In line with technological progress and globalization. The world of education is being rocked by various changes in accordance with the demands and needs of the community, and is challenged to be able to answer various local problems and global changes that occur so rapidly. Such conditions are increasingly making people aware of the demands of life they face.[1]

Among the factors that determine school success are teachers. Teachers as curriculum developers and implementers have a strategic role. All components in the teaching and learning process such as materials, media, facilities and infrastructure, education funds will not provide maximum support or cannot be utilized optimally to improve the quality of the process and learning outcomes without the support of the presence of teachers who continually strive to realize ideas, ideas , and thoughts in the form of behavior and attitudes that excel in their duties as educators.

If the teacher is analogous to a spear, then he is a double-edged spear. One eye must have the sharpness in mastering the material and the nature of the knowledge to be taught, while the other sharp eye is because it has the ability / skills in gathering and presenting material so that students can learn meaningfully, and provide usefulness that can be felt from the learning process that they follow. Imagine how this spear reaches its target, if one of the spearhead is blunt or even both. Therefore, teachers are not only able to master the material to be taught, but are also capable and skilled in conditioning learning for their students.[2]

Another factor which is the reason is the low level of teacher professional competence. Teacher mastery of teaching materials and methods is still below standard. The facts show that in carrying out their duties, we often find the teaching-learning process not achieving the goals and objectives of learning. Another condition is that there are still many teachers who are less motivated and motivated to empower themselves, develop their professionalism and update their knowledge continuously and continuously.[3]

Nowadays, various methods are carried out to improve the quality of teachers through education and training programs for prospective principals undertaken at LPPKS with high academic and practical abilities. The aim of the program is to improve teaching skills, mastery of teaching materials, and commitment and teacher motivation in teaching. However, these programs still need an evaluation to find out how they are relevant and how they affect the quality of education in schools. In addition, the influence of fast-paced information encourages teachers to continually learn to adjust to the development of science and technology as well as dynamic community mobilization.[12,13]

Based on that fact, teachers need to get regular and planned guidance (supervision). Supervision according to Piet A. Sah understanding is "an effort to stimulate, coordinate and guide the continuous growth of teachers in schools both individually and collectively, so as to better understand and be more effective in realizing all teaching functions" .[14]

Through decentralized teacher management, it is hoped that the regions will be able to plan autonomously the management and development of teachers in accordance with the needs of the surrounding community. The relationship between educational institutions and the community is getting closer in establishing cooperation, giving and receiving each other.[15] This provides opportunities and responsibilities to the regions, especially in the field of educational supervision conducted by principals, school inspectors, and other supervisors and supervisors in increasing professionalism teacher. Based on the above background, the researcher intends to conduct research aimed at identifying the implementation and implementation of teacher supervision in the education and training of prospective principals in the Institute for Development and Empowerment of School Principals and School Supervisors.

2. RESEARCH METHODOLOGY

This study utilizes a qualitative descriptive method that aims to describe data related to the implementation and implementation of teacher supervision in the education and training of prospective principals in the Institute for Development and Empowerment of School Principals and School Supervisors in Indonesia. In accordance with the object of this study, this study uses a field research approach (field research), which is research directly conducted in the field or on respondents. Sampling using the purpuve sampling method involving 2 LPPKS sites, namely in the districts of Sukabumi and Bontang. There were 41 participants consisting of 17 participants in Sukabumi district and 24 participants in Bontang district. Furthermore, there were 17 widyaiswara who became respondents.

Pretest and posttest were used in this study to determine the implementation of teacher supervision in the education and training of prospective principals in the Institute for Development and Empowerment of Principals and School Supervisors. While the questionnaire is used to determine the implementation of teacher supervision in the education and training of prospective principals in the Institute for Development and Empowerment of School Principals and School Supervisors.

3. FINDINGS AND DISCUSSION

Professional supervision based on supervision has no meaning if the results of supervision do not appear to improve the learning process of students. Supervision is an effort to improve the ability of teachers, not just filling knowledge and skills in the teacher, but the knowledge and skills they have must be reflected in teaching activities that appear in changes in student attitudes because learning activities are more active and give birth to learning achievement. Teacher professional development is a vital component in teacher education in positions.[16,17,18,19]

In teacher supervision, the development of trust is a very important relationship in supervision. Supervision with teacher professional growth is inseparable. Such linkages such as the use of data in supervision activities can be used in planning and implementation in order to help teachers improve and expand their skills. In the context of teacher professional improvement, supervisors have a more emphasized role to provide opportunities for professional development for teachers and provide resource opportunities such as learning materials, media, books, etc. that are needed by teachers to reflect on teaching practices and to share their practices to other people. Supervisors help indirectly by increasing support and opportunities and directly through collaboration with teachers as colleagues. Supervisors need to understand the professional level of teachers and need to provide a framework and take responsibility for their development.[20,21,22,23]

Table 1. T Test Results for the study conducted at LPPKS Sukabumi Regency, West Java

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2,647	1,666		1,589	,133
	PreTest	,680	,222	,621	3,065	,008

a Dependent Variable: PostTest

The test results show the direct and positive influence of the prostest on the pretest. These results can be seen that the variable PreTest (X1) has a significance value (Sig.) 0.08 in the Coefficientsa table with a value of α (degree of significance) 0.05 meaning 0.008 <0.05 or there is a significant influence and the t test shows 3065> t table (1,690). This means that the Pre-Test conducted in Sukabumi Regency has a significant positive effect on the Pro-Test.

Table 2. Results of T-Tests for research conducted at LPPKS Bontang Regency, East Kalimantan

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	3,729	1,779		2,096	,048
	PreTest	,542	,234	,442	2,314	,030

a Dependent Variable: PostTest

The test results show the direct and positive influence of the prostest on the pretest. These results can be seen that the variable PreTest (X2) has a significance value (Sig.) 0.030 in the Coefficientsa table with a value of α (degree of significance) 0.05 meaning 0.030 <0.05 or there is a significant influence and the t test shows 2,314> t table (1,690). This means that PreTest conducted in Bontang District has a significant positive effect on ProstTest. From the data above, the authors conclude that for the implementation of teacher supervision in Sukabumi, West Java and Bontang, East Kalimantan is good. This refers to the results of the PreTest and PostTest that have been conducted in both places.

To be able to carry out effective and efficient supervision activities there must be careful preparation, it cannot just come to school to see the implementation of the KBM in the classroom then an assessment is made. As stated by Piet A. Sahabah that one of the principles that must be fulfilled in the implementation of supervision is a scientific principle, meaning that the supervision activities are carried out systematically, planned, and continuously, based on objective data obtained either through questionnaires, observations, personal conversations, and so on.[24,25,26]

The use of the PreTest and PostTest instruments by the teacher supervisors in Sukabumi, West Java and Bontang, East Kalimantan in their supervision activities shows that the steps taken in the supervision implementation process are indeed based on valid data. Data validity is very influential in making the selection of techniques, models and supervision approaches effective. Because the selection of techniques, models, and the right approach will determine the success of the supervision itself, it must be based on valid data. That is, the implementation of teacher supervision will be effective if the use of techniques, models, and approaches are in accordance with existing problems. This is in accordance with the opinion of Made Pidharta who said that each supervision technique has its own effectiveness, its use is in accordance with the existing problems.[27.28]

In carrying out supervision activities in this case the teacher supervisors in Sukabumi Regency, West Java and Bontang District, East Kalimantan have used a modern concept. This can be seen from several criteria, such as; implementation of supervision that is to guide, provide direction, and motivate. Not just assessing and finding fault. In addition, the stages that are passed are in accordance with the characteristics of the concept of supervision, for example; data collection about the teacher's problems first, the follow-up of existing problems such as discussions between supervisors and supervision, guidance in class, and so on. [29,30,31,32]

Although in terms of implementation it is already good. However, the results of the supervision implementation have not shown significant implications for the improvement of teacher professionalism in Sukabumi, West Java and Bontang, East Kalimantan. This can be seen from the results of the determination test.

Table 3. Determination Test Results in Sukabumi Regency, West Java

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,621(a)	,385	,344	1,40105	2,017

a Predictors: (Constant), PreTest
b Dependent Variable: PostTest

Based on the above table, the Adjusted R^2 (R Square) figure is 0.344 or (0.344%). This shows that the percentage contribution of the influence of the independent variable on the dependent variable is 34.4%. Or the variation of the independent variables used posttest explained 0.344% variation of the pretest dependent variable. While the remaining 65.6% is influenced or explained by other variables not included in this research model.

