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GUIDELINES for CONTRIBUTORS

The following shall serve as guidelines to all contributors for publication of research articles to the Global Researchers Journal Volume 5, June 2019 issue:

1. All articles must have a high degree of scholarship;
2. All articles must be evaluated thru double-blind system by selected referees for publication;
3. The articles may either be written in English or Filipino. All articles written in either languages must be accompanied by an Abstract which is written in English;
4. All contributions must be original;
5. Articles must use APA style sheet; and,
6. Articles must be typed single-spaced, Times New Roman 11 pts on letter sized (8 x11) paper in not more than twelve (12) pages.

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MATH SCRABBLE: A COLLABORATIVE LEARNING STRATEGY IN TEACHING INTEGERS

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ABSTRACT

Educators believed that effective learning tools and strategies encouraged learners to amplify their interest in Mathematics thus, promote dynamic communication of ideas which maximizes knowledge. This experimental research study sought to determine the impact of Math Scrabble using integers to the pupils' academic performance and attitude in Mathematics. It was a quasi-experimental research using matching-only design comparing the academic performance and attitude in Mathematics of the two intact groups - control group and experimental group. The researcher-made questionnaire was used as pretest and posttest. A sample was drawn from the 40 Grade 6 pupils of Hambabauran Elementary School, Hambabauran, Ubay, Bohol. The gathered data were subjected to reliability and validity test including the questionnaire for the attitude of pupils towards Mathematics. Results revealed that pupils exposed to Math Scrabble using integers had higher achievement scores compared to those pupils exposed to flashcards or board work as traditional method of teaching integers. It further disclosed that Math Scrabble using integers bridges the gap between pupils with difficulties in Mathematics. On the other hand, pupils exposed to Math Scrabble using integers have shown positive attitude towards Mathematics as a subject. This implies that Math Scrabble using integers has a positive impact to pupils' academic performance and attitude in Mathematics. The researchers concluded further that Math Scrabble using integers is an effective teaching strategy to improve pupils' academic performance and attitude in Mathematics.

Keywords: Math Scrabble, Collaborative, Learning, Integers, Teaching, Strategy

INTRODUCTION

Teachers play an important role in the innovation of teaching mathematics. Global initiative of promoting quality education to produce quality and competent learners and never-ending effort of searching and experimenting new teaching approaches had been the concerns of all educational institutions. Concerns that schools must prepare learners for life and work in the 21st Century have prompted teachers to explore new methods in teaching mathematics.

Mathematics is a fundamental human endeavor that empowers individuals to describe, analyze, and understand the world we live in. It is a core skill for man in his life. Mathematically well-educated population contributed a lot in the nations' prosperity. One of the instructional strategies to help brain development of a child is playing board games in the classroom. Board games offer a variety of mind-enriching opportunities that could provide benefits for the learners through engaging them in classroom activities (Jimenez-Silva & White-Taylor, 2010).

However, perennial problem of poor performance in Mathematics among learners remained a matter of great concern to all (Ihendinihu, 2013). Despite the continuous implementation of different teaching strategies suggested by researchers, the achievements of pupils in mathematics have persistently been poor (Olunloye, 2010). Moreover, there is a need to explore teaching methods that will improve pupils' academic achievement as current results indicate that collaborative learning can improve performance, long term memory, self-concept and social skills and positive attitudes toward mathematics (Johnson, 2009). Thus, creating more opportunities which were given through discussions, problem solving and working with peers improved learners' performance and attitude in toward Mathematics.

Based on the foregoing, it is therefore necessary to innovate teachers' teaching strategies to improve pupils' academic performance and attitudes toward Mathematics. Mathematics teachers also need to provide varied classroom activities for the pupils to develop their critical thinking skills. It is therefore important for the teachers to teach mathematics in the most creative and meaningful way.

STATEMENT OF THE PROBLEM

This study was to evaluated the impact of Math scrabble using Integers as teaching strategy to improve Mathematics performance and attitude of the Grade 6 pupils of Hambabauran Elementary School toward Mathematics during the school year 2018-2019. Specifically, it aimed to answer the follow-

ing questions:

1. What is the pretest performance of the pupil-respondents in Mathematics?
2. What is the posttest performance of the pupil-respondents in Mathematics?
3. What is the pupil-respondents' attitudes toward Mathematics?
4. Is there a significant difference between the pretest performance of the pupil-respondents in Mathematics?
5. Is there a significant difference between the pretest and posttest performance of the pupil-respondents in Mathematics?
6. Is there a significant difference between the posttest performance of the pupil-respondents in Mathematics?
7. Is there a significant difference between the pupil-respondents' attitudes toward Mathematics?

Hypotheses

1. There is no significant difference between the pretest performance of the pupil-respondents in Mathematics?
2. There is no significant difference between the pretest and posttest performance of the pupil-respondents in Mathematics?
3. There is no significant difference between the posttest performance of the pupil-respondents in Mathematics?
4. There is no significant difference between the pupil-respondents' attitude toward Mathematics?

METHODOLOGY

The study used the quasi-experimental research using matching-only design to evaluate the impact of Math scrabble using Integers to the pupils' academic performance and attitude in Mathematics. This study compared the Mathematics performance and attitude of the pupil-respondents exposed to flash cards and board work or the traditional method of teaching and those exposed to Math Scrabble using integers.

The participants of the study were the 40 Grade VI pupils of Hambabauran Elementary School, Hambabauran, Ubay, Bohol. Pupil-respondents were divided into two groups, the control group and experimental group. Statistical matching was used to equate respondents in terms of their academic grades in Mathematics during the First Quarter of School Year 2018-2019. The researcher used the second quarter topics – Set of Integers, Integers and the Number Line, Comparing and Arranging Integers, Addition of Integers, Subtraction of Integers, Multiplication and Division of Integers, Exponent and Exponential Notations, and Order of Operations Involving Integers. Teacher-made pretest and posttest were constructed to measure three skills, namely: Knowledge (60%), Comprehension (30%), and Higher Order Thinking Skills (10%).

Permission to conduct the study was requested by the researcher and submitted to the Schools Division Superintendent, Division of Bohol, through the School Principal prior to the experiment period. Given the approval, pilot test was conducted and result was duly analyzed. Each item was analyzed using the U-L Index Method by Stockliein (1957). Items with difficulty indices within 0.21 to 0.80 were retained. Items with difficulty indices less than 0.21 and greater than 0.80, but with the discrimination indices within 0.21 to 0.40 were revised. Items apart from the said limits were rejected. The results of the first item analysis were tabulated. The revised 50-item test was administered to a sample of thirty (30) Grade 7 students. An item analysis was conducted to see if there was an improvement on the difficulty and discrimination indices especially on the revised items. Then the final items were determined.

The results were used to evaluate the reliability and validity of the test. To determine the reliability of the half-test, the split-half technique was used where the scores of the respondents on the odd-numbered items were correlated with their scores on the even numbered items. The obtained split-half reliability of the test was 0.715. To obtain the reliability of the whole test, the Spearman Brown Formula was used. The reliability coefficient obtained was 0.724. The calculated values revealed that the test was highly reliable.

Another instrument used by the researcher was the Attitudes Toward Mathematics Inventory (ATMI) to investigate the underlying dimensions of attitudes of the pupil-respondents toward Mathematics. This instrument was developed by Tapia, M. and Marsh II, G. (2004). The items were modified using a Likert-scale format with the following anchors: 1 strongly disagree, 2 disagree, 3 agree, and 4 strongly agree. Fifteen items given the appropriate value for data analysis. The score was the weighted mean of the ratings.

After the second quarter topics in integers were discussed, posttest and the test for attitudes toward Mathematics were conducted to the pupil-respondents who were exposed to flash cards and or board works or the traditional method of teaching and those exposed to Math Scrabble using integers to determine their performance and attitude towards Mathematics. Subsequently, the pupils of the control group were also exposed to Math Scrabble using Integers.

REVIEW OF RELATED LITERATURE

In the teaching-learning process, the teacher knows what is best for the learners and in the best position to improve their learning skills through varied and meaningful teaching styles and strategies. Research reports indicated that many reasons account for pupils' poor achievement in the mathematics. Among these are poor teaching approaches and poor learning environment. This ugly trend of high failure rate in mathematics is a national disaster; it calls for mathematics educators to intensify efforts in research to offer solution that will improve the situation (Olunloye, 2010).

Bruner's (1973) constructivist theory as cited by Monteagudo (2011) is a general framework for instruction based upon the study of cognition. Much of the theory is linked to child development research especially on Piaget. The ideas outlined originated from a conference focused on science and mathematics learning. Curriculum should be organized in a spiral manner so that the pupils builds upon what they have already learned.

Game-based Learning (GBL) has developed a reputation to educators. It is built upon a constructivist type of learning. Constructivism suggests the need to provide pupils with the necessary tools so they can build, manipulate, and calculate their own procedures in order to solve a problem and learned in the process. This implies a participatory process by the pupils, who interact with their environment to solve the situation that is being set out to them (Abdul Jabbar & Felicia, 2015).

Likewise, Kendall (2011) cited in his journal on Cognitive-behavioral therapy, pioneered by psychologists Aaron Beck and Albert Ellis in the 1960s that cognitive therapy assumes that maladaptive behaviors and disturbed mood or emotions are the result of inappropriate or irrational thinking patterns, called automatic thoughts. Instead of reacting to reality of a situation, an individual reacts to his or her own distorted viewpoint of the situation. When the pupils do not like teachers' teaching strategy, pupils easily feel bored and inattentive resulting to poor performance.

In Vygotsky's (1978) theory of play and learning, the Zone of Proximal Development of a child changes over time, thus, independent practice is required to close the loop. As cited by Angeles, et. al. (2015), plays and games recreate a zone of proximal development of a child. In a play or game, a child always behaves beyond his/her average age, above his/her daily behavior.

Furthermore, Observational Learning Model of Bandura (1986), as mentioned by King (2010), states that pupils learn through imitation or modeling. By observing the co-members in the group, pupils can acquire knowledge, skills and attitudes, but, overall, the level of discussion was of a higher level for both groups. Each member of the group will contribute ideas to achieve the same goal. Thus, it will improve the performance of the pupils.

As cited by Hanafin (2014), Gardner defines intelligence as ability or set of abilities that allows a person to solve a problem or fashion product that are valued in one or more culture. This means that learners have different intelligences and these maybe independent abilities possessed by the learner themselves. A person can be low in one domain but high in another. Everyone has his own intelligences but in varying degrees of strength and skill. An especially intriguing aspect of his work is the insight that provides into those individuals who are capable of penetrating mathematical vision but who are baffled by the most obvious musical symbols. The possible drawbacks of collaborative learning are that some pupils prefer to work alone; low-achieving pupils may slow down the progress of high-achieving pupils; a few pupils may do most or all of the cognitive work while others do little called social loafing; some pupils may become distracted from the group's task because they enjoy socializing; and many pupils lack the skills needed to collaborate effectively with others, engage in productive discussions and explain their ideas or evaluate other's ideas effectively.

Playing board games is perceived as a potentially engaging form of supplementary learning that could enhance the educational process. While teachers strive to capture attention and activate imagination with the lessons, they take some time to consider how board games can play a more upfront role within the teaching strategies, curricula and within how they see child's development (Hainey, Connoly, Boyle, & Razak, 2016).

According to Delacrus (2010), "playing and learning mathematics do not have to be mutually exclusive activities". Playing board games can give young people opportunities to learn and develop foundational math skills that are aligned with the common core standards of mathematics through age-appropriate, fun, and engaging activities especially when rewards are given to the winners.

Also, Berland and Lee (2011), states that "when games are collaborative-that is, a game requires that players work joint pursuit of a shared goal – the computational thinking is easily observed as distributed across several participants". This raises the possibility that focus on such board games are profitable for those who wish to understand computational thinking skills in the teaching-

learning process in mathematics.

Sofroniou and Poutos (2016) in their study "Investigating the Effectiveness of Group Work in Mathematics", evaluated the effectiveness of implementing group work in a university – level mathematics module, in terms of students' performance and students' perceptions of learning. The researchers found out that group work learning helped to deepen students' understanding of the material, a conclusion that is also reflected in the final examination results prompted higher performance levels for the class which underwent group work learning on the specific topic of integration. They hold that cooperative learning creates a classroom environment in which learners listen to each other, develop love for peers, exchange ideas and be on task most of the time. They also come to feel for their classmates. Communication abilities of listening and questioning as well as the learner's polite interaction are improved. Since cooperative learning requires learners to be both physically and mentally engaged, it makes them to construct knowledge.

The attitude from the beginning of a difficult task will affect successful outcome. This idea crosses many different aspects of everyday life because attitude is one of the factors that affect learning. At the beginning of the class, the minds of the pupils must be set positively in order to have a better understanding in learning Mathematics. The achievement will vary depending on the attitudes exemplified by the pupils (Jameson & Fusco, 2014).

Attitude in Mathematics is also affected by perceptions. According to Bem (1965) as cited by Mata, Montiero, and Peixoto (2012), self-perception theory suggests that people infer their own attitudes, opinions, and other internal states partly by observing their behavior and the circumstances in which that behavior occurs.

In order to achieve effective learning outcomes, teachers should use effective teaching strategy to develop pupils' numeracy skills. One of the collaborative learning approaches believed to be effective is the scrabble using integers. Math scrabble board game is to play tiles marked with integers. After the initial operation is played, players take turns adding numbers to existing operation or adding operation to existing numbers. There are two types of tiles, one is consisting the operations and the other is consisting of integers. Math scrabble using Integers as a board game applied in the teaching-learning process is believed to be effective in developing pupils' academic performance and attitude in mathematics.

Effective teaching strategy involves not only clarity about what is to be taught but also a process of determining pupils' performance and achieved the mastery level of learning. Every pupil deserves to receive quality education through competent instruction. Thus, instructional strategies must provide pupils with effective learning for the pursuit of national capability and competitiveness.

FINDINGS

Table 1. Pretest Performance of the Pupil-respondents in Mathematics

Score	Description	Control Group		Experimental Group	
		Frequency	Percentage	Frequency	Percentage
39-40	Excellent	0	0.00	0	0.00
29-38	Very Satisfactory	0	0.00	0	0.00
19-38	Satisfactory	3	15.00	1	5.00
9-18	Fair	12	60.00	15	75.00
0 - 8	Poor	5	25.00	4	20.00
Total		**20**	**100.00**	**20**	**100.00**
Mean		**12.2**		**11.65**	

Table 1 presents the pupils' pretest performance in Mathematics. It could be gleaned from the table that both group of pupils, control and experimental group, got an average score within the range "9-18" which is described as "Fair". This denotes an exact grouping of pupil-respondents before the experiment.

Table 2. Posttest Performance of the Pupil-respondents in Mathematics

Score	Description	Control Group		Experimental Group	
		Frequency	Percentage	Frequency	Percentage
39-40	Excellent	0	0.00	0	0.00
29-38	Very Satisfactory	5	25.00	13	65.00
19-38	Satisfactory	13	65.00	7	35.00
9-18	Fair	2	10.00	0	0.00
0 - 8	Poor	0	0.00	0	0.00
Total		**20**	**100%**	**20**	**100%**
Mean		**23.4**		**29.85**	

Table 2 shows the pupils' posttest performance in Mathematics. The computed mean revealed that pupil-respondents exposed to Math Scrabble using integers (Experimental Group) got a score higher than those pupil-respondents exposed to flash cards and board work, customary method (control group) of teaching Mathematics. This means that appropriate teaching tools and strategies improved pupils' performance in Mathematics.

In line with the findings of Sofroniou and Poutos (2016) that group work learning helped to deepen learners' understanding, a conclusion that is

also reflected in the final examination results prompted higher performance levels for the class which underwent group work learning on the specific topic of integration.

Table 3. Pupil-respondents' Attitudes Toward Mathematics

Statements	Control Group			Experimental Group		
	W	VI	Ra	W	V	Ra
I am able to solve mathematics problem without too much difficulty.	3.15	SLA	13.5	3.75	A	4.5
Knowing mathematics will help me earn a living.	3.80	A	1	3.55	A	10
I think mathematics is quite easy.	3.25	SLA	7	3.6	A	8.5
I do not feel nervous in studying mathematics.	3.40	SLA	4	3.45	A	13
Thinking numbers is not a waste of time.	3.25	SLA	7	3.65	A	7
Mathematics is a worthwhile and necessary subject.	3.2	SLA	10.5	3.95	A	2
I usually enjoyed studying mathematics in school	3.75	A	2	3.90	A	3
Mathematics is important in everyday life.	3.2	SLA	10.5	3.75	A	4.5
I can see challenges in math.	3.3	SLA	5	3.5	A	11.5
I feel a definite positive reaction to numbers.	3.15	SLA	13.5	3.4	SLA	14
I like mathematics better than any other subject.	3.5	A	3	3.35	SLA	15
I can easily solve problems involving integers and other exercises in math.	3.2	SLA	10.5	3.5	A	11.5
I am motivated to apply mathematical concepts in into real life situations.	3.2	A	10.5	3.6	A	8.5
I do not get confused working with problems involving integers different from other classwork.	3.1	SLA	15	3.7	A	6
I can easily interact with my classmates and teacher during discussions specially when it involves integers.	3.25	SLA	7	4.05	A	1
Average Weighted Mean	3.31	Slightly Agree		3.65	Agree	

Table 3 depicts the pupils' attitudes toward Mathematics after the experiment period. The result revealed that pupils exposed to traditional method of teaching mathematics perceived that item number 2 (*Knowing mathematics will help me earn a living*) was rated the highest Weighted Mean of 3.80 with a descriptive rating of Agree. Item number 14 (*I do not get confused working with problems involving integers different from other classwork*) was rated the lowest Weighted Mean of 3.1 with a descriptive rating of Slightly Agree. The Average Weighted Mean of 3.31 perceived Slighly Agree on the pupils' attitude in Mathematics.

On the other hand, it could be gleaned from the table that pupils exposed to Math Scrabble using integers perceived that item number 15 (*I can easily interact with my classmates and teacher during discussions specially when it involves integers*) was rated the highest Weighted Mean of 4.05 with a descriptive rating of Agree. Item number 11 (*I like mathematics better than any other subject*) was rated the lowest Weighted Mean of 3.35 with a descriptive rating of Slightly Agree. The Average Weighted Mean of 3.65 perceived Agree on the pupils' attitude towards Mathematics.

According to Hanafin (2014), the possible drawbacks of collaborative learning are that some pupils prefer to work alone; low-achieving pupils may slow down the progress of high-achieving pupils; a few pupils may do most or all of the cognitive work while others do little called social loafing; some pupils may become distracted from the group's task because they enjoy socializing; and many pupils lack the skills needed to collaborate effectively with others, engage in productive discussions and explain their ideas or evaluate other's ideas effectively.

Table 4. Test of Difference Between the Pretest Performance of the Pupils-respondents' in Mathematics

	Mean		Mean Difference	t	Sig. (2-tailed)	Finding
	Control Group	Experimental Group				
Pretest	12.20	11.65	0.55	0.407	0.686	Not Significant

It can be gleaned that there is no significant difference between the pretest performance of the control group since the t-value of 0.407 with the computed significant value of 0.686 which is greater than 0.05 level of significance thus, the null hypothesis is accepted. This denotes that pupils have equal ability in Mathematics prior to the experiment period.

Table 5. Test of Difference Between the Pretest and Posttest Performances of the Pupil-respondents in Mathematics

Group	Mean		Mean Difference	t	Sig. (2-tailed)	Finding
	Pretest	Posttest				
Control Group	12.20	23.40	-11.20	-20.70	<0.001	Significant
Experimental Group	11.65	29.85	-18.20	-36.75	<0.001	Significant

The result portrayed that there is a significant difference between the pretest and posttest performance of the control group since the computed t-value of -20.70 with the computed significant value of <0.001 which is lesser than 0.05 level of significance. Likewise, there is also a significant differ-

ence between the pretest and posttest performance of the pupils exposed to Math Scrabble using integers since the computed t-value of -36.75 with a p-value of <0.001 which is lesser than the pre-set level of significance 0.05 thus, the null hypothesis is rejected. This means that both the Math Scrabble using integers and the flash cards and or board work improve pupils' academic performance in Mathematics.

The result of the study is supported by Delacrus (2010), which stressed that playing board games provide learners the opportunities to learn and develop foundational skills in Mathematics that are aligned with the common core standards of the subject.

Table 6. Test of Difference Between the Posttest Performance of the Pupil-respondents in Mathematics

	Mean		Mean Difference	t	Sig. (2-tailed)	Finding
	Control Group	Experimental Group				
Post-test	23.40	29.85	-6.45	-5.085	<0.001	Significant

The result revealed that there is a significant difference between the posttest performance the pupil-respondents exposed to traditional method like flashcards or board work and the Math Scrabble using integers since the computed t-value of -5.085 with the computed significant value of <0.001 which is lower than 0.05 level of significance thus, the null hypothesis is rejected. This outcome stipulates that the use of Math Scrabble in teaching integers as one of the competencies in Mathematics resulted in a higher academic performance.

According to Berland and Lee (2011), "when games are collaborative, the computational thinking is easily observed. Likewise, playing board games is perceived as a potentially engaging form of supplementary learning that could enhance the educational process (Hainey, Connoly, Boyle, & Razak, 2016).

Table 7. Test of Difference between the Attitude of the Pupil-respondents Towards Mathematics After the Experiment Period

Variable	Mean Scores		Mean Difference	t	Sig. (2-tailed)	Finding
	Control	Experimental				
Attitude	3.30	3.65	-0.35	-4.99	<0.001	Significant

The result has shown that there is significant difference between the attitudes of pupils exposed to flash cards or board work in a traditional method and those exposed to Math Scrabble using Integers, because the computed t-value of -4.99 with the computed significant value of <0.001 which is greater than 0.05 level of significance thus, the null hypothesis is rejected. It implies that the pupils were able to perform operations in integers better by using and by playing the board game as a teaching strategy in teaching integers. In line with the findings of Jameson and Fusco (2014) which states that "the achievement will vary depending on the attitudes exemplified by the pupils".

CONCLUSION

Based on the findings, the following conclusions were drawn:

1. There is a highly significant and positive effect of Math Scrabble using integers to pupils' academic performance and attitude in Mathematics. Pupils exposed to Math scrabble using Integers have better performance in the subject as compared to those pupils exposed only to Flashcards and board work in a traditional way of teaching. It can be deduced that using math board game, pupils learned Integers advantageously. Math scrabble board game allows pupils to gain a deeper understanding of mathematical concepts through their active involvement.
2. Math Scrabble remediates pupils' difficulties in Mathematics. This strategy is a solution to level up the variability of learning outcomes among pupils due to individual differences. Thus, pupils learn at the best and meaning way using effective method of teaching Mathematics.
3. Utilizing board games into mathematics classroom fosters pupils' positive attitude towards the Mathematics. Pupils recognized Math Scrabble as an effective teaching strategy in learning Mathematics.

RECOMMENDATIONS

Based on the conclusions, the researcher recommends the following:

1. Education supervisors and school administrators should encourage teachers to utilize and apply the Math Scrabble using Integers in teaching mathematics. Furthermore, they should also provide teachers with the training opportunities, resources, and support in implementing the new strategy in teaching Mathematics.
2. Teachers must utilize and recognize Math

Scrabble using Integers as effective teaching strategy in teaching mathematics. Moreover, teachers can enhance the mechanics of playing Math Scrabble using Integers to improves learners' Mathematics performance.

3. Learners should adopt Math Scrabble using Integers in order to enhance their academic performance and attitude in Mathematics.