Table 4. Determination Test Results in Bontang District, East Kalimantan

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,442(a)	,196	,159	1,40447	2,002

a Predictors: (Constant), PreTest
b Dependent Variable: PostTest

Based on the table above, an Adjusted R^2 (R Square) figure of 0.159 or (0.159%) is obtained. This shows that the percentage contribution of the influence of the independent variable on the dependent variable is 15.9%. Or the variation of the independent variables used posttest

explained by 0.159% variation of the dependent variable pretest. While the remaining 84.1% is influenced or explained by other variables not included in this research model.
In these results there are still quite a lot of things that become the problem of the teacher in carrying out his profession as the researchers have explained above. This shows the need for an evaluation and renewal in the implementation of teacher supervision in Sukabumi District, West Java and Bontang District, East Kalimantan.

Related to the implementation of teacher supervision in the education and training of school principals in the Institute for Development and Empowerment of School Principals and School Supervisors (LPPKSPS), the results of the questionnaire filled out by widyaiswara can be analyzed as follows.
First, as many as 10 participants or 60% of respondents agreed that teaching teacher supervision was an option for him because they felt they had more control over the substance of the supervision than other teaching teammates. While 7 participants or 40% of respondents said no. From these findings, widyaiswara feel confident if they are able and mastered educational and training materials that must be taught to training participants. Secondly, 6 participants or 35% of respondents agreed that teaching teacher supervision was the choice of the teaching teammates because they felt they had more control over the substance of supervision. While 11 participants or 65% of respondents said no. Based on this, it can be stated if they have the intention to share experiences that they have mastered while becoming headmasters.
Third, the reason why they teach or not is due to several reasons, most of which are that they do it by sharing assignments between widyaiswara. Another reason is that they teach because their teaching partners are older, and supervision hours are very sufficient and not tiring. Fourth, 16 participants or 95% of people stated that they checked and paid close attention before starting the lesson and 1 or 5% of people only checked the PPT.
Fifth, some input for improvement of teacher supervision materials and learning materials needs to be improved or reviewed, which include: Improving the RPP review instruments with new RPPs, adjusting the RPPs, the need for emphasis in preparing the supervision program, implementing and compiling reports and following up on supervision results, additional material on program making and follow-up so that the principal has real experience., synchronization of the material with worksheets, a revised workshop on academic supervision learning materials, the need for making teacher supervision video tutorials and a tendency supervision tutorial. and learning material is the manual from the tutorial, and finally the need for a tiered explanation, for the supervision program and the supervision report.
The six, the alternatives to meet andragogy learning includes: supervision planning has not been the result of teacher needs, the need to do a re-design that is more on problem solving, more simulations / practices, efforts should be made to provide assistance that can really monitor the training participants, it is necessary to add the practice of compiling reports and follow-up results of supervision, the need for the development of teacher and tendency supervision programs, additional training time, the need for improvement of the TOT (Traning On Traner) system.
Seventh, improvements needed in learning tools (RBPMD and RP), methods and models, substance, instructor training, quality of learning materials, assessment tools, invoices, covering all aspects of methods and models, making videos for each level, materials lack of learning, improvement so that in the implementation of teaching and learning instructors are indeed able to provide experience that can really be implemented in on the job learning so that if you become a principal then be able to practice with the right techniques, the work report supervision is still missing. Then, Eighth, 75% of respondents appreciate the teacher's supervision learning video today which is used as media in the classroom.
The ninth, 70% of respondents agree that education and training instructors lack mastering of the substance of supervision and implement andragogy learning. Furthermore 65% of respondents stated the need for pre and post test questions when the teacher's supervision subject was separated from the general pre test post. The tenth 85% of respondents agreed that if the teacher's

supervising training was carried out simultaneously with the tendency supervision tutor, it should be separate and be given a portion according to the needs of each training subject. And the eleventh, 70% of respondents stated that the implementation of the assessment that was running really benefited the training participants but did not maintain the quality of the training.

The results of the supervision implementation report by Widyaiswara as the teacher supervisor in Sukabumi Regency, West Java and Bontang Regency, East Kalimantan. The programs that have been implemented so far have not shown any significant implications in providing an impact on improving teacher professionalism in Sukabumi, West Java and Bontang, East Kalimantan.
As an institution that has responsibility for teacher performance, this must be a serious concern, especially if the educational organization system becomes a mechanical part in the organization, then the innovative step of the educational organization component becomes a substantive part of the support of the leader. Widyaiswara as the supervisor does not only look at himself as an agent of change, but also must look at the outside of himself who makes innovative breakthroughs. The attitude of sensitivity to the needs and changes of the times, as well as being open and flexible towards the teacher will have an extraordinary effect on the motivation of the teachers to participate in any planned program.
Previous research states a leader must have high flexibility to the situation and conditions of his subordinates. If not, then what will emerge is not commitment but resistance from subordinates which ultimately results in the ineffectiveness of leadership.[33,34,35]
The existence of a democratic attitude and ongoing communication between components in educational institutions both supervisors, educators and non-educators, principals, and so on is one of the assets to create success in improving the quality of professionalism of teachers. 36
Teacher supervision as a form of government policy to supervise, foster teachers in carrying out their duties as educators which in this case is carried out by supervisors should be carried out as well as possible. This is stated in government policy through Law No. 14 of 2005 concerning Teachers and Lecturers, article 7 that the empowerment of the teaching profession is carried out through self-development carried out in a democratic, fair, non-discriminatory, and sustainable manner by upholding human rights, religious values, cultural values, national pluralism, and professional code of ethics .[37,38]
In Sukabumi, West Java and Bontang, East Kalimantan, the implementation of supervision has not yet touched the essence of supervision itself. The programs created are not sufficient to mobilize the needs of teachers in developing their professionalism competencies.
In addition, the lack of communication between supervisors and principals, this is an obstacle in making effective the professional development of the teachers there. The lack of supervisory guidance to the principal in terms of explanations regarding the procedures for implementing supervision that is effective, efficient, and innovative is a factor that is not yet optimal for the role of the principal there. [39]
Teacher supervision as an effort in fostering, enhancing teacher professionalism is not an easy task, the role of all stakeholders is crucial in the success or failure of coaching conducted. Therefore for the future all must work together in the sphere of kinship. Supervisors from Widya Iswara and all teachers must coordinate with each other as best as possible to equally advance and improve the professionalism of teachers which will all have an impact on the quality of education in Sukabumi, West Java and Bontang, East Kalimantan.

4. CONCLUSIONS AND SUGGESTION

1. Teacher supervision by supervisors in Sukabumi Regency, West Java and Bontang District, East Kalimantan is good, this refers to the tests conducted that show significant results based on the results of the pretest and posttest.
2. Professionalism of teachers in Sukabumi Regency, West Java and Bontang District, East Kalimantan is still lacking, this refers to the results of the report on the implementation of

supervision by Widya Iswara as the teacher supervisor in Sukabumi Regency, West Java and Bontang Regency, East Kalimantan. The programs that have been implemented so far have not shown any significant implications in providing an impact on improving teacher professionalism in Sukabumi, West Java and Bontang, East Kalimantan.
3. Based on the 12 input points given by the respondent, it can be concluded that the majority of respondents agreed that if the training material was supervised by the learning teacher simultaneously with the subject of tutoring supervision, the material was separated and given a portion according to the needs of each subject. in addition, there needs to be an improvement so that in the implementation of learning that is able to provide experience that can really be implemented in on the job learning so that when later participants become principals they are able to practice with the right techniques. furthermore, there is still a lack of material for making supervision work reports. Finally, the implementation of the assessment that has been running really benefits the training participants but does not maintain the quality of the training.

Suggestions that can be delivered by researchers as a result of research, discussion, conclusions, and limitations above are:
1. Supervisors as implementers of teacher supervision must always develop the implementation of teacher supervision by optimizing varied, creative, and innovative ways as a form of correction of the deficiencies that have been generated through joint reflection with teachers on the implementation of supervision learning that has been completed.
2. Teachers as professionals must have high motivation in improving their professional competence, both personal competence, pedagogical competence, professional competence, and social competence.
3. In order to have a very significant implication of the implementation of teacher supervision that can have an impact on increasing teacher professionalism, it should be prepared in its implementation well from the planning, implementation, evaluation, follow-up, and report-making stages.

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USING MIND-MAPPING STRATEGIES AS AN INNOVATION TO TEACH ENGLISH VOCABULARY FOR GRADE 10 STUDENTS

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ABSTRACT

With the increasing trend of globalization, English is considered the most important foreign language to master. More and more people all over the world than ever are learning English as it has become the language of international business and education. That is the reason why it is one of the compulsory core subjects taught in Vietnam's education system. Students are required to be fluent in four skills of English such as reading, speaking, listening and writing. In order to be skillful at those skills, vocabulary plays a fundamental role contributing to the success in mastering the language. Vocabulary learning, however, is one of the major obstacles foreign language learners face during the process of learning a language. For this reason, an exhaustive research was implemented to discover the effect of using mind mapping on students in terms of students' vocabulary. It was found out from the study that a large number of lexical resources were gained and retained by the majority of students in the project. Moreover, students' positive attitudes were also recorded while implementing mind mapping.