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ONE STI APP: AN ANDROID SELF-SERVICE APPLICATION FOR THE STUDENTS

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ABSTRACT

In today's world, having a mobile app strategy can support any organization to satisfy customers' needs and stay competitive. The same can likewise be said in the education sector where mobile applications can help improve the delivery of quality services to students. The purpose of this project is to develop an Android self-service application for the students to enable them to access relevant information through a single point of entry while benefiting from the single sign-on experience. The students can view their profile, enrolled class schedules, assigned faculty members per class, periodical and final grades, assessments, payments, account adjustments, and the institution's newsfeeds. In consideration of the early business and academic value that can be reaped from every feature that is built and deployed, the iterative and incremental model was chosen as the most appropriate methodology in developing the app. For every increment of the app, the process of gathering requirements, analysis, design, coding and testing, and deployment was carried out. The feedbacks of students regarding their use of the app were gathered from the feedback module and user reviews in Google Play. These were analyzed using qualitative mode of analysis. The students appreciated the aesthetic look, usability, speed, and performance of the application. The result of the overall rating is close to somewhat satisfactory. This suggests that mobile application is effective in delivering service and support an institution's thrust of providing quality services to students.

Keywords: student services, mobile app, single sign -on, o365

INTRODUCTION

Nowadays, most schools have already adopted and implemented mobile app solutions to stay competitive, reduce cost, and improve teacher's productivity and quality of services for the benefit of its students and their parents as well. With mobile usage on the rise, schools should make developing mobile apps for students a high priority (Pimental, 2016). School mobile app features such as viewing of student records, student progress, school news, updates, notifications, events, calendars, private messaging, among others, help enable and improve the satisfaction and experience of the various stakeholders.

STI Education Services Group, Inc. (STI), one of the largest networks of schools in the Philippines, has acquired a commercial Student Information System (SIS) in 2013. An SIS is a computer system that manages student data and information such as classes, grades, financials, attendance, transcripts, among others. It is a core system of any university and integral to its operations and services to students (Mukerjee, 2012). The SIS solution that STI purchased is the Peoplesoft Campus Solutions (PSCS) and is a product of Oracle Corporation. It is a web-based application that can be used by the network of schools of STI through a central database.

One of the promises of PSCS is to improve student service through the reduction of wait times during enrollment. However, while PSCS has self-service functionality which provides students access where they can enroll in classes and view their grades online, its interface is not that engaging and aesthetically appealing based on the feedback of the Registrars and Faculty members. Also, doing self-service tasks such as the activation of gradebook and encoding of grades are very cumbersome and error-prone.

Aside from the not pleasant user interface of PSCS, it is also not optimized and responsive for mobile use. The interface of the PSCS site does not adjust automatically when viewed in mobile devices making navigation difficult to users. Similarly, the pages do not automatically orientates based on the screen size of the device.

Due to the limited functionality of PSCS, it will take extensive customizations in order to provide the information student needs. However, customizing a commercial application is very costly because it requires the expertise and support of third-party developers. Furthermore, customizing the look and feel of PSCS according to the STI brand would be very difficult because the developers under the Management Information System (MIS) department of STI do not have the expertise yet in customizing the PSCS pages and it will require time for the team to explore its possibility.

Currently, there are issues regarding the timely encoding and accuracy of students grades in PSCS. Based on reports being monitored regularly by the Head Office of STI, most of the Faculty members

cannot comply with the due dates of grades encoding. There are issues also on the accuracy of encoded grades resulting to a lot of changes of grades being requested by Faculty members on posted final grades. On the financials side, there are fraudulent cases already happened in schools specifically on cash payments that were not registered or transacted in PSCS because of dishonesty and the lack of control measures.

Being an education institution, STI has acquired licenses of Office 365 (O365) at a minimal cost from Microsoft Corporation which is intended to be used by its employees and students as their standard productivity tool. The tool has been adopted and widely used by the employees. However, on the part of the students, only a few are using it because of the lack of awareness. Most students still use their student number in logging on with the STI's Learning Management System (LMS).

It is in the above reasons that the MIS team, headed by the proponent of this study, proposed the development of a mobile application called One STI App. It is called "One STI" because the app will be the sole point of entry for students to access all relevant information they need about their course of study with STI while feeling the benefit of a single sign-on experience. It will be a self-service technology where they can access information, whether online or offline, at their convenience. The app will also be beneficial to both the school administration and management because some administrative tasks of school personnel will be streamlined which will lead to better productivity and reduced administrative costs.

STATEMENT OF OBJECTIVES

Generally, the objective of this project is to develop an Android self-service application for the students of STI. Specifically, the One STI app project aims to:

1. Support STI's thrust of providing quality services to students by enabling them to access information anytime and anywhere, online or offline, through the use of a self-service Android mobile application;
2. Develop an Android mobile application that allows students to access the following information:
   - Profile;
   - Enrolled class schedules;
   - Faculty assigned to classes;
   - Class periodical and final grades;
   - Academic Term GWA & Cumulative GWA;
   - Assessments, payments and account balances; and,
   - Institution's network newsfeed; and,
3. Determine the effectiveness of mobile app in delivering service to students

METHODOLOGY

In developing the One STI App project, the MIS team used the Iterative and Incremental model. The model was chosen to be the most appropriate one based on the following key considerations:

- The earlier a feature is built and deployed, the earlier the business value of the application is reaped;
- In case there are change requests between increments, they can be readily accommodated; and,
- Able to gather feedback early from end users as input to improve the application.

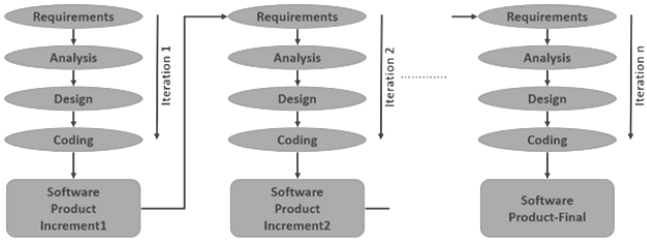

Fig. 1 Process flow of the incremental and iterative model
Source: http://hexagonkupan.se/incremental-vs-iterative-life-cycle.html

Figure 1 shows the phases of every iteration. It consists of the requirements, analysis, design, coding, and deployment phases.

In the Requirements phase, the STI Management Committee (Mancom), School Operation Managers, and students were consulted and interviewed to determine what specific information to display in the app.

In the Analysis phase, the requirements gathered are analyzed. The sources of data from PSCS to what tables and fields they are residing are determined. A collaboration with the PSCS champions and database administrator was also conducted in this activity. The repository of the STI newsfeed was coordinated with the Communications Group because they are the one maintaining the STI website.

In the Design phase, the overall architecture of the application was designed. The user interfaces were designed in cooperation with the Communications Group of STI to ensure that the design is in accordance with STI brand. The functionalities and architecture were presented and later on approved by the members of the STI Mancom. The architec-

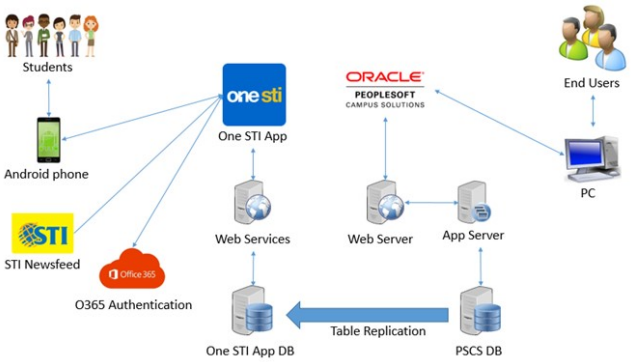

Fig. 2 The One STI App Architecture

In the Coding phase, the implementation or development took place. A cross-platform mobile development tool called Xamarin was used in the development. Considering that most of the data the One STI App uses are being processed by PSCS and stored in its database, the proponent together with the MIS team conducted intensive series of transaction testings and exploration activities to determine the tables and fields to where the data are stored and the business logic of each of the features to apply in the app. For every feature that was built, the MIS team and project stakeholders conducted the testing.

In the Deployment phase, the One STI App was deployed in Google Play using STI's subscription. Through Google Play, the students can easily download the app and submit their ratings and reviews.

The feedbacks of students provided in the Feedback module of the app and in Google Play were gathered after a month of use. As of that period, there were 47 respondents who provided comments, suggestions and ratings. A Likert scale was used in evaluating the feedbacks to determine the effectiveness of the application.

REVIEW OF LITERATURE

Self-Service Technology for Students

Self-Service Technology (SST) has been adopted by many educational institutions through the use of portals and kiosks. Through these tools, they believe that they can better serve the students and at the same time, improve employees' productivity and lower their operating costs. According to Cini (2015), the idea of using modern business practices that leads to more online and self-service help for students are very important given that most students interact online, and if they don't have a positive experience getting questions answered, it becomes a nuisance. From the assessment of Ngcwabe & Chiliya (2014), regarding the effectiveness of SST in the University of Witwatersrand, the overall attitude that students have towards SSTs are that they seek an easy to use service that will benefit them through checking their results or even perform the whole registration process to save costs, time, and avoid standing in long queues; and this must be convenient to use at any location. An interactive kiosk called KIOSQO designed by Malabanan & Abello (2018) provides efficient and accurate information management and quality assistance in grade inquiry and Transcript of Records request for the students and alumni.

Single Sign-On

Nongbri, Hadem & Chettri (2018) defined Single Sign-On (SSO) as a mechanism that allows users to authenticate mobile applications or web applications with single username and password to access multiple applications that uses the same authentication provider. This means that a user does not have to remember many login credentials for applications that he/she has access to. To summarize, a well-planned and well-executed SSO strategy can eliminate password-related reset costs and downtime, mitigate the risk of insider threats, improve user experience and authentication processes, and put the organization firmly in control of user access (Drinkwater, 2018).

Mobile App Features for Students

With the prevalence of mobile devices, many organizations including the education sector find the introduction of mobile applications for their customers a vital strategy in improving customer experience and satisfaction. In the study of El Said (2018) about the intention of students to use a mobile portal, the findings suggest that the design features affecting the use of mobile student portal are content sharing, personalized content and notification, location-aware notification, user control, and context switching and interrupted behavior. The proposed system of Rajebhosale et al. (2016) called SMART CAMPUS constitutes a web and Android mobile application versions which provide a smart and easy way for the execution of several academic operations to provide students with information regarding complaints, any placement activities, general notices, and important notices regarding all departments. The Android app developed by Lausa & Algara (2018) provides handbook, quiz and mini -dictionary features which intensify information dissemination ensuring understanding of College's policies, rules and regulations.

FINDINGS

The results of the early implementation of One STI App were gathered from the feedback of students through the Feedback module (see Fig. 3) and reviews in Google Play. The feedbacks are categorized and grouped according to the following:

1. Look and feel;
2. Speed and performance;
3. Experience on usability;
4. Error/crash reporting;
5. Availability of information; and,
6. Additional features

Each of the feedback may have supplied with comments or suggestions and rating. The rating scales used were:

1 – very dissatisfied;
2 – somewhat dissatisfied;
3 – neither satisfied nor dissatisfied;
4 – somewhat satisfied; and,
5 – very satisfied.

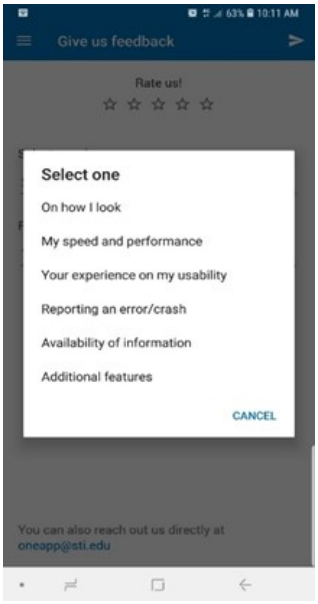

Fig. 3 One STI App Feedback Module

Table 1: Gathered feedback for the Look and Feel category

Feedback	Rating
Overall good design, but the font size of cumulative GWA annoys me coz it does not fit with my Samsung Galaxy S5. Maybe, make it a little bit small or make the box with icon bigger?	5
Sooo aesthetic	5
Very nice and helpful app for STIers. But I wish that we can update our profile information. Thanks.	5
Good graphics, easy to navigate and very useful!	5
Nicely done!	5
Good	5
Very nice app	5
Nice	5
Please improve the UI	3
Mean Rating	**4.78**

Table 1 shows almost all the students were very satisfied based on the feedbacks and average of the ratings. Most of the students appreciated the aesthetic look of the user interface. There was a suggestion that the user interface needs to be improved, however, the suggestion is vague as there was no way to determine on what specific design to improve.