KEYWORDS: mind mapping, implement, vocabulary, lexical resources

I. INTRODUCTION

With the increasing trend of globalization, English is considered to be the most important foreign language to master. More and more people all over the world than ever before are studying and learning English as it has become the language of international business and education. That is the reason why it is one of the compulsory core subjects taught in Vietnam's education system. Students are required to be fluent four skills of English such as reading, speaking, listening and writing. In order to be skillful those skills, vocabulary is an important element of language. Vocabulary learning, however, is one of the major obstacles foreign language learners face during the process of learning a language. One way to relieve the burden is to help them become independent learners during the process of L2 vocabulary learning. This can be achieved through guiding learners to implement vocabulary learning strategies as effectively as possible. Of all the strategies, mind-mapping is an extremely effective technique to improve students' vocabulary. So far there have been a wide variety of previous research into the impacts of mind-mapping on vocabulary teaching and learning: Effendi (2004); Davies (2010), Nguyen (2012). The results of all the research showed its beneficial effects such as the students' positive behaviors towards mind-mapping and the improvement of students' vocabulary maintenance.

To better vocabulary teaching and learning, I myself have thought of many questions relating to vocabulary such as 'what are the effective methods of teaching vocabulary?' 'How to hold back a new word in the mind? Therefore, I decide to choose Mind-mapping tactics to teach vocabulary in my innovation. This study aims at strengthening students' capability in acquiring English by introducing mind-mapping techniques to promote the knowledge attainment and repossession process, reflecting on strategies in teaching vocabulary and facilitating students' inspiration to do more revision. My innovation is **"Using mind-mapping strategies to teach vocabulary to grade 10 students"**(new textbook). I hope that my innovation can bring new and effective tactics in teaching vocabulary. It is designed to answer the two following questions:

(1) How effective is the technique of mind-mapping in teaching vacabulary in a high school environment?

(2) What benefits can be discovered for learners after implementing mind-mapping?.

II. LITERATURE REVIEW

1. The definition and the importance of vocabulary

It is very important for foreign language learner to master a large amount of vocabulary. Without having it, they will find it difficult to develop four language skills. There are a number of definitions of vocabulary stated by some researchers. According to Hatch and Brown (1995), the term vocabulary deals with 'a list or set of words for particular language' or 'a list of words that individual speakers of language use'.They explains that vocabulary is the total number of the words (with their meaning and with regulations for merging them) coming up with the language.
The importance of vocabulary was highly appreciated in many studies. Krashen (1989) pointed out that having a large number of vocabulary is necessary for learners to master a foreign language as one cannot convey anything if he or she does not have enough vocabulary. In terms of communication, Rubin and Thompson (1994) pointed the great significant role of vocabulary when they stated that learning vocabulary seems to be at the heart of mastering a foreign language and without knowing a lot of words learners will have difficulty in speaking, understanding, reading or writing a foreign language. They also admitted the important part of vocabulary in learning a foreign language. It plays a core element in integrate the four skills of speaking, listening, reading and writing all together.

Indeed, vocabulary supports communication. It is an integral component of language instruction. In order to communicate a certain foreign language well, an adequate number of words and using them accurately should be demanded. Della and Hocking (1992) also claimed the importance of vocabulary in communication that the learners are able to gain a little smooth communication with a little grammar, but other people cannot understand message that the learners wish to express without vocabulary. It can be inferred from this reason that a shortage of using clever grammatical structures might not impede communication. A lack of vocabulary, however, can make communication fail.

2. Mind-mapping

2.1. Definition of mind-mapping

Mind mapping was originally developed by the British psychologist Tony Buzan in 1970 (Buzan and Buzan, 1996) in making an attempt at assisting students to take notes effectively. Buzan (1993:1) states that "Mind-mapping is a powerful graphic technique, which provides a universal key to unlock the potential of the brain". It is an inventive note-taking approach, which makes us remember much information easier. Buzan (1996) argued for a specific process to design a mind map. A picture and a word should be started in the middle of the paper and then add the key words relating to the central topic. The keywords branching out from the center must be printed on curved lines. He also emphasized that one should use pictures, colors, dimension and symbols to impart great emphasis and foster retention.

From all of the above elaboration, it can be concluded that mind-mapping is a graphic organizer that is used to simulate words, ideas, tasks, or other items linked to and managed radially around a inner key word or idea. Mind-mapping is used to trigger, visualize, construct and categorize ideas, and as an aid in studying, forming, problem resolving, decision making and writing.

2.2. Characteristics of Mind-Mapping

Ibrahim (2013) argues that there are four essential characteristics of mind-map: "the subject attention is crystallized in a central image, the main themes of the subject radiate from the central image as branches, branches comprise a key image or key word printed on an associated line, and the branches form a connected nodal structure".

It must be the main idea, subject or focus which is solidified at the central image. The core ideas, known as 'branches'

2.3. Mind mapping in teaching vocabulary

Casco (2009) presents that mind-mapping was first introduced in foreign language teaching in the 1990s. Working as an aid to motivate previous knowledge on a certain topic it assists learners to order and recollect items of vocabulary. When being used to animate previous knowledge, learners are asked to what extend they acknowledge about a certain topic and they have ability to brainstorm associations in order to create a collective map. In addition, when being used for vocabulary acquisition, learners are first asked to brainstorm items of vocabulary relating to a certain topic and to make their own maps instead of the more traditional method of formulating lexicon with new vocabulary. Picture, symbol, and color should be included in a mind map because they will not only help learners comprehend the knowledge of vocabulary but also make them feel good, relaxed and encourage them to pay much attention to master their vocabulary**.**

2.4. The advantages of using mind-mapping

Compared to the traditional linear notes, we must admit many advantages of using mind-mapping technique. Mind-mapping has many applications (Russell, 1979). First and foremost, it helps organize information into a form that is easily blended and retained by the brain. As a result, it can be widely used for noting books, lectures, conferences, interviews and telephone conservations. Furthermore, he also states that mind-mapping permits ideas to be rapidly noted because it appears, in an organized style, avoiding the relatively arduous process of creating splendid sentences and writing out in full. Therefore, it seems to be a quick and proficient means of recall, and so push recall at a high level. Besides that Russell emphasizes mind-mapping is very helpful for any planning and organizing, no matter what it is of books, reports, lectures, meetings, study, daily tasks or future activities.

DePoter and Hernacki (2008) put out four undeniable advantages of mind-mapping: (1) Flexibility, (2) Concentration on the topic, (3) Increasing comprehension, and (4) Pleasure. Firstly, mind-mapping helps learners present everything very easily as they are flexible in developing or adding ideas without confusing. The second one deals with the centralization of learners to the main topic. In addition, learners are easy to understand the material more deeply thanks to mind-mapping and they are not confused to understand what they have learned as well. The last addressed the abundance of imagination and creativity. Learners may have a lot of excitement and relaxation in reflecting something relating to the topic by using pictures and colors.
It can be seen from the above discussion, the author would like to restate that the ability of learners' memorization and brain development can be taken from mind-mapping. It seems to be an amazing technique for learners to not only take note the lesson but also enlarge vocabulary. Mind-mapping enables them to brainstorm the topic from some key words to many other related ideas due to the ability of activating existing knowledge. Learners will get more and more vocabulary in their mind

2.5. Procedures to build up a mind-mapping
There are variety of ways of showing mind-mapping. DePorter and Hernacki (2008) indicate the procedures of presenting mind-mapping as follows:

1. *Introducing the topic*: Note down a key word, concept, term or topic which are related to classroom work on a paper, the board, or a slide.
2. *Brainstorming activities*: Motivate students to think of as many words as possible which are linked to the choosen key word or topic.
3. *Presenting target terms*: Present target terms which are unknown to students.
4. *Categorizing*: Instruct students to make a list of the words by categorizing and have them mark the classification.
5. *Personalizing*: Have learners widen words or categories to the mind-mapping.
6. *Reviewing of target words*: Verify and make sure that students comprehend the meanings of target words and enable to operate them.

III. RESEARCH

1. Description of the innovation and cultural aspects of the research setting.
My innovation research was carried out in my teaching context. The study lasts for 6 weeks. Twenty-five students (aged from 15 to 16), selected accidentally, were involved in my research. All of them are at the pre-intermediate level. I often have three lessons a week for such skills: Reading, Speaking, Listening, Writing and Language focus. Teaching vocabulary is not distinctly demonstrated in a period. It is taught parallel to other skills. Accordingly, it is really hard to stimulate or force students to learn vocabulary. My students are good at grammar structures; however, they are weak at vocabulary. For instance, many students often get good marks (9 or 10) in the tests on grammar; nevertheless, they show their difficulties in skills: speaking English in front of their class in cooperative activities, reading a text or writing an essay, etc. Apart from that, many teachers in my school only concentrate on teaching Grammar because our students' aims of learning English is to pass the exams organised by the teachers. Moreover, most of the exams in my country primarily pay attention to Grammar. It is the reason for their English teaching to

focus only on Grammar. Therefore, I want to carry out my research with the inspiration of finding out a new strategy that can bring effective motivation in teaching and learning vocabulary. I chose three vocabulary parts in the coursebook where vocabulary is taught, using mind-mapping technique. Each was taught in 30 minutes. The three chosen parts of vocabulary are as follows:

Vocabulary Part 1: Your body and you (Unit 2 – Language)
The topic of the lesson is about the systems and the organs of the body. The aim of the lesson is to enable students to know words which are connected to the concept *"Your body"*. Also, learners can study and recollect words pointing to various systems of the human body such as: circulatory system, digestive system, respiratory system, skeletal system and nervous system. I asked partakers to match them with the given pictures and to give their Vietnamese meaning. Then, students were asked to work in groups to classify the organs into their appropriate systems

Vocabulary Part 2: Food and drink (Unit 2 – Writing)
The aim of the lesson is to help learners to study and recall words relating different kinds of foods and drink, assist them give advice on what to eat and what not to eat before important occasions. Firstly, the students were told to brainstorm and produce a list of foods and drink. Then they put the words into categories, such as: ***Allegies*** (the food most commonly causing allergies: milk, wheat, eggs, soya, fish, peanuts, shellfish…), ***Bad Breath*** (the food which may spoil your breath for days after a meal: onion, garlic, cabbage, curry…), ***Stress*** (food and drink which strongly stimulate the body can cause stress: coffee, tea, chocolate, junk food, fast food…), ***Sleeplessness*** (food that can help you fall asleep or keep you awake). This topic is quite familiar to learners. Therefore, students would be eager to learn this vocabulary section.

Vocabulary Part 3: Music and Contest (Unit 3 – Speaking)
In this vocabulary lesson, participants studied how to compare and contrast the TV shows they have seen with the partner. Hence, they need to know a lot of words relating to the core subjects (music and contest). In this task, learners were asked to work in pairs to complete the chart. I could check learners' practicing by asking some pairs to speak aloud in front of the class. Then they did the comparison.

Above all, in order to create the exiting environment and motivation among learners, I divided the class into 4 groups. Each group did the same task. That was finishing the map on the paper in 5 minutes. After that, I verified learners' performance by calling some of them to hang it on the board. Most of the students showed their eagerness to do this task as they could share their own ideas and consulted together.

2. Methods

Evaluation methods and purposes

According to Dahlberg and McCaig (2010), evaluation is a process which critically investigate a program. Gathering and analyzing information about a program's activities are involved in evaluation. Its aim is to make judgments about a program, to upgrade its benefits, and/or to impart programming decisions.Smith and Bowers-Brown (2010) shared the same idea that evaluation makes a decision the value of studying and training programs and plays a role as blueprints for judgment and advancement.

Each study implemented serves for some certain purposes (Dexter, 2011). This evaluation was carried out in order to measure the impacts of a new teaching tactic, namely mind-mapping on the learning vocabulary to the learners at grade 10. The aim of my research is to investigate the feasibility of teaching vocabulary through mind mapping. Specifically, I am going to evaluate learners' benefits of learning vocabulary through mind-mapping and the impact of applying mind-mapping on students' vocabulary retention. In other words, it aims to provide evidence that whether this technique worked well or not. Evaluation is frequently devided into two types: *formative* and *summative* .In formative evaluation, programs or research are normally evaluated during their progression or early investigation to provide information about how best to revise and adapt for improvement. On the other hand, summative evaluation is developed at the end of the process to reflect which of the awaited outcomes or targets are met or not; denoting final outcomes (Daniel & Chris, 2007). For this research, both formative and summative evaluation are going to be used to help the researcher evaluate the innovation better.

Teacher and researcher

I played two substantial roles at the same time as a researcher and a teacher from the study. Both two roles showed their distinctive characteristics. I find them very different in terms of goals, training processes, and roles in the classroom. In the first, the teacher's goals consists of students' apprehension, students' achievement in examinations, students' interest, engagement and recreation in the lesson. Being a researcher, my goal is to find out the answer of the research question I posed, by gathering relevant data. In the second, the teacher must act in response instantly to learners' needs, divide my attention among the learners, follow individual learners if necessary, and deal problems which do not concern to learning. On the contrary, the researcher seems not to responsible for classroom contretemps. Labaree (2003) says that the researcher is motivated by the demand to know and understand what is happening and why. To gain this, I sit near a small group of learners and keep my eyes on their work from start to finish, as it is going on. The teacher, meanwhile, is moving among learners, seeing parts of the studying processes of many learners. The investigator will normally record observations, so I can observe events and episodes, in an attempt to scrutinize and comprehend what occured from different circumstances, and to recommend clarifications and conclusions.

My research was carried out from October 10^{th}, 2019 to November 20^{th}, 2019. I used three following methods to evaluate this innovation as followed:

Semi - structured interview: Lynggaard, Manners and Löfgren (2015) denoted that semi - structured interview seems to be a very common method used in the qualitative research. . After the three vocabulary parts applied mind-mapping, interviews were executed with 10 students randomly to get more objective and accurate ideas and feedbacks about learning vocabulary with mind map. Semi-structured interviews were ultilized to get information about the difficulties, interests, benefits that mind-mapping has brought to learners and some of their suggestions if they had. Vietnamese and English versions are conducted in the interviews basing on learners' apprehension and interest. It was conducted at the beginning week of the project (week 1)

Observation: Observation is an effective tool in the social sciences, including education (Given, 2008). I act two roles: researcher and teacher when using this method. From week two to week five, I began observing and jotting down all participates' activities such as their cooperation, gestures, verbal and non-verbal behaviors. Furthermore, I observed students' involvement in mind – mapping activities, whether they felt happy or confident or not, whether they know how to use mind-mapping to apply in all lessons or not. Observation was carried out during all 6 weeks of the research.

Questionnaires: Questionnaire was performed twice. The first one was conducted at the beginning of the innovation (without applying mind-mapping strategies). The second one was performed in the end of the project (addressing mind-mapping strategy). To make sure that every question was understandable by all participants, it was translated into Vietnamese. The students' answer in the two versions allowed me to compare the results to discover the benefits of this tactic for students. All of them enable me to find out the answer the research question and to evaluate my innovation objectively.
I only used qualitative research approaches in this evaluation to triangulate the data to search for the answer of the research question. Furthermore, with a small scale study and in a short time, the qualitative approach was profitable for my innovation. Kvale and Brinkmann (2009) pointed out that th qualitatve research is implemented by content data analysis which is gathered and mainly concentrated on meaning. Therefore, in my evaluation, I adduce and scrutinize the data on a theme-by-theme basic. I strongly take into account the importance of the triangulation of data so as to synthesis and make a comparison the ideas of participants under various perspectives. This also assists the findings of the evaluation to become more diversified objective and convincing.

3. Ethical issues

All researchers should take consideration of some relevant ethical issues such as the permission of the principal, the consent of the students' parents and the students, participants' rights, confidentiality and anonymity. In order to make positive results, it is essential to build trust between investigators and participants (Kvale and Brinkmann, 2009). Obviously, every research must be conducted under the agreement of the superiors, guarantors (because the participants are under 18 years old). I designed an informed consent to ask the parents' permission for their children to participate in my research. I also gave them the details of the study about its goal; timetable; processes; location; date beginning and finishing; students' rights, benefits, risks, anonymity and confidentiality. Any unexpected withdrawals of the participants would be accepted . Especially, I further emphasized that their answers did not affect to the results of their study so that they felt relax and comfortable to answer the questions freely and honestly. Hence, I took the advice of Smith and Bower-Brown (2010) that all the partakers' names in interview and questionnaire should be changed to warrant their privacy. All of the data was kept in secret at the end of the research.