At the time the feedbacks of students were gathered, the proponent found no feedback that falls into the Speed and Performance category. The understanding of the proponent from this result was that the students did not observe any issue related to speed and performance.

Table 2: Gathered feedback for the Experience on Usability category

Feedback	Rating
The app is very useful.	5
No class schedules are showing unlike my classmate's feed.	3
This is great. I love it.	5
I have not encountered any problem so far, very useful, continue to enhance this app for future students.	5
Great app! I really appreciate the support team. They helped me with my concern.	5
Yes, it is a good app now that I have log into it. Thank you developers for assisting on how to log in :)	5
This application helps me to look at my previous grades and also to look up my schedule.	5
Very useful app, looking forward for the other features	5
Great app! It's very convenient for everyone!	5
Helpful & easy to use.	5
I love STI	5
Mean Rating	**4.82**

Table 2 shows almost all the students were very satisfied based on the feedbacks and average of the ratings. The only feedback with a 3 rating was probably a class schedule data entry problem in PSCS. Overall, the students recognized the usefulness of the app.

Table 3: Gathered feedback for the Error/crash Reporting category

Feedback	Rating
My Samsung Galaxy A7 2016 cannot pass through the login. What to do??	2
Wrong schedule on Saturday. It should be PM not AM	None
When I tried to login on the app, it always close itself. After they assisted me with my problem, it now works! Just update your Chrome app if it crashes after tapping the log in button. It works for me so I think it will work for you. Kudos to the developers of this app!	5
Great assistance	5
I can't access why?	3
How to retrieve an account? I followed the instructions in the "forgot your STI O365 account?" link but it did not show up my credentials	5
It has been 30 minutes since I tried to login to this app and I'm stuck on the page where it shows the app's logo and says "Hi, ELVIN! Wait a moment..."	1
I can't login in to this App. I want to login in Student ID	2
It is not working!!	1
The app is not working	1
Can't login	1
Mean Rating	**2.60**

The purpose of the Error/Crash Reporting category was to gather feedback if the app is automatically reporting any system issues or crashes to the One STI App team. However, based on the feedback gathered in Table 3, the issues that were

raised are related to the data that was appearing in the app, the failure to login, and some vague comments with no specific details on what to address. While these feedbacks do not relate with the true purpose of this category, it was still important to get these data to address the issues encountered by the students. Since these are issues, expectedly, the ratings were low which means they were somewhat dissatisfied. The cause of issue regarding the wrong schedule of the student was probably on the wrong class schedule entry in PSCS.

Table 4: Gathered feedback for the Availability of Information category

Feedback	Rating
Wrong class schedule	3
Update Grades. Sync from the start of residency.	4
Good app so far! I would just kindly recommend if you could add a feature in which we can save a picture of some of our student payments/assessments and also a feature for changing my profile picture	4
Very good app to check your schedules, balance and grades. I hope the data are in real time.	5
No Grades. No Schedule.	3
Mean Rating	**3.80**

The information from the feedbacks derived from Table 4 can be inputs to check and correct the issues of the students and considerations for future development. Overall, the result of the average rating was somewhat close to satisfactory. Some feedbacks were not related to the availability of information specifically the wrong class schedule. The issue of no grades and no schedules by the student can also be checked in the PSCS system. The recommendation to access real-time data can be considered for future developments. The recommendation to change the profile picture can be done in their Microsoft O365 account.

Table 5: Gathered feedback for the Additional Features category

Feedback	Rating
Maybe in the My Profile Section. That you can change the picture and add and edit information.	5
Hoping for this app to have a "search-a-friend"-like feature	5
Add a GWA Calculator, which makes it a reliable app.	4
Integration to an Online Payment System.	4
I hope this app would be available for iOS soon!	4
Export grades to pdf version	4
Now it is working. I give it 3 stars. Hoping for more features like online payment and online enrollment.	3
Add the other option to login this app by using student ID number with password.	3
I want to login in Student ID	2
I should be able to log-in using my student number	1
Student number must be the way to log in	1
Mean Rating	**3.27**

Table 5 shows the result of the average rating was somewhat close to satisfactory. The following suggested additional features are similar to what the MIS team had planned to develop in the future or probably in the next iteration:

- Online enrollment;
- Online integration with third-party payment channels;
- iOS version;
- Socialization capability; and,
- Edit student profile

For the suggested GWA calculator and export grades to PDF, the proponent thinks these were valid suggestions, but their value is very low compared to the other suggested features, thus, may be put to low priority. The students' preference to use student ID as an alternative way to access the app can be considered in future developments.

Table 6: Summary of ratings

Category	Result
Look and feel	4.78
Speed and Performance	-
Experience on usability	4.82
Error/crash reporting	2.60
Availability of information	3.80
Additional features	3.27
Overall Rating	**3.85**

The result of the overall rating shown in Table 6 was close to somewhat satisfactory. This suggests that mobile application is effective in delivering service and support an institution's thrust in providing quality services to students.

CONCLUSION

Based on the results of the feedbacks of students gathered from the early implementation of One STI App, the following conclusions were derived:

1. The One STI App supports the STI's thrust of providing quality services to students. The app supported related studies about perceptions of students in using SSTs where they seek easy to use services that benefit them in accessing information leading to the saving of costs and time and avoiding long queues.
2. Through the One STI App, STI students can already view their profile, enrolled class schedules, faculty assigned to classes, periodical and final grades, academic term and cumulative GWA, assessments, payments, account adjustments, balances, and institution's newsfeed.
3. The One STI App is effective in delivering service to students given that the overall rating was close to somewhat satisfactory. The students appreciated the aesthetic look, usability, speed, and performance of the application.

RECOMMENDATIONS

Based on the aforementioned, the following recommendations are forwarded for consideration:

1. To avoid issues related to the accuracy of data that are appearing in the One STI App considering that the app gets its data from PSCS, STI needs to improve its validation controls on data entry in PSCS. A few students have given feedback about their wrong schedule. To avoid these, STI needs to have a stringent policy where the Academic Heads are required to review the schedules encoded by the Registrar in PSCS.
2. Soon, students may give feedbacks about the possible late encoding of grades. To avoid these, STI needs to enhance PSCS through add-on solutions given its limitation, to be able to setup due dates on the encoding of grades so that Faculty members will be obliged to encode student grades on time.

Other than these improvements and in reference to relevant suggestions made by some students, the following are suggested for future enhancement of the One STI App:

- Online enrollment;
- Online integration with third-party payment channels;
- iOS version;
- Edit student profile; and,
- Use of student ID as an alternative user ID

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ART TRAINING ASSESSMENT ON DESIGNING INSTRUCTIONAL VISUALS

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ABSTRACT

The study was conducted to determine the outcome of art training assessment on designing instructional visuals to the seventy trainees from different levels of teacher education program of Carlos Hilado Memorial State College, Talisay Campus. Specifically, this study described how trainees assessed themselves prior and after the art training. Findings in the post- training also described how they learned from topics and skills activities with significant results. To statistically answer the problem, the study employed descriptive and experimental methods to determine the level of self–assessment of trainees both for pre and post-training period and t-test to determine the difference between self-assessments. The questionnaire of 20-item test was designed by the researcher, validated and reliability tested. Results showed that the trainees have average level of self-assessment in the pre-training period and very high level of self-assessment in the post-training period when grouped as a whole and according to clusters. They were divided into three clusters to highlight commendable performance and which group needs further support. When compared, there was significant difference between results in pre-training and post-training as an entire group and according to clusters with very high level description. Another instrument was validated, reliability tested and utilized by judges to determine their level of visual art skills with overall rating of excellent performance. With these findings, possible means for future art trainings both for teachers and students can be facilitated. While lo-tech materials are mostly used in the cooperating schools, designing of instructional visuals in technical viewpoint is encouraged to equipped students with necessary skills before they are deployed to cooperating schools. Researches and curricular enhancement activities may include evaluation of implementation of instructional materials to effect quality instruction.

Keywords: Art, Design, Instructional Visuals, Post-Training, Pre-Training

INTRODUCTION

Teaching skills is limitless and should not evolve merely on lecture of concepts and theories of certain areas of learning. Hence, education students should be trained and provided with knowledge, skills and diverse techniques in designing instructional visuals with emphasis on its connectivity to the lesson, pedagogical aspects and technological elements which should be thought of (Mishra & Koehler 2006 cited by Vindollo, et. al., 2016) in the process of creation. This notion also stressed the importance of Technological Pedagogical Content Knowledge (TPACK) that our teacher education students have to be equipped with before stepping inside the classroom. What to teach and how to teach are components of the lesson plans with instructional materials needed in the delivery of the lesson. However, sometimes the use of technology like visual materials becomes ineffective because of insufficient knowledge on the true purpose and proper use of such technology. Another aspect that has to be considered in preparing our on becoming teachers in terms of teaching principles is on the appropriateness of visual materials to be used according to the characteristics of audiences/ learners (Lucas, 2015) who have diverse learning needs. These concerns can be addressed by offering a venue calibrated by experts in this field to affect students' way of preparing visuals and textual learning technology. Hence, education students have to be creative and be trained because in the future, they will face several classroom preparations such as bulletin boards, visual aids, 3D models, lettering styles and even stage decorations. These types of instructional materials are so called lo-tech materials (Garo, 2008) which are still practical and useful to education students who will be deployed in schools where internet access is inadequate.

To facilitate these needs, a ten- day art training on designing instructional visuals was conducted to provide a gate- through for students to gain knowledge in visual arts and how the principles of design/arrangement are applied. This training was an avenue where trainees' social skills were developed and bolstered their art talents. Likewise, new techniques in designing instructional materials were introduced through the transformation of recyclable materials into creative visual forms. Likewise, they have developed awareness on their role as students in contributing to the green culture program of the College. The use of recyclable materials was a revolutionary approach by which creative ideas were processed and revealed through individual and group activities.

Thus, the study on designing instructional visuals was conducted to reveal results on student's

visual art skills and to address feedbacks and observations about students' lack of preparations and ability to prepare instructional aids (conventional types) in a technical viewpoint.

STATEMENT OF THE PROBLEM/ OBJECTIVES OF THE STUDY

The study aimed to determine the outcome of art training assessment on designing instructional visuals to the trainees from different levels of education students of Carlos Hilado Memorial State College, Talisay Campus. Specifically, the study sought answers to the following questions:

1. What is the level of self-assessment of trainees in the pre-training and post-training performance in art when taken as an entire group and when grouped according to clusters?
2. Is there significant difference in the self-assessment of trainees in the pre-training and post-training performance of trainees when taken as an entire group?
3. Is there significant difference in the self-assessment of trainees in the pre-training and post-training by cluster?
4. What significant outcome do trainees have obtained from the art training assessment on designing instructional visuals?

Hypotheses

The hypotheses are presented for testing the significance of the findings:

1. There is no significant difference in the pre -training and post-training performance of education students when taken as an entire group.
2. There is no significant difference in the pre -training and post-training of trainees by cluster.

REVIEW OF LITERATURE

The designing of instructional visuals can be deeply understood when a person had inherent talent or proper training in visual arts. Art appreciation does not stop by merely watching different art forms. It can be cultivated by exposing and engaging oneself in any art activities or training. According to Plato, art is the whole spirit of man. Many definitions had explained how important art is in the different walks of life. Art has been anchored with the theory of Pragmatism (Spiegil,1998) where art exists to serve a function and is conceptualized in terms of its effects on its audience, and purposes. It was considered to accomplish the creation of specific shared experiences, namely: as a means of enhancing experience and thought; as a means of escape from, or consolation for reality; as a means of perceiving a higher, more perfect, or ideal reality; as a source of pleasure or delight; as a means of promoting cultural and historical community or continuity as instructive, didactic, or propagandistic; as therapeutic; i.e., as healing or purgative; as a means of communication.