IV. Research data and data analysis

Semi – structured interviews, observation and questionnaires were used to collect data. I take the suggestion of Ellis & Barkhuizen (2005) that notifying and classifying each theme must be short and simple to keep in mind. Absolutely, the investigators attentively examined the transcriptions of questionnaire, interview and observation, triangulated themes to illustrate the issues to look for the concepts. From the results obtained by three above methods, I chose four key themes; including knowing; application competences;motivation and interest; difficulties and recommendations for overcoming obstacles. Then I made a code list for each participant with alias like **Red, Yellow, White, Purple, Orange, Blue,** and so on ....
In this section, I am going to quote some answers from students in order to confirm the findings and make them more persuasive, as follows:

Firstly, ***Knowing*****:** It is necessary to find out the participants' knowledge of reflective activity and the use of journals as a means of reflection-on-action. The understanding about Mind map was conveyed obviously in the interviews. Generally, their responses displayed different levels of knowing of relevant issues of showing that Mind-mapping was an "exciting and useful" or "necessary" activity.

> *From my point of view, tasks applied this tactic is very interesting and profitable in enlarging vocabulary as well as improving the confidence for learners, especially the seniors in high school.* ***(Blue)***

> *I myself find mind-mapping activities necessary in teaching vocabulary because it helps us have more real opportunities to practice vocabulary in the target language. Also, I can improve my confidence in communication.* ***(Orange)***

Nevertheless, some students did not know clearly or they were rather vague this technique. They stated that this was a "new" term.

> *.... The term "Mind-mapping" is completely new for me. Perhaps, since I learned at my secondary school I have used it, but I can't define what it is...* ***(Purple)***

> *.... Uhm, well, "Mind-mapping", is it a strategy? Or is it a new tactic? Or something? As for me, it's absolutely strange, but I suppose I will be interested in it after being obviously taught as I have a keen interest in everything, especially in new things* ***(White)***

In fact, almost students have employed this technique before, but they did not know its name and meaning. For example:

> *.... Actually, mind-mapping is very accustomed to the learners, however, occationally, we don't know the name of this strategy exactly, so we are able to define it before we are explained how to do.* ***(Yellow)***

> *.... It's not new because mind-mapping has been used since I learnt at the secondary school. However, I am not aware that it is mind maps at that time. I just follow the teacher's guidances and requirements.* ***(Red)***

From the above data, I found out that most of the learners acknowledge well mind-mapping and its importance. Or, they could apply it many times in the classrooms, but they do not make awareness of this activity. Yellow and Red are typical examples for this.

Secondly, ***Application capabilities***: After understanding clearly about mind-mapping, the participants need to employ it into practice so as to improve their vocabulary. Hence, the second theme of this evaluation is the application capabilities or ability to apply mind-mapping in enlarging vocabulary. From the data collected, the researcher recognized that even though the student (Blue) knew or understood about this tactic and its importance, its application capabilities was not good. In particularly, he pointed out his loss of confidence and dejection when using mind-mapping in learning English vocabulary.

.... I feel quite interested at the beginning as I can work with English words. I can use variety of colour, symbols, images, and take advantage of my drawing ability in order to make my own maps. But, I find it very hard to combine and collaborate related ideas … ***(Blue)***

… I can't link words or combine all relevant ideas to make my presentation. I feel unconfident when I have to present ideas of the maps in front of the class. ***(Black)***

By contrast, from the data I collected, I recognized that most of the learners felt that mind-mapping had a good impact on enriching their vocabulary as followed.

… After being practiced with mind-mapping under the instruction of my teacher, I really enjoy this approach very much. Through it, I can enlarge my English vocabulry relating to many different topics, thereby other skills such as reading, speaking, writing, listening may be improved . It helps me recollect the taught word better... ***(White)***

... Working with mind-maps looks interesting but rather tedious and difficult to follow the lesson. However, to some extent, I know and remember a large number of new words relating to the given topic. I can guess the meaning of the new word from the maps. This motivates me in learning English. I hope that, from day-by-day I can improve my English vocabulary and my English proficiency. ***(Green)***

... At least for me, my English vocabulary is very limited. So the application of mind-mapping might has much effect. I see that this technique is quite useful for me. It allows me to brainstorm words or ideas relating to the given topic … ***(Orange)***

Additionally, some students described both the straightaway usefulness of the activity, like *"I enjoy seeing how the ideas were combined,"* and longer term benefits, such as *"I like that it assists me to manage my thoughts and I can always look at it for a rapid reflection."*

Above all, the greater number of respondents expressed the positive effects of mind-mapping that the learners can study glossaries easily and rapidly, guess the meaning of new words through the related old ones, recall vocabulary for a longer time, stimulate them in studying vocabulary, etc. Through this result, it can be inferred that most of the students find the profits of using mind-mapping in teaching and learning vocabulary. Moreover, they also showed their eagerness to learn vocabulary owning to the implementation of this tactic in vocabulary lessons. Especially, some of them notified that using mind-mapping in vocabulary lessons makes the environment of the classroom less nervous and more stimulating.

Next, ***Motivation and Interest****:* Motivation seems to be the key to learning English successfully and interest is also one of the most significant factors in how well the participants learn a foreign language. Hence, when I observed the partakers at my school, motivation and interest were reckoned a vital criteria in examine the effectiveness of using mind-mapping in teaching vocabulary. In general, most of the students liked the unrestrained atmosphere, the aggressive and the enjoyment that learning activities brought to the classroom. That was because students had opportunities to "implement their visualization and inventiveness" among activities like games in the classroom. Besides, a large number of responses described their interest in the imagination and the use of color in the activity, like “I like being able to utilize color and drawings to help me express the message and add meaning to the glossaries Moreover, the students were able to interact freely with each other. This efficient interaction among the participants was seen to supplement positively to the classroom atmosphere.

The information provided by the students’ opinions in the questionnaires, interviews generally revealed that the students became more engaged in mind-mapping activities. The majority of the students (19/25) chose either “strongly agree” (4/25) or “agree” (15/25) for the first item of the questionnaire (Mind-mapping contained interesting activities), and only two students chose “disagree” for this. In answering the open-ended question 5 of the questionnaire, White wrote: “Yes, I certainly would like to have mind-mapping in the future. All the lessons applied mind-mapping technique are enjoyable. Otherwise, I wouldn’t gain so much English words now”. In the interview, all the five students shares the same view that mind-mapping made their classes increasingly interesting and effective (to a certain extent).

In addition, the data from semi-structured interview could give illustration obviously. For example, when some students were questioned “How do you find learning vocabulary with mind-mapping?”. They said:

> *.... I love everything related to English because it is the subject that I like most, consisting of mind-maps. As far as I’m concerned, it is a very exciting and crucial activity to extend vocabulary for students. I’m really interested in working with it.* ***(Yellow)***
>
> *... Mind-mapping is a useful tool for us to improve our English skills, especially improving vocabulary. Taking part in this activity, I feel interested in using mind maps. Besides, it motivates us to consult with my friends about the topics or to interact with each other informally …* ***(Purple)***

Finally, ***Difficulties and Recommendations****:* Being asked the question “What are the difficulties in learning vocabulary with mind-mapping”, some students mentioned specifically about the fact that they could not be creative enough or they were not capable of developing enough opinions. Their considerations would likely be less if they worked in pairs or groups, instead of individually. However, some students stated that working in groups was not easy and they found it challenging to finish the maps in groups. Other participants narrated feeling fewer successful finishing maps because of the obstacle concerning to categorising, arranging and then linking opinions within a group. Therefore, eventhough some learners loved the social cooperation in groups, they worried about whether they could be accomplished in finishing their maps well or not.

.... Doing with maps is really exciting but I’m afraid that I can’t finish the maps because I don’t have enough lexicons and ideas as well … ***(Orange)***

… To some extend, working in groups brings learners many benefits. But, in this case I have difficulty in it because I’m not able to combine the different ideas of other members to make maps … ***(Purple)***

Others conveyed concerns with the time constraints related to finishing the mind map in class. In other words, they find that this approach is a time-consuming activity and it takes most of the students energy to work with. Besides, some respondents gave their opinions that it is rather difficult for them to follow the lesson.

… For Map 3 – Music and contest, I don't have enough time to finish, and completing what I begin is very important to me. Our group tries in vain to complete the maps … ***(Green)***

Some partakers also gave some their suggestions as "regular practice" to help develop ideas, " games " to make the lesson interesting, and " colorful chalks" to make the maps more vivid and easy to follow.

> *… To prevent students from the shortage of ideas in maps, they should regularly practice doing with maps for variety of topics or situations in coursebook. This makes opinions more plentiful .* ***(Red)***
>
> *…In my opinion, the teacher should use some games and colourful chalks in the lesson to make it more enjoyable and exciting…* ***(White)***

It can be inferred that these above recommendations have significant implications for advancing the effectiveness of mind-mapping activites to help learners master their English vocabulary. They are appreciated source for the researcher to take into account when implementing mind-mapping in the classroom.