In the Philippine article "Arts and Hearts" by Jallores, A. (2016), emphasized the big role of a teacher in bringing out the best in learners, including their creative flair. Teachers, in this premise were trusted upon to provide learners with opportunities that will ignite their creative spark into a passionate fire with the advent use of today's technology and open-mindedness of the 21st century. These were some of the teachers' tools used not only to tell, but to demonstration diverse forms of visual arts, such as painting, drawing, photography, sculpture, and even films from all over the world, without the need to spend much. On the issue "Why encourage children to get into the visual arts?" the Parenting.com reported some of the benefits of cultivating children's skills in the visual arts. A Harvard research group established a notion that "participation in a school arts program increases a child's ability to observe the world carefully and discard preconceptions and envision something and then create it. They also believed that the child goes beyond just learning a skill to express a personal voice, problem-solve and persist despite frustration and setbacks. He or she reflects on the results and ask what could improve them." The ability to be observant, critical, creative, expressive, persistent and reflective are just some of the skills learners should possess in order to meet the challenges of the 21st century.

Another growing bodies of researches entitled: How the Study of the Arts Contributes to Student Achievement and Success (Ruppert, S. 2006, p.8) had presented compelling evidence connecting student learning in the arts to a wide spectrum of academic and social benefits. These studies documented the habits of mind, social competencies and personal dispositions inherent to arts learning. In addition, the study had shown that what students learned in the arts may help them to master other subjects, such as reading, math or social studies. Furthermore, findings also yielded that students who participated in arts learning experiences often improved their achievement in other realms of learning and life. In a well-documented national study using a federal database of over 25,000 middle and high school students, researchers from the University of California at Los Angeles found students with high arts involvement performed better on standardized achievement tests than students

with low arts involvement. Moreover, the high arts-involved students also watched fewer hours of TV, participated in more community service and reported less boredom in school.

On the research "To Understand the Role of Visual Arts in the Teaching and Learning of Science (Dhanapal, et. al., 2014) yielded that visual arts play a useful role in the teaching and learning science. Since visual arts had been proven to play an important role in the development of individuals, many researchers advocated for its integration in science lessons at all levels of study which promoted higher order thinking skills and provided abilities to survive in the 21st century.

To provide further opportunities for learners, prior knowledge and abilities was thought to have a gate through by means of research –based trainings not only in art but in other fields as well. This belief had been supported by the study conducted by Koneru, K. (2018) entitled: "Needs and Methods of Training and Development". In this study, training was described as the act of increasing the knowledge and skills of an employee for doing a particular job. He also stressed that training was a short-term educational process and utilizing a systematic and organized procedure by which employees learn technical knowledge and skills for a definite purpose. In other words, training had positively contributed to the improvement, modification and shaping employee's knowledge, skill, behavior, aptitude, and attitude which were required in the job, and organization. This conclusive statement was strengthened by the findings of Yazdanifard, R. (2019) on the Impact of Employee Training and Development on Employee Productivity which highlighted training and development as an instrument that aid human capital in exploring their dexterity. Thus, training and development was considered vital to the productivity of organization's workforce. Similar verdict was found by Edralin (2011) which aimed to determine the current training and development experiences and the emerging best practices of large corporations in the manufacturing and non-manufacturing sectors in the Philippines. Results also revealed the importance of training in improving job performance not only in terms of technical competence, but for the development of cultural behavior and values congruent with that of the company's core values and philosophy.

METHODOLOGY

The study utilized the descriptive and experimental methods to determine the level of self – assessment of trainees both for pre and post-training phase. The art training was participated by trainees composed of students from different levels of teacher education program of the College of Education. To test whether or not difference exists between the self-assessment of trainees during the pre and post-training performance as a whole and grouped according to clusters, T-test of dependent samples was used at .01 alpha level. To validate the outcome of the study, the trainees' visual outputs were assessed by experts and qualitative interview was conducted.

The twenty item self-made questionnaire composed of essential topics namely: Elements of Art, Principles of Design, Designing Instructional Visuals and Lettering were validated by the jurors who are experts in terms of pedagogical and technological aspects and are instructors in Educational Technology courses. It was reliability tested at .946 utilizing the Cronbach's Alpha based on standardized items. The test was conducted to the 20 education students who were not the respondents/trainees of the art training. At first, there were 170 students who confirmed to join but later declined in number due to the conflict of classes during that summer. Among the trainees, only 70 were chosen as respondents for their consistent attendance in the entire schedule of training. The trainees were divided into three clusters namely, Cluster A with 23 Bachelor of Secondary Education (BSEd) students; Cluster B composed of 13 graduates of teacher education program and Cluster C consists of Bachelor of Elementary Education (BEED) students, all from different levels. Clusters were made to determine further the level of visual art skills when grouped according to programs before and after the training.

Prior to the training, the trainees were instructed to accomplish the questionnaire as to how they rate themselves in terms of knowledge and skills in visual art using the Five-Point scale ranges from 1.00 – 1.80 Very Low; 1.81 – 2.60 Low; 2.61 – 3.40 Average; 3.41 – 4.20 High & 4.21 – 5.00 Very High. This instrument was utilized to determine their level of self-assessment, strength, weaknesses and prior knowledge. As a result, additional information and activities were incorporated to cater their needs. The same instrument was used during the post-training.

This ten- day training design was officially approved by the College President. The first day was started by an opening program held at the Audio Visual Room of CHMSC. It was followed by a three- day lecture on art principles and demonstration of art techniques (Albert Bandura, 1997) for the trainees to observe, imitate and create new ideas using recyclable materials and other available materials. The hands-on activities were conducted at the Drafting Shop of the College. The next seven days of training was scheduled for the actual application of learned techniques and principles from

the training. Eight bulletin boards were provided for them to bring out their artistic skills in terms of designing instructional visuals. After which, interviews were conducted to validate results of their self-assessment.

In terms of trainees' (visual art skills) post performance, their outputs were then evaluated with a mean of 4.40 described as excellent by the seven experts composed of drafting instructors and teachers in Educational Technology courses of CHMSC. Before the utilization of the instrument, it was validated at a mean of 4.8 and reliability tested at .899 using the Cronbach's Alpha with a criterion composed of the following items: Effective Communications (It conveys the message quickly and clearly); Attractiveness (Colors and arrangement catch and hold interest); Balance (Objects are arranged stability is perceived); Unity (Repeated shapes or colors or use of borders holds display together); Interactivity (The style and approach entice learners to be involved); Legibility (Letters and illustrations can be seen from a good distance); Correctness (It is free from grammar errors, misspelled words, and ambiguity); and Durability(It is well-constructed, items are securely attached) by Newby, et. Al, 1996 cited by Lucas and with a modified rating scale of 4.21-5.00 = Excellent; 3.41–4.20 = Superior; 2.61- 3.40 = Very Good; 1.81- 2.60 = Good; 1.00 –1.80 = Fair.

To test the reliability of the modified criteria in evaluating instructional visuals, the 33 faculty members from DepEd schools specialized in Technology and Livelihood Education (TLE) and some were from the College of Education of CHMSC was tapped to judge the five instructional bulletin boards designed by another group of education students who were not the respondents/trainees of the art training.

After the ten-day training, a closing program was conducted with the presence of the College President and Campus Director and the certificates of completion were given to all trainees who complied all the required outputs. Their outputs were then displayed at the corridor for public viewing.

After the training, results were gathered, tabulated and computed.

Conceptual Framework

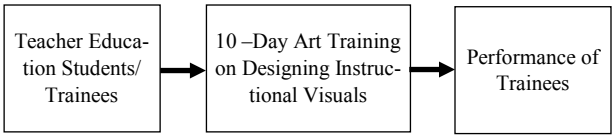

Figure 1. Paradigm Showing the Conceptual Framework of the Study

FINDINGS

Table 1. The level of Self-assessment of Trainees in the Pre-Training and Post- Training Performance in art when Taken as an Entire Group and When Grouped According to Clusters

Level of Self-assessment	PRE-TRAINING			POST-TRAINING		
	M	SD	I	M	SD	I
As an Entire Group	2.81	.717	A	4.77	.552	VH
Cluster A (BSED)	3.08	.683	A	4.77	.425	VH
Cluster B (Graduates)	2.63	.575	A	4.80	.174	VH
Cluster C (BEED)	2.69	.753	A	4.76	.711	VH

Legend: A- Average; VH –Very High
BSEd- Bachelor of Secondary Education
BEEd- Bachelor of Elementary Education

During the pre-training period, the entire group of trainees assessed themselves with a mean of 2.81 at .717 standard deviation interpreted average. While in the post-training phase, the trainees obtained a mean of 4.77 with standard deviation of .552 was described very high.

When grouped according to clusters, Cluster A (BSED) had a mean of 3.08, Cluster B (Graduates) at 2.63 and 2.69 for Cluster C (BEED). All clusters have equal footing during the pre-training period. In the post-training phase, the three clusters have similar means such as 4.77, 4.80 and 4.76 with very high level of self-assessment respectively.

Table 2. Difference between the Pre-Training and Post-Training Results of Trainees' Self-Assessment as an Entire Group

Level of Self-Assessment		Mean	t	df	p
As an Entire Group	Pre- training	2.81	-18.767**	69	.000
	Post-training	4.77			

***Significant at 0.01 alpha*

When the pre-training and post-training results were compared, the obtained mean in the pre-training period was 2.81 with average interpretation and at 4.77 mean in the post-training with very high description yielded a p-value of .000 was statistically significant at .01 level.

These findings revealed improvement in the post-training of trainees which were evident in their actual outputs.

Table 3. Difference in the Self-assessment of Trainees in the Pre-training and Post-training Performance of Trainees by Cluster

Level of Self-assessment		Mean	t	df	p
Cluster A	Pretest	3.08	-11.396**	22	.000
	Posttest	4.77			
Cluster B	Pretest	2.63	-12.798**	12	.000
	Posttest	4.80			
Cluster C	Pretest	2.69	-11.778**	33	.000
	Posttest	4.76			

***Significant at 0.01 alpha*

When the results of all clusters in the pre-training and post-training were compared, the computed p –value of .000 was statistically significant at .01 level. The findings indicated that there was significant difference between the pre-training and post-training results of the three clusters. Regardless of their clusters, the study shows that trainees have the same self-assessment of their learning which also determines the same satisfaction.

The result also implied that trainees will do better in the teaching job when rooted with foundation. The same result was found in the research conducted by Wick et.al. in 2006 that training served as extending device into the future workplace increase performance when the learners apply their new skill to the job.

CONCLUSIONS

In view of the findings, the following conclusions were formulated:

1. The level of self-assessment of trainees in the pre-training phase is average and very high in the post-training when grouped entirely and according to the three clusters respectively.
2. The trainees' self- assessment as an entire group is average in the pre-training period and very high in the post-training phase since new information has been processed cognitively and acted upon in the skills activities.
3. The trainees have an average level of self-assessment during the pre-training and very high when grouped according to clusters in the post-training period.
4. The outcome of the art training in terms of students skills was excellent which have provided the trainees several models/ opportunities adapting the combination of styles of creation utilizing the basic elements of art and how the principles of design and lettering are applied in designing instructional visuals. The competencies instilled in them have developed their skills to conceive, generate, organize, refine and complete artistic ideas.

RECOMMENDATIONS

Based on the conclusions derived from the study, the following recommendations were drawn:

1. Courses which deal with instructions and preparations of instructional materials may include students' art skills development activities not only on the use of electronic technology but on the development of lo-tech materials (conventional) which are prevalent in the actual classrooms where teacher education students are deployed during their internship.
2. In-house training/Seminar- workshop on the development of instructional materials of different types can be conducted to teachers by building up prior learning. In this way, the learned experience by teachers may be brought down to classrooms to provide balance of input and productivity. Technical designers can be tapped as sources of expertise.
3. The use of variety of instructional modes in the preparation of course syllabi may be integrated as curricular enhancement program.
4. For the researchers, a study on the implementation, evaluation on the effectiveness of instructional technology interventions in actual classroom environment may elicit more results.

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EFFICIENCY OF TEACHER'S CLASSROOM–BASED MANAGEMENT IN REDUCING STUDENTS' STRESS

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ABSTRACT

The main purpose of the study was to ascertain the efficiency of teacher's classroom- based management in reducing student's stress in selected public high schools. This sought to answer the relationship between the level of student's stress and the perceived stressors of the respondents, and the relationship between teacher's classroom – based management and student's stress. The researcher's utilized the descriptive survey to attain its primary goal. Adapted questionnaires were applied to determine student's common stressors and stress indicator (Counseling Team International, 2011) and the status of teacher's classroom-based management (VanHousen, 2013). Further, there were a total of 250 student–respondents and 50 teacher-respondents as part of the survey from the selected CAMAG public high schools. After subjecting data to documentary and statistical analysis, the results revealed that the more the students are exposed to the different stressors the more students get stressed. It was found out that classroom – based management brings out the best among students including increased on-task behavior and academic engagement. With the light of these findings, the researcher's recommended that teachers need to grow professionally by attending more related seminars and in-service trainings for their professional advancement; teachers should constantly use techniques and approaches to motivate and improve students towards academic works; school heads and administrators are encourage to enhance the school programs that will help every teacher to improve their strategies in teaching to build a stress-free learning environment; and the school should implement programs in mentoring students in managing emotions, stress, anxiety, and build resiliency.

Keywords: Classroom Management, Efficiency, Teachers, Stress, Students

INTRODUCTION

Stress is becoming more prevalent in any educational settings. It happens to anyone particularly the students who are confronted with different challenges in terms of their academic, family situation, friends and many more (Ghatol, 2017).

However, classroom management of the teachers has been viewed as one of the effective strategies to reduce student's stress (Hanke, Harms, Hester, et. al., 2014). By developing favorable teacher-student relationships, student's stress is reduce (Yildiz, 2017).

Students in the Philippines experience a unique cluster of stressors. Students are threatened with interpersonal, intrapersonal, academic and environmental stressors. With regards to that, the universities in the country sees that teacher's supportive classroom management technique help students to cope up with these stresses (Guevarra & Cimanes, 2017).

In the local setting, students in Bohol experience various environmental and personal stressor. Students experience greater level of stress related to academics as a result of new demands. The necessity for an effective classroom management technique has been extremely given in accent by the local educational implementers (Gamutan, Anora, Jala, et. al., 2017).

This scenario triggers the researchers to undertake this study to determine the efficiency of classroom management in reducing student's stress. The findings of the study may serve as the bases for the improvement of classroom management to help students cope with their stress for their holistic development.

STATEMENT OF THE PROBLEM

The main purpose of the study is to ascertain the efficiency of teacher's classroom- based management in reducing students' stress in the selected public high schools in the Eastern part of Bohol.

Specifically, it seeks to answer the following questions:

1. What are common stressors of the student's in terms of:
   1.1 Academic factors;
   1.2 Environmental factors;
   1.3 Personal factors; and
   1.4 Relationships factors?
2. How does stress affect the different aspects of student's life in terms of:
   2.1 Physical;
   2.2 Sleeping habits;

2.3 Behavioral;
2.4 Emotional; and
2.5 Personal habits?

3. What is the efficiency of the teacher's classroom – based management in terms of:
   3.1 Classroom rules;
   3.2 Enhancing classroom environment; and
   3.3 Reinforcement strategies?
4. Is there a significant relationship between the level of student's stress and the perceived stressors in terms of:
   4.1 Academic factors;
   4.2 Environmental factors;
   4.3 Personal factors; and
   4.4 Relationships factors?
5. Is there a significant relationship between teacher's classroom – based management and student's stress?

METHODOLOGY

Design

To evaluate the efficiency of teacher's classroom- based management in reducing students' stress of selected public high schools in the Eastern part of Bohol, the researchers used the descriptive survey method.

This design used to depict the participants in an accurate way.

The researcher collect data through observational and survey based with the aid of questionnaire about a specific topic.

Instruments

The researcher used two sets of questionnaire specifically for the purpose of this study. The first set is a survey questionnaire with three parts: the student's profile such as age, sex and grade level; common stressors of the students; and stress indicator questionnaire composed of 56 items to determine their stress level on physical, sleep, behavioral, emotional and personal habits. The said questionnaire was adapted from the Counseling Team International (2011).

Another set of questionnaire specifically for teacher-respondents including their profile in terms of age, sex and years of teaching experience; and the status of teacher's classroom based management in terms of classroom rules, classroom environment and reinforcement strategies. This comprises 50 items adapted from the study of VanHousen (2013) on "Effective Classroom Management in Student- Centered Classrooms".

Environment and Participants

The locale of the study were from five (5) districts in the eastern part of the province of Bohol namely: Candijay, Alicia, Mabini, Anda and Guindulman (CAMAG). There were 250 students and selected 50 teachers participated in this study. The five (5) identified big student population included in this study namely: Candijay National High School (District of Candijay), Alicia Tech. Voc. (District of Alicia), San Roque High School (District of Mabini), Candabong High School (Distict of Anda) and Mayuga High School (District of Candijay).

Data Gathering Procedures

The researchers go through the proper procedure of securing the approval from the Dean of the College of Advanced Studies and official permit from the Supervisor of the Department of Education in the province of Bohol and the School Head of each school to conduct this study, the researchers likewise asked permission to the teachers for the purpose of this study. Questionnaires were distributed personally to the respondents and explained to them thoroughly the importance of the study and assisted in answering the questionnaires to clarify the difficult words or questions to the respondents. The said respondents were given ample time to answer the questions. It was then retrieved the answered questionnaires.

After gathering the data it was then tallied, tabulated, collated and were subjected to descriptive and inferential statistics for the purposes of analysis and interpretation in accord to the specific problems of the study. Thus, adding empirical data.

Statistical Treatments

To determine the efficiency of classroom – based management in reducing student's stress, the Percentage, Weighted Mean, T- test for independent samples and Spearman Rank Correlation Coefficient were used.

LITERATURE REVIEW

In today's world of competition, stress has its roots into the society spreading its ill effect to the productive section of the society that is the students. Stress is explained by (Pargman, 2016) as an uncertain reaction to external and internal factors that means a negative or positive reaction to environmental stimuli.

Stress affects people from all walks of life. It simply cannot be avoided because it is part of being a human. In fact, a lot of people experience stresses

every day especially the students (Guszkowska, 2015). Students are confronted with several stressors significantly related to academic factors, relationships factors, personal factors and environmental factors which adversely affect students (Yusoff, Yen Yee, Heng Wie, et. al., 2011).

Therefore, teachers are expected to create a classroom setting, which promotes the academic success and emotional well-being of the students. Teachers, in other words, play various roles in a typical classroom but surely one of the most important roles is when it comes to classroom management (Marzano, 2015).

On the other hand, classroom management is an essential component to the classroom learning environment. Classroom management refers to all the things that a teacher does to organize students, space, time, and materials so that student learning can take place. As put by Williams (2014), classroom management involves how the teacher works, how the class works, how the teacher and students work together and how teaching and learning takes place, giving students a sense of belongingness and making a positive teacher –student interaction.

In addition, according to Vygotsky's (1962) theory states that social interaction plays a very important role in the development of an individual and could not be understood without looking into the social and cultural context. The teacher should interact with the students in the learning process inside the classroom to maximize positive teacher – student relationship.

This is also anchored by Skinner's Operant Conditioning Theory (2000), the best way to modify behavior is to modify the environment. Thus positive reinforcement strengthens a response by presenting something pleasant after the response and negative reinforcement strengthens a response by reducing or removing something unpleasant.

According to Taylor (2017), the use of reinforcements is an effective strategy to reduce any disruptive behavior of students such as noisy – making and bullying. With this, students feel safe making the classroom a conducive one for their learning and this may lead to a stress-free environment. Reinforcement strategies are another significant component of classroom management. It involves the use of rewards and punishment in modifying environment. Positive reinforcement is a behavior management strategy (Whitaker, 2018). The goal of positive reinforcement is to give something to somebody to make a behavior happen again (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2015).

According to the Educational Act of 1982, in Section 2; states one of the rights of the students in school is the right to receive primarily through competent instruction, relevant quality education in line with national goals conducive to their full development as persons with human dignity.

Further, the Code of Ethics for Public School Teachers Republic Act (4670) Section 7, states that the work of a teacher in the development and guidance of the young is a tremendous responsibility for which he is accountable to God, to his country and to posterity. It is a trust of which every teacher should strive to be worthy and should be his self – imposed duty in improving himself constantly and professionally.

Therefore, students are entitled to receive quality instruction and assistance from their teachers as part of their classroom management in order to become globally competitive graduates as envisioned by the institution. Schools and classrooms need to be a safe and welcoming place that provides the necessary academic, as well as social and emotional supports, all students need.

FINDINGS

In table 1.1, students rated "lots of group works" as the highest stressor receiving a weighted mean of 2.97 "Agree". According to Prabu (2015) and Mathew (2016), many students reported their experience of high academic stress which have resulted from having several group works in a comparatively very small amount of time. In addition, having "lower grades" causes the students with a least stress receiving a weighted mean of 2.64, categorically described as "Agree". According to Passer and Smith (2010), most students who got stressed by getting a poor grade on an exam spend more time studying for a final. Getting greater chance of a higher grade on final reduces their stress.

Table 1.1 Students' Common Stressors in terms of Academic Factors
N = 250

Statement	WM	DI	Rank
Increased class workload (assignments, etc.)	2.86	A	3
Lower grade	2.64	A	8
Many hours of studies	2.85	A	4
Language difficulties	2.65	A	7
Procrastination	2.78	A	6
Examinations	2.96	A	2
Missing lectures frustration due to misunderstanding lectures	2.82	A	5
Lots of group work	2.97	A	1
Average Weighted Mean (AWM)	**2.81**	**Agree**	

Legend:

Rating Scale	Descriptive Interpretation (DI)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree (D)
1.00 – 1.74	Strongly Disagree (SD)

In the overall, academic stressors received an average weighted mean of 2.81, categorically described as "Agree". This claim was strengthened by Nikitha, et. al. (2014) that academic is the major source of stress among students which may lead to low self –esteem and psychological problems such as anxiety and depression.

Table 1.2 Students' Common Stressors in terms of Environmental Factors
N = 250

Statement	WM	DI	Rank
Bad living conditions	2.55	A	2
Placed in an unfamiliar situations	2.54	A	3
Poor facility in school	2.48	D	4
Misbehavior among classmates	2.64	A	1
Punishment in the class	2.43	D	5
Average Weighted Mean (AWM)	**2.53**	**Agree**	

Legend:

Rating Scale	Descriptive Interpretation (DI)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree (D)
1.00 – 1.74	Strongly Disagree (SD)

Table 1.2 depicts that among the environmental stressors, students get the most of their stress in "misbehavior among classmates" receiving 2.64 weighted mean categorically described as "Agree". Classroom misbehaviors are disruptive to classroom order and cause trouble to teachers that adversely affect the order, teaching, and learning in the classroom (Sun & Shek, 2012, and Castle, 2011).However, taking "punishment in the class" ranked the lowest in this category receiving a weighted mean of 2.43 "Disagree". Environmental stressor is rated by the students with an average weighted mean of 2.53 firmly described as "Agree". It paints that students get stressed caused by environmental factors as indicated also in the study of Najafi, et. al, (2018).

Table 1.3 Students' Common Stressors in terms of Personal Factors
N = 250

Statement	WM	DI	Rank
Combining job with studies	2.56	A	8
Change in living environment	2.52	A	9
Change in sleeping habits	2.70	A	5
New responsibilities	2.93	A	1
Health problems	2.74	A	4
Poor eating habit	2.58	A	7
Financial difficulties	2.90	A	2
Lack of computer know-how	2.68	A	6
Future worries	2.81	A	3
Worry about lower standard of living than classmates	2.42	D	10
Average Weighted Mean (AWM)	**2.68**	**Agree**	

Legend:

Rating Scale	Descriptive Interpretation (DI)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree (D)
1.00 – 1.74	Strongly Disagree (SD)

Table 1.3 affirms that having "new responsibilities" among students is the most common personal stressors rated with a 2.93 "Agree" weighted mean. According to Yumba (2008), adapting to new responsibilities as revealed in the results of their study is one of the stressors among students. Thus too many responsibilities stress students.

The table also affirms having "worry about lower standard of living than classmates" is the least source of stress in this category having a weighted mean of 2.42 or "Disagree".

This is in consonance with the study conducted by Fosnacht (2013), in which the results of his study exposes that having worries about lower standard of living than of their classmates has less impact in their stress and has less change in their behavior due to their finances.

In general, personal factors received an average weighted mean of 2.68 categorically described as "Agree". This means to say that students agreed that personal factors as enumerated in Table 1.3 are source of their stress. According to Dyrbye, et. al., (2008), that a number of factors—including personal factors such as those enumerated in the table — have been found to contribute to the stress among students.

Table 1.4 Students' Common Stressors in terms of Relationship Factors
N = 250

Statement	WM	DI	Rank
Working with new people	2.50	A	2
Troubles with boyfriend or girlfriend	2.07	D	3
Conflict with parent's	2.72	A	1
Average Weighted Mean (AWM)	**2.43**	**Disagree**	

Legend:

Rating Scale	Descriptive Interpretation (DI)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree (D)
1.00 – 1.74	Strongly Disagree (SD)

Table 1.4, in relationship stressors category, students get stressed the most on "conflict with parents" having a weighted mean of 2.72 "Agree". Kai-wen (2010) in his study on stress sources among students identified family factor as a source of stress for secondary school students characterized by a lack of parent-child communication and shallow understanding of each other's expectation causing stress among students.

On the contrary, students rated the lowest on the stressor "troubles with boyfriends/ girlfriends" in this category with a weighted mean of 2.07 or "Disagree". As to the study conducted by Bernstein (2008), the findings showed that students who have fight with boyfriends/ girlfriends are reported to experience occasionally low levels of stress.

Nevertheless, in this category, it was graded by the students with a weighted mean of 2.43 categorically described as "Disagree". It exemplifies that students disagree that relationship factors is a

source of their stress. Having good relationship to others can enhance confidence and positive attitude.

Table 2.1 How Stress Affect Students in terms of Physical Indicators
N = 250

Statement	WM	DI	Rank
My body feels tense all over.	3.04	ST	2
I have a nervous sweat or sweaty palms.	2.79	ST	3
I have a hard time feeling really relaxed.	3.13	ST	1
I have severe or chronic lower back pain.	2.48	AN	11
I get severe or chronic headaches.	2.62	ST	7.5
I get tension or muscle spasms in my face, jaw, neck or shoulders.	2.44	AN	13
My stomach quivers or feels upset.	2.62	ST	7.5
I get skin rashes or itching.	2.22	AN	16.5
I have problems with my bowels (constipation, diarrhea).	2.08	AN	19
I need to urinate more than most people.	2.22	AN	16.5
My ulcer bothers me.	2.05	AN	20
I feel short of breath after mild exercise like climbing up four flights of stairs.	2.69	ST	5.5
Compared to most people, I have a very small or a very large appetite.	2.76	ST	4
My weight is more than 15 pounds higher than what is recommended for a person my height and build.	2.18	AN	18
I smoke tobacco.	1.35	N	21
I get sharp chest pains when I'm physically active.	2.29	AN	15
I lack physical energy.	2.57	AN	10
When I'm resting, my heart beats more than 100 times a minute.	2.32	AN	14
Because of my busy schedule I miss at least two meals during the week.	2.44	AN	12
I don't really plan my meals for balanced nutrition.	2.69	ST	5.5
I spend less than 3 hours a week getting vigorous physical exercise (running, playing basketball, tennis, swimming, etc).	2.57	AN	9
Average Weighted Mean (AWM)	**2.46**	**Almost Never**	

Legend:

Range	Descriptive Interpretation (DI)
4.20 – 5.00	Almost Always (AA)
3.40 – 4.19	Most of the Time (MT)
2.60 – 3.39	Some of the Time (ST)
1.80 – 2.59	Almost Never (AN)
1.00 – 1.79	Never (N)

Table 2.1 reveals the responses of the students on how stress affect their physical aspect. Most of the students experienced the item "I have a hard time feeling really relaxed." receiving 3.13 weighted mean described as "Some of the Time".

According to Deckro, et. al., (2010), students who are in state of stress can't seem to relax. His research among students supports a relationship between heightened levels of stress and behavior patterns that may compromise health such as unable to relax.

In this category, students least experienced item "I smoke tobacco." with a weighted mean of 1.35 described as "Never". It can be assumed that the respondents were not particular on smoking especially inside the campus.

People increase the use of tobacco when they are stressed. Unfortunately, instead of relieving the stress and returning the body to a relaxed state, these substances tend to keep the body in stressed state and cause more problems (Robinson, 2017).

In general, most of the students responded on the questionnaire stress level as adopted on Counseling Team International (2011) in terms of physical indicators with "Almost Never" as reflected in their average weighted mean with 2.46.

Table 2.2 How Stress Affect Students in terms of Sleeping Indicators
N = 250

Statement	WM	DI	Rank
I have trouble falling asleep.	2.62	ST	2
I take pills to get to sleep.	1.28	N	5
I have nightmares or repeated bad dreams.	2.42	AN	4
I wake up at least once in the middle of the night for no apparent reason.	2.55	AN	3
No matter how much sleep I get, I awake feeling tired.	2.99	ST	1
Average Weighted Mean (AWM)	**2.37**	**Almost Never**	

Legend:

Range	Descriptive Interpretation (DI)
4.20 – 5.00	Almost Always (AA)
3.40 – 4.19	Most of the Time (MT)
2.60 – 3.39	Some of the Time (ST)
1.80 – 2.59	Almost Never (AN)
1.00 – 1.79	Never (N)

Table 2.2 discloses the responses of the students' stress in terms of sleep indicators in which the item "No matter how much sleep I get, I awake feeling tired." receives the highest response of 2.99 weighted mean categorically described as "Some of the Time". According to Folk, et. al., (2018), this fatigue feeling can precede to elevated stress.

On the contrary, item "I take pills to get to sleep." is least experienced by the students with a weighted mean of 1.28 or "Never". Stress was related to nightly variability in individuals' sleep duration. Therefore, there are few students who take pills to have longer sleep duration (Owens, et al., 2009).

The table also exposes that most of the students responded on the questionnaire stress level as adopted on Counseling Team International (2011) in terms of sleep indicators with "Almost Never" as reflected in their average weighted mean with 2.37.

In Table 2.3, displays the responses of students' stress in terms of behavioral indicators, in which the item "I have to bring work home." received the highest response of 2.84 weighted mean described as "Some of the Time". In this day and time, most high school students are always doing something.

Most students have to do several workloads (e.g., assignment, group works, projects, etc.)

which can get overwhelming, and very stressful. Studies reveals that doing and thinking work at home instead of taking break from those all-day work makes students stress (Felekan, 2016 and Shih, et. al., 2016).

However, the item "I have more than two beers, eight ounces of wine or three ounces of hard liquor a day." marked the lowest weighted mean of 1.28 "Never" in this category.

Table 2.3 How Stress Affect Students in terms of Behavioral Indicators
N = 250

Statement	WM	DI	Rank
I stutter or get tongue tied when I talk to other people.	2.47	AN	2
I try to work while I'm eating lunch.	2.28	AN	4
I have to work late.	2.26	AN	5
I go to work even when I feel sick.	2.59	AN	3
I have to bring work home.	2.84	ST	1
I drink alcohol to relax.	1.33	N	6
I have more than two beers, eight ounces of wine or three ounces of hard liquor a day.	1.28	N	8
When I drink, I like to get really drunk.	1.30	N	7
Average Weighted Mean (AWM)	**2.04**	**Almost Never**	

Legend:

Range	Descriptive Interpretation (DI)
4.20 – 5.00	Almost Always (AA)
3.40 – 4.19	Most of the Time (MT)
2.60 – 3.39	Some of the Time (ST)
1.80 – 2.59	Almost Never (AN)
1.00 – 1.79	Never (N)

According Moffat, et. al., (2008), stress adversely affects students since it plays a role in alcohol and substance use. In response to these increasing levels of stress, students often engage in negative health behaviors (e.g., drinking, smoking) (Pritchard, et. al., 2007).

Table 2.4 How Stress Affect Students in terms of Emotional Indicators
N = 250

Statement	WM	DI	Rank
I have found the best way to deal with hassles and problems is to consciously avoid thinking or talking about them.	3.00	ST	3
I have trouble remembering things.	2.98	ST	4
I feel anxious or frightened about problems I can't really describe.	2.96	ST	5
I worry a lot.	3.11	ST	2
It is important for me not to show my emotions to my family.	3.12	ST	1
It is hard for me to relax at home.	2.61	ST	12
It's best if I don't tell even my closest friend how I'm really feeling.	2.88	ST	6
I find it hard to talk when I get excited.	2.78	ST	8.5
I feel very angry inside.	2.68	ST	11
I have temper outbursts I can't control.	2.48	AN	13
When people criticize me, even in friendly, constructive way, I feel offended.	2.78	ST	8.5
I feel extremely sensitive and irritable.	2.69	ST	10
My emotions change unpredictably and without any apparent reason.	2.87	ST	7
Average Weighted Mean (AWM)	**2.84**	**Some of the Time**	

Legend:

Range	Descriptive Interpretation (DI)
4.20 – 5.00	Almost Always (AA)
3.40 – 4.19	Most of the Time (MT)
2.60 – 3.39	Some of the Time (ST)
1.80 – 2.59	Almost Never (AN)
1.00 – 1.79	Never (N)

Table 2.4 exposes the responses of students stress' in terms of emotional indicators, students responded the highest on the item "It is important for me not to show my emotions to my family." with a weighted mean of 3.12 "Some of the Time".

This means that emotional detachment or depriving one's self on showing or expressing emotions towards his/her family is a part of emotion regulation. The respondents however manage and control their emotions toward their significant others.

Gross (2007) defined emotion regulation as processes that influence which emotions an individual experiences and how the emotions are experienced or expressed. Strategies used to regulate emotions may also be related to stress.

However, the item "I have temper outbursts I can't control." got the lowest weighted mean of 2.48 described as "Almost Never".

According to Rausch (2010), et. al., excess stress influences emotional health. It is now widely believed that the cause of many emotional problems such as temper outburst is caused by stress. Among students, excess stress is associated with increases headaches and uncontrolled temper.

Table 2.5 How Stress Affect Students in terms of Personal Habits
N = 250

Statement	WM	DI	Rank
I spend less than three hours a week working on a hobby of mine.	2.76	ST	5
I spend less than one hour a week writing personal letters, writing in a diary or writing creatively.	2.40	AN	8
I spend less than 30 minutes a week talking casually with my neighbors.	2.52	AN	6
I lack time to read the daily newspaper.	2.48	An	7
I watch television for entertainment more than one hour a day.	3.13	St	2
I drive in a motor vehicle faster than the speed limit for the excitement and challenge of it.	1.78	N	9
I spend less than 30 minutes a day working toward a life goal or ambition of mine.	2.84	AN	4
My day to day living is not really affected by my religious beliefs or my philosophy of life.	2.90	ST	3
When I feel stressed, it is difficult for me to plan time and activities to constructively release my stress.	3.20	ST	1
Average Weighted Mean (AWM)	**2.67**	**Some of the Time**	

Legend:

Range	Descriptive Interpretation (DI)
4.20 – 5.00	Almost Always (AA)
3.40 – 4.19	Most of the Time (MT)
2.60 – 3.39	Some of the Time (ST)
1.80 – 2.59	Almost Never (AN)
1.00 – 1.79	Never (N)

Table 2.5 indicates the responses of the students in their stress in terms of personal habits. The item in personal habits category "When I feel stressed, it is difficult for me to plan time and activities to constructively release my stress." experi-

enced most of the students receiving a weighted mean of 3.20 "Some of the Time".

Planning has something to do with cognitive aspects. Bressert (2018) affirms that one of the cognitive signs of stress is mental slowness, your mind races at times and constant worry. This occurrence may unable student to plan the definite time and activity efficiently.

The item "I drive in a motor vehicle faster than the speed limit for the excitement and challenge of it" receives the lowest response of a weighted mean of 1.78 or "Never".