V. DISCUSSION

The findings of this research show that mind-mapping would be an effective vocabulary approach that can be utilized for vocabulary teaching. They could be analyzed to find out the answer of my research question: “How and why my students engage with the application of mind-mapping technique in teaching vocabulary”.

A small number of learners could not define this activity when they were interviewed. Besides, the exact and full knowledge about mind-mapping were not met by the participants. In reality, although some students had associated to maps since they learnt at secondary school, they have not known its name properly. Indeed, it seems that mind-mapping is not "strange" approach for the learners as they have performed it formerly. Blue and Orange are two examples in this case. Particularly, among the participants were questioned, Purple and White proved that they did not get to know about mind-mapping and considered it as a new and strange activity. Also, Purple was not secure whether she had employed it in her class or not. From this fact, there may be a lack of explanation and instruction of English teachers about this tactic in the earlier school years. However, it does not rule out that learners may not pay much their attention to the lessons or tasks organized by their teachers in English lessons. At the same time, they also gave their satisfied and ebullient when involving in mind-mapping activities in the classroom. In general, the learners’ perceptions of mind-mapping are positive. Above all, these are satisfactory signs in the acquisition and understanding about the mind-mapping technique of the grade 10 students at my school.

In terms of the application capabilities of this technique in teaching vocabulary for students, some other issues can be mentioned. Firstly, in spite of knowing clearly about mind-mapping, some students have difficulty in employing this innovation into practice to upgrade the ability to speak English. For instance, Blue, although he felt that mind-mapping was an interesting activity and he enjoyed doing with colour, images of the maps, it was difficult for him to combine ideas. This is also a general issue of the other students, such as Black. He was very shy and unconfident to present mind-mapping in front of the class. In other words, a small number of participants either benefited very little or nothing from mind-mapping as a vocabulary guidance strategy. This may be due to learners’ diversified perceptual learning styles such as visual, acoustic … which shown in Nguyen (2012) research on the impact of maps as vocabulary instruction tactic on EFL students with various perceptual learning styles. Oviously, the effectiveness of any teaching technique depends on a variety of teacher and learner variables. Regarding learner variables, these consist of the students’ age, gender, level of competency, learning styles, techniques, and motivation as well. However, after a few English vocabulary lessons, these students became more confident and then, they volunteer to present their maps in front of their classmates and teacher. This illustrates that the participants may get used to this activity and have preparation beforehand to decrease the tension when making presentation in front of the class. It is also a positive sign that shows initial effectiveness of this innovation, namely mind-mapping, for these participants.

Actually, applying mind-mapping for vocabulary instruction is also proposed by Ghazal (2007). He supposed that one of the most beneficial and favorite approaches in vocabulary teaching is creating diagrams in which lexicons are grouped by themes, categories, word families, synonyms or antonyms (p. 90). This statement is strongly strengthen by the learners’ positive responses to the questionnaire. Hence, the result of this study persuades me that mind-mapping, among other vocabulary tactics should be and can be utilized to help the learners achieve ESP vocabulary better. In my innovation, a great number of the participants perceived that mind-mapping technique was effective to their vocabulary learning and that it made them more interested in lessons of learning vocabulary. This beneficial impact of this innovation may be attributed to the fact that learners can know the rapport among glossaries in the maps and that the integration of new lexicons into the old ones allowed learners to recollect and retain words better as it supplies with repossession cues. The findings in my study are also the same as what Nguyen (2012) found in her experiential research that maps had ability of promoting both memory and understanding of new glossary items because it sets up connective networks for lexicons by combining a various strategies of memory such as grouping, using imagery and cooperating.

Besides, my innovation got many difficulties given by the participants during the application of mind-mapping technique. Some of the students, like Orange and Purple, found it difficult to finish the maps due to the lack of ideas or vocabularies and to manage them in the maps. Others judged that woking with maps took a lot of time and they had to spend much their energy on completing maps. Using games, colourful chalks and regular practice are also some recommendations of the students to help my innovation more effective.

In conclusion, my innovation was welcomed and acceptable. The findings from the research shows that students have an awareness of the importance of mind-mapping strategy in teaching and learning vocabulary. Although it is now challenging for them to finish the maps, the participants engaged the tasks actively and it had some certain positive signs as mentioned above.

VI. REFLECTION

1. Reflection on the innovation

After completing my research, I notify that this innovation is quite successful and somehow it meets the research purposes that I put forward. Due to the research results, mind-mapping is really not a certainly strange activity with learners. In fact, most of the participants are quite accustomed to this strategy, but they do not get to know its exact name. In addition, although some of them know clearly about the role of mind-mapping, the application capability of this technique of these participants is limited. Thus, if I had a chance to perform this innovation again, I would do some points differently. Firstly, before conducting the study, I will spend a lot of time in explaining and instructing the steps and the rules of mind-mapping clearly and meticulously to help all participants, even the weakest ones, can understand and be aware of this technique. Because if being explained surely, learners will be capable of taking part in the activity more actively and they will use it effectively. The researcher might speak mother tongue to help learners fully understand and follow the tasks. Secondly, I will ask the participants to prepare beforehand for the given topics in textbook in terms of words, ideas or opinions. This will encourage and motivate them to participate in activities and especially raise the sense of the students' initiative.

Overall, the findings suggest that mind-mapping strategy may have positive influence on students' abilities to make arrangement and organize their ideas better. In addition, using this technique can help in generating students' cognition efficiency and aid in information retrieval. This deduction was made basing on the qualitative data which was obtained from analyzing three research instruments: semi-structured interview, questionnaire and observation. The mind-mapping technique would seem to be particularly appropriate to helping students master their vocabulary and improve other English skills.

2. Reflections on the innovation process

In order to implement my innovation, three qualitative methods such as observation, semi-structured interview and questionnaire were used. They were rather advantageous and positive to collect information. They assisted me to find out the answer of the research question. However, besides the positive findings, the outcomes of my innovation were not anticipated.

With classroom observation, it helped the investigator know how the innovation took place in its real teaching context and how the participants engaged in the activities and what they encountered difficulties. I used field-notes to note down all relevant information about the students' competency of making maps, the students' competency of holding or retaining lexicons, their motivation and interest in class activities. However, it was not easy for me to observe all the partakers (25 students) at the same time. Hence, the researcher invited one colleague, an English teacher, as an observer. He helped me to observe and take note the observation forms.

With the second research instrument, because the order of the questions in semi-structured interview is not fixed, so the flow and the sharing of the participants' views were more natural. It assisted me to collect depth of information. I chose 10 students to be interviewed randomly and the interviews were recorded. However, some of the students seemed not to like being recorded the conversation. I found that they did not feel naturally. They did not concentrate on answering the questions because they often stared at tape-recorder. Thus, acts as a moderator, I tried to create an informal, friendly atmosphere, promoting a 'natural' current of ideas and opinions. More importantly, I explained how the information would be recorded and I ask for the students' permission to tape-record. Furthermore, using this instrument took a lot of time. At first, I planned to spend one morning interviewing. But in the end, it took me whole day to make it. If I do my innovation in the future, I will limit the number of interviewees, as semi-structured interviews are time-consuming to apply and analyze.

With the last research instrument - questionnaire, a large number of information could be gathered in a comparatively cost effective way and in a short time. However, I recognized that some of the partakers still seemed to search for the 'right', 'acceptable' or 'positively valued' answers rather than showing their own ideas. For instance, I observed some students asking others sitting nearby what the right answer would be to some of the questions. In order to restrict this issue, the researcher emphasized to the partakers that there were no right or wrong answers in questionnaire. From then on, they appeared to respond ideas to the questions truthfully.

If I can apply this study again, I will also use these three methods because of their benefits. If permitted, however, I may change research methodology and bigger sample size. Accordingly, I will mix qualitative and quantitative research methods. I will implement testing as it can help me examine how much knowledge of the learnt lexicons the students recollect after the research. Moreover, it will assist me to get the rich and comprehensive data and to garantee the persuasion for the evaluation. Consequently, the findings of my evaluation will be changed productively.

I acted as a teacher and a researcher in my innovation. On the other hand, the partakers are my students. It means that, I know their names and their English proficiency entirely. In my point of view, therefore, this was also a disadvantage in accessing the data because the loss of objectivity can be resulted from the greater intimacy between the investigator and the participants. Besides, overlapping role made me overwhelmed or stressed, and sometimes push my students a bit too much. I should have balanced the two roles better for better results of my study.

This is the first time I have a pilot research with my own teaching context. When conducting this study, I encountered many difficulties. However, I have had some positive experiences such as: I have learned about the teacher's role in instructing and explaining to learners about issues concerned to the lessons, especially new things like my innovation, I have known how to analyze and gather good data. It can be stated that, through my innovation, it seems to be extremely important for almost teachers and students at my school to innovate, update a positive teaching and learning vocabulary technique.

VII. Conclusion

In conclusion, from analyzing the data, I came across a further point which came up from the application of the mind mapping strategy. I perceived an advancement in my learners' thinking skills, where they became better and better in generating ideas and dealing with them quickly. Futhermore, my students were capable of retrieving their prior knowledge about various topics and design maps using this comprehension. Hence, it cannot be denied that mind-mapping strategy can create a change in students' cognition and aid in vocabulary repossession.

Basing on the basis of the research findings, I propose some suggestions for teachers, students and future research as follows: For the teacher, this tactic can be applied to other skills, big or small classroom, level of grades and level of students. For instance, when writing skill is employed mind-mapping technique, the learners will be easier to find out opinions and to organize structure of writing. For students, they can use it for many purposes. For example, they may use mind-mapping to make draft of writing, outline of reading, speaking, listening and writing. During the lesson, they need to be more active. They also should be more confident to present their opinions in front of class after the session of discussion. For future research, it is advocated to explore the effectiveness of using mind mapping in developing other skills such as speaking or writing. The larger sample may be involved, thus the result of research can be more extended.

I certain that my teaching experience and my professional growth have been much bettered through doing this action research. For instance, doing the research improved my critical reflection skills on my teaching tactics. In other words, I become a more reflective practitioner, where I had more chances to mirror, adapt and advance my teaching strategies, especially vocabulary teaching. Furthermore, I learnt about new teaching methods and approaches from the variety of many other researchers and authors' viewpoints through reading and finishing the literature review sections. Generally, I learnt many beneficial skills which will help me to deal with difficulties that I may encounter in my future classroom. Hopefully, many other teachers , at least at my school, can take several advantages from my research. Based on the description above, I would like to recommend other researchers that the result of this action research can be utilized as additional reference for the next research.

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Appendices

SEMI-STRUCTURED INTERVIEW

1. *How do you find the learning vocabulary with mind mapping?*
2. *Did you gain more English new words with mind-mapping? Which skills? What makes you think so?*
3. *What effects do using mind mapping have on your vocabulary learning in the lessons?*
4. *What are the difficulties in learning vocabulary with mind mapping?*
5. *Did you gain more English new words with mind-mapping? Why / why not?.*
6. *Would you like the teacher to apply mind-mapping in the future classes? Why / why not?*

QUESTIONNAIRE

I. Students' opinions about mind-mapping :

Please show the degree of your agreement / disagreement with the following statements by using the scale below :

Strongly agree : 1 Agree : 2 Neutral : 3 Disagree : 4 Strongly disagree : 5

No	Items	1	2	3	4	5
1	Mind-mapping contained interesting activities					
2	Mind-mapping distracted me from learning					
3	Mind-mapping helped me review and recall a lot of English new words					
4	Mind-mapping helped me reminisce previous knowledge					
5	Mind-mapping helped me brainstorm the content of the lesson effectively					
6	Mind-mapping helped me take notes during the lesson					
7	Mind-mapping takes too much time for other languge exercises and/or activities.					

II. Open-ended questions (Please try to be specific by giving EXAMPLES)

1. What would you find most useful about mind-mapping in teaching vocabulary ? Why ?

____

____

____

2. What aspects of mind-mapping did you find the most enjoyable ? Why ?

____

____

____

3. What aspects of mind-mapping did you find the least enjoyable ? Why ?

____

____

____

4. What comments/suggestions do you have which could the use of mind-mapping to help you develop vocabulary ?

5. Would you like to have mind-mapping strategy in the future English classes ? Why / Why not ?

6. What difficulties do you have in learning vocabulary with mind-mapping ?

THANK YOU FOR YOUR CONTRIBUTIONS!

OBSERVATION FORM

Date:	Lesson:
Number of students:	

No	Statements	Not at all	Somewhat	Moder-ately	Much	Very much
1	Students are motivated and interested in mind-mapping activities.					
2	Students can drill learned vocabulary.					
3	Students can widen their vocabulary.					
4	Mind-mapping helps students remind more what they learned.					
5	Mind-mapping can make students learn and remember vocabulary easily					
6	Students can make their own maps creatively.					
7	Students can summarize the content of the lesson effectively					

Additional comments: ………………………………………………………………............

Areas for Development: ....

- **In conclusion:**

The lesson with applying mind-mapping strategy is:

(*Please choose the best option)*

1. Outstanding ☐
2. Good ☐
3. Satisfactory ☐
4. Inadequate ☐

Participant consent form for students and their parents
(in both English and Vietnamese)

Please carefully read the statements below and indicate your agreement
Dear Mr/Mrs/Ms A,

My name's ………………, with the permission of Principal, I implement my research about the mind-mapping program from October 10th 2019 to November 20th 2019, and all students that I chose, will have to do mind-mapping as part of their language work; Therefore, You are received this parental consent form to both inform you and to request permission for your son (daughter)'s participation in my research, which will help me work out the Mind-mapping program to improve students' vocabulary.

Remember clearly if the project goes smoothly, your child will considerably benefit from it. If you agree, please write your full name below.

Thank you very much for your help.

I just confirm that I have read and understood the information above regarding the mind-mapping program thoroughly and have had the chance to ask questions. I also do understand that my son (daughter) is completely free to ask for further information whenever they want. I know very well and consent that:
1. My son's (daughter) participation in the project is entirely voluntary and that s/he is free to withdraw from the project at any time ,without giving any reason, without his/her learning being affected..
2. Students are often unpleasant being recorded; however, a small recorder shouldbe optional and will be used about which they soon forget;
3.Theproject's beneficial resultsmay be published and will be accessible in the school library howeverI and my colleagues try to preserve his/her anonymity**;**

- I totally agree to let my child join voluntarily the above study.
- Parent's name: ____________________Student's name: ___________________
- Signature of parent: ___________________
- Date : ____

SAMPLE OF INTERVIEW
(Translated version)

Student: Orange

1. ***How do you find the learning vocabulary with mind-mapping?***
- I myself find mind-mapping activities necessary in teaching vocabulary because it helps us have more real opportunities to practice vocabulary in the target language. Also, I can improve my confidence in communication.

2. ***Did you gain more English language skills with mind-mapping? Which skills? What makes you think so?***
– Umh, yes, yes. I think I improved speaking in terms of fluency. Mind-mapping helped me speak faster now because I didn't stumble over my words due to the lack of vocabulary. It made me remember new word for a long time.

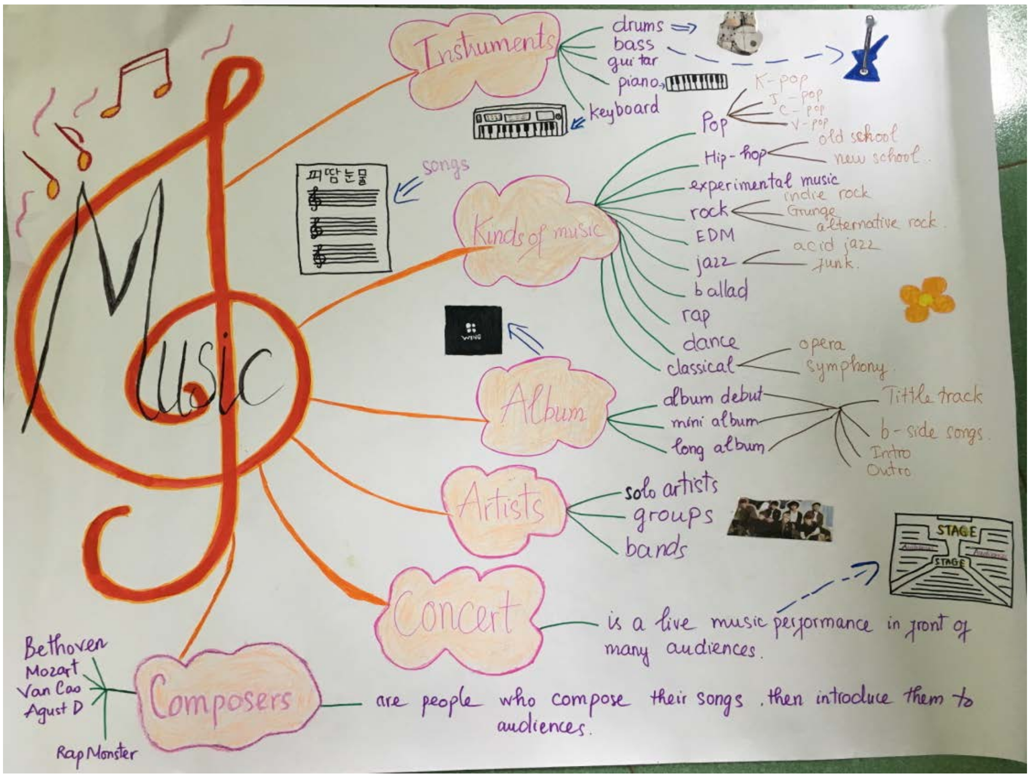
3. ***What effects do using mind-mapping have on your vocabulary learning in the lessons?***
- At least for me, my English vocabulary is very limited. So the application of mind-mapping might has much effect. I see that this technique is quite useful for me. It allows me to brainstorm words or ideas relating to the given topic …