According to Ad Hoc Committee for Youth At Risk Journal (2014) too much stress is physically and emotionally unhealthy and can lead to risky behavior. In general, most of the students responded on the questionnaire stress level as adopted on Counseling Team International (2011) in terms of personal habits with "Some of the Time" as reflected in their average weighted mean with 2.67.

Table 3.1 Teachers' Classroom – Based Management in Terms of Classroom Rules
N=50

Statements The teacher…	WM	DI	R
1. Used school – wide discipline	3.98	O	7
2. Employed separate rules for classroom.	4.18	O	3.5
3. Introduced the rules on the first day.	4.48	VO	1
4. Introduced rules on the first week.	3.98	O	7
5. Involved the students in rules development in the classroom.	4.10	O	5
6. Involved in crafting the rules in the classroom.	3.96	O	9
7. Involved parents in developing the rules in the classroom.	3.62	O	11
8. Involved the administrators in developing the rules in the classroom.	3.7	O	10
9. Pasted the rules in the classroom.	4.18	O	3.5
10. Taught the rules in lesson format.	3.98	O	7
11. Made the parents aware of rules at parent/ teacher conference.	4.34	VO	2
AVERAGE WEIGHTED MEAN	**4.05**	**Often**	

Legend:

Range	Descriptive Interpretation (**DI**)
4.20 – 5.00	Very Often (VO)
3.40 – 4.19	Often (O)
2.60 – 3.39	Half of the Time (HT)
1.80 – 2.59	Sometimes (AN)
1.00 – 1.79	Never (N)

Table 3.1 displays the teachers' perceptions cited on the responses on their classroom management efficiency in terms of classroom rules. The table reveals that the teacher – respondents gave their highest rating on the item "Introduced the rules on the first day." with a weighted mean of 4.48 or "Very Often". These implemented rules serve as a guideline for students to follow through the school year. By doing these, students feel they had a hand in deciding what is expected of them; they tend to follow the rules more closely (Cox, 2018). However, teachers gave their lowest rating on the item "Involved parents in developing the rules in the classroom" with a weighted mean of 3.62 described as "Often".

According to the study conducted by Jeynes (2008), results indicate that the influence of parental involvement as to rules making in the classroom has a significant relationship towards shaping students behavior. These promote consistency between home and school and lay the foundation to establish positive relationships (Hemmeter, 2018).

In general, most of the teachers responded on the questionnaire classroom – based management as adopted on the study of VanHousen (2013) in terms of classroom rules with "Often" as reflected in their average weighted mean with 4.05. Rules are fundamental and the backbone in the classroom that fosters order. It teaches students to be discipline and have self – control and more effective and engaged in learning (Tierney, 2018 and Hart, 2015).

Table 3.2, in terms of enhancing classroom environment, teachers gave their highest rating on "Used classroom arrangements that are flexible to accommodate a variety of teaching" with a weighted mean of 4.30 "Very Often". Learning can be very effective if the classroom is conducive for learning.

Table 3.2 Teachers' Classroom – Based Management in Terms of Enhancing Classroom Environment
N=50

Statements The teacher…	WM	DI	R
1. Used problem – solving strategy (e.g., define problem, brainstorm solutions.)	3.86	O	11
2. Ignored misbehavior that is non – disruptive to class.	2.98	HT	23
3. Used verbal redirection for child who is disengaged.	3.56	O	15
4. Used Time Out (Time Away to calm down) for aggressive behavior.	3.54	O	17
5. Singled out a child or a group of children for misbehavior.	3.24	HT	22
6. Organized individual incentive program (e.g., stickers, prizes)	3.34	HT	21
7. Used clear classroom discipline plan and hierarchy.	3.88	O	10
8. Used emotion coaching.	3.50	O	19
9. Used persistence coaching (focusing, being patient, working hard)	3.75	O	14
10. Formed model self –regulation strategies for students.	3.80	O	13
11. Taught specific social skills in circle time.	3.82	O	12
12. Used imaginary play/ drama, stories and puppets to teach problem solving.	3.38	HT	20
13. Promoted respect for cultural differences in my classroom.	4.22	VO	4
14. Educated children to ignore disruptive behavior.	3.54	O	17
15. Trained children anger management strategies (Turtle technique, calm down thermometer)	3.54	O	17
16. Took students current interests into consideration when planning my lessons.	3.98	O	8
17. Learned self and the students about cultural diversity.	4.02	O	7
18. Organized and structured the children's, looking for interrelationships among them.	3.92	O	9

Statements The teacher…	WM	DI	R
19. Encouraged questions, suggested unusual associations that help students find new dimensions about the topic, aspects not foreseen.	4.06	O	6
20. Arranged the students' seats where their attention is directed toward the teacher.	4.18	O	5
21. Made sure the students are able to clearly see chalk board, screens, and teacher.	4.28	VO	2.5
22. Made sure the students are seated facing the front of the room and away from the windows.	4.28	VO	2.5
23. Used classroom arrangements that are flexible to accommodate a variety of teaching.	4.30	VO	1
AVERAGE WEIGHTED MEAN	**3.78**	**Often**	

Legend:

Range	Descriptive Interpretation (**DI**)
4.20 – 5.00	Very Often (VO)
3.40 – 4.19	Often (O)
2.60 – 3.39	Half of the Time (HT)
1.80 – 2.59	Sometimes (AN)
1.00 – 1.79	Never (N)

On the contrary, the teachers gave their lowest rating on the item "Ignored misbehavior that is non – disruptive to class" with a weighted mean of 2.98 "Half of the Time". Ignoring can accidentally reinforce less safe behavior. For instance, when a student seeks attention in disruptive ways, ignoring the behavior can increase anxiety or discomfort and subsequently increase student's behavior (Minahan, 2017).

In general, most of the teachers responded on the questionnaire classroom – based management as adopted on the study of VanHousen (2013) in terms of enhancing classroom environment with "Often" as reflected in their average weighted mean with 3.78. Steelcase Education (2016), funded a study, which showed that an enhanced classrooms designed to support participative learning increased students' engagement and that enhanced classroom designed matters to how children engage, participate and ultimately stay involved in their learning experience (Beer, 2015 & Good, 2015).

On the table 3.3 below presents the responses of the teachers as to reinforcement strategies; teachers gave their highest rating on the item number 5 "Praised positive behavior" having a weighted mean of 4.40 categorized as "Very Often". Recognizing the student's effort by praising positive behavior encourages students to take risks and persevere. Additionally, this promotes whole school wellness and preventing reducing school problems. (Whitaker, 2018 & Taylor, 2017).

However, teachers responded the lowest on the item "Sent the child to their home for aggressive or destructive misbehavior" receiving a weighted mean of 2.66 categorized as "Half of the Time". This means that teachers ensure leadership and management within the classroom where in fact they handled their students' misbehavior.

Table 3.3 Teachers' Classroom – Based Management in Terms of Reinforcement Strategies
N=50

Statements The teacher…	WM	DI	R
1. Described or commented on bad behavior.	4.06	O	3
2. Used a classroom wide behavior management system (Token system, stop light)	3.82	O	5
3. Coached positive social behaviors (helping, sharing, and waiting).	4.34	VO	2
4. Rewarded a positive behavior with incentives (e.g., stickers).	3.84	O	4
5. Praised the positive behavior.	4.40	VO	1
6. Used physical restraint.	3.16	HT	12.5
7. Reprimanded in a loud voice.	3.32	HT	10
8. Performed on In-house suspension or sending students to Principal's office for misbehavior.	3.00	HT	14
9. Warned or threaten to send child out of classroom if s/he doesn't behave properly.	2.68	HT	15
10. Sent the child to their home for aggressive or destructive misbehavior.	2.66	HT	16
11. Called parents to report bad behavior.	3.56	O	6.5
12. Used special privileges (e.g., special helper, extra computer time).	3.30	HT	11
13. Set up individual incentive program (e.g., stickers, prizes)	3.40	O	8
14. Informed of the consequences for misbehavior (e.g., loss of privileges)	3.56	O	6.5
15. Sent home notes (or frowny faces) to report problem behavior to parent.	3.16	HT	12.5
16. Referred notes/happy grams home about positive behavior	3.34	HT	9
AVERAGE WEIGHTED MEAN	**3.48**	**Often**	

Legend:

Range	Descriptive Interpretation (**DI**)
4.20 – 5.00	Very Often (VO)
3.40 – 4.19	Often (O)
2.60 – 3.39	Half of the Time (HT)
1.80 – 2.59	Sometimes (AN)
1.00 – 1.79	Never (N)

The table also sum – up the responses of the of the teachers responded on the questionnaire classroom – based management as adopted on the study of VanHousen (2013) in terms of reinforcement strategies with "Often" as reflected in their average weighted mean with 3.48. This efficiency will lead to a better classroom management and desirable learning environment.

Table 4 reflects the relationship between the students' level of stress and the perceived stressors in terms of academic factors, environmental factors, personal factors and relationships factors and the overall stressors. The result depicted that there is a significant relationship between the students' level of stress and the perceived stressors since the computed correlation values of 0.170, 0.257, 0.261, 0.133 and 0.258 with the p –values of 0.007, <0.001, <0.001, 0.36 and <0.001 respectively are lesser than 0.05 level of significance thus the null hypothesis is rejected. This implies that the more the students are exposed to these stressors the more students get stressed.

Table 4 Relationship Between the Students' Level of Stress and the Perceived Stressors N = 250

Perceived Stressors	R	p-value at a = 0.05	Interpretation	Decision
Academic Factors	0.170	0.007	Significant	Reject Ho
Environmental Factors	0.257	<0.001	Significant	Reject Ho
Personal Factors	0.261	<0.001	Significant	Reject Ho
Relationship Factors	0.133	0.036	Significant	Reject Ho
Overall Stressors	0.258	<0.001	Significant	Reject Ho

**correlation is significant at the 0.05 level (two-tailed)*

School has always been considered as a highly stressful situation for students. There are some reasons for stress among students like academic, environmental, personal, as well relationship problems. These problems cause students to be stress (Yusoff, et al., 2011). Shaikh with his colleagues (2004) showed that stress among students composes with these stressors which may reason of make worse decision, reduced attention, decrease of self-esteem, raised anxiety and depression. Responses to stress effects the physical, sleep, behavioral and emotional and students' personal habits along those we live, work and cooperate (Mazumdar, et al., 2012).

After subjecting to Spearman Rank Correlation Coefficient (rs) test, data in table 5 reveal that there is no significant relationship between the level of students' stress and level of efficiency of teachers' classroom – based management in terms of classroom rules, enhancing classroom environment, reinforcement strategies and the overall classroom – based management since the computed correlation values of -0.054, 0.168, 0.265, and 0.201 with the p – values of 0.709, 0.245, 0.063, and 0.162 respectively are greater than 0.05 level of significance thus leading to the acceptance of the second null hypothesis (Ho_2).

Table 5 Relationship Between the Students' Level of Stress and Level of Efficiency of Teachers' Classroom - Based Management $N_1 = 50$; $N_2 = 250$

Classroom-Based Management	r	p-value at a = 0.05	Interpretation	Decision
Classroom Rules	-0.054	0.709	Not Significant	Accept Ho
Enhancing Classroom	0.168	0.245	Not Significant	Accept Ho
Reinforcement Strategies	0.265	0.063	Not Significant	Accept Ho
Overall Classroom – Based Management	0.201	0.162	Not Significant	Accept Ho

The result of is in consonance with the result conducted by Hughes (2014). However, classroom – based management is found out that it brings out the best among students including increased on-task behavior and academic engagement.

CONCLUSIONS

Based on the thorough analysis and findings of the study, the researchers' concluded that there was a significant relationship between the level of student's stress and the perceived stressors of the respondents. Students who are exposed to the different stressors are prone to have a high level of stress. However, teacher's classroom – based management were found to be insignificantly related to their level of stress. It was also concluded that there is no direct effect on teachers' classroom management towards the stress level of the students; it could be due to the lack of motivation and inappropriate strategies applied by the teacher in the classroom.

RECOMMENDATION

Based