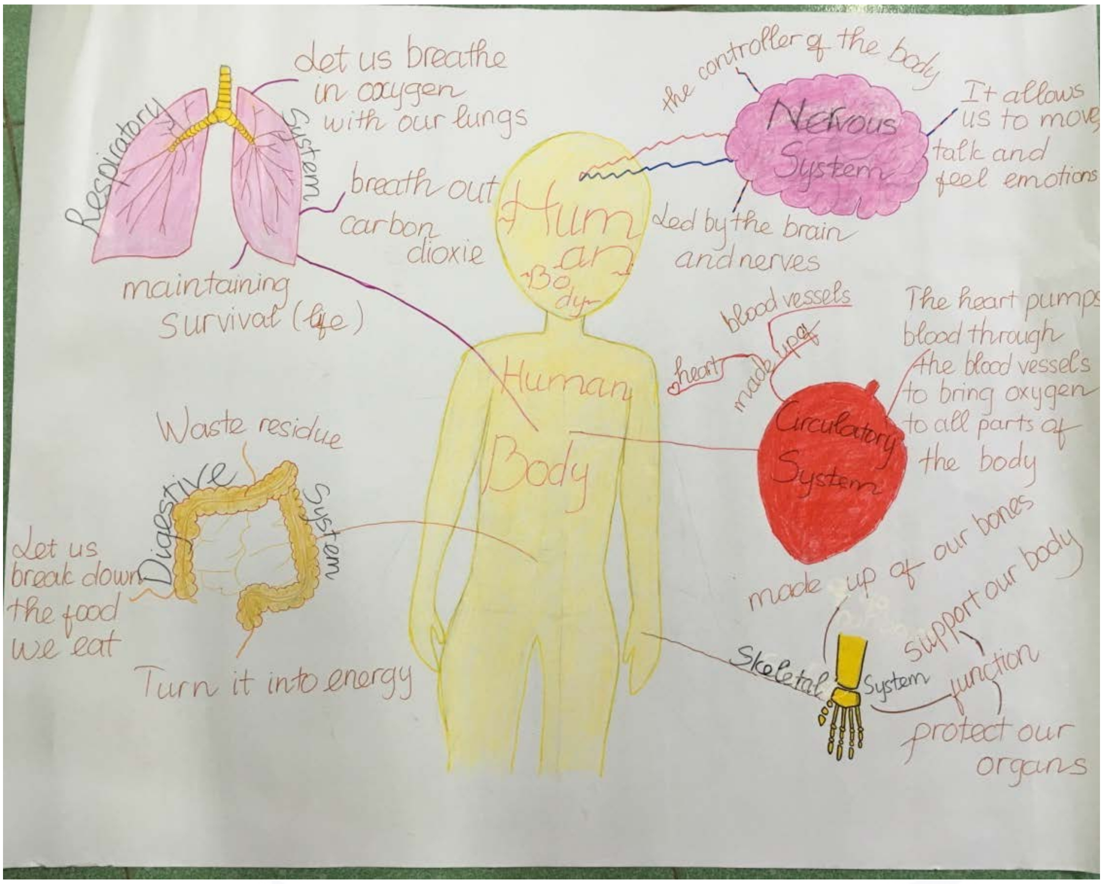
4. ***What are the difficulties in learning vocabulary with mind-mapping?***
– Well, doing with maps is really exciting but I'm afraid that I can't finish the maps because I don't have enough lexicons and ideas as well …

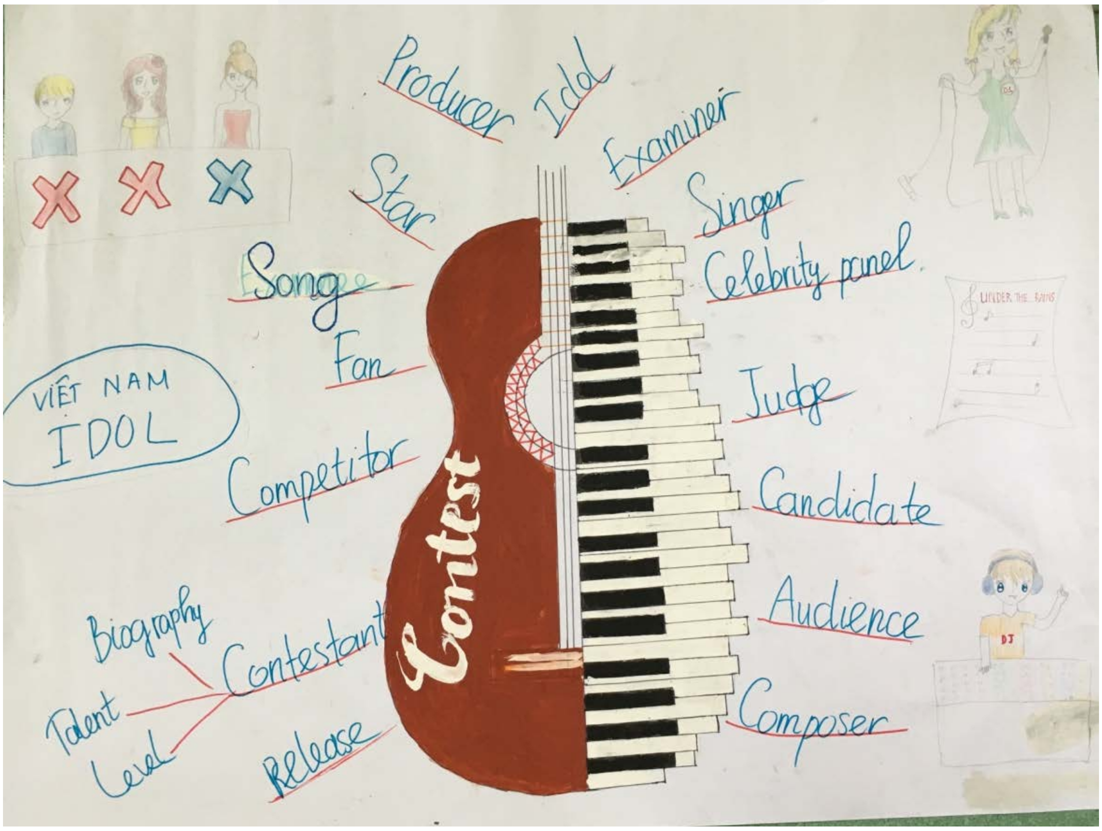
5. Did you gain more English new words with mind-mapping? Why / why not?
Yes, I've gained lots of new words in English. Cuz in the mind-mapping classes, I had to try my best to express myself for my peers to understand me, that's why I could remember more English words. Also sometimes the vocabulary came back in later classes by accident, which helped me learn them again.

6. Would you like the teacher to apply mind-mapping strategy in the future English vocabulary classes? Why / why not?
Yes sure, I would love to have more mind-mapping strategy in the future English vocabulary lessons. Because it was fun, motivating, and useful for my learning English, especially my vocabulary's learning. But I would like the teacher to have more guidance and better control of the activities so that we would have more equal roles, equal time of practice. Nobody is gonna take the lead all the time

SAMPLES OF STUDENTS' MIND-MAPPING




Let us breathe
in oxygen
with our lungs
Respiratory System
breath out
carbon
dioxie
maintaining
survival (life)
the controller of the body
Nervous System
It allows
us to move,
talk and
feel emotions
Led by the brain
and nerves
Human
Body
blood vessels
heart
made up of
The heart pumps
blood through
the blood vessels
to bring oxygen
to all parts of
the body
Circulatory System
Waste residue
Digestive System
Let us
break down
the food
we eat
Turn it into energy
made up of our bones
support our body
function
Skeletal System
protect our
organs


Producer
Idol
Examiner
Star
Singer
Song
Celebrity panel
Fan
VIỆT NAM
IDOL
Judge
Competitor
Contest
Candidate
Audience
Biography
Contestant
Talent
Level
Release
Composer

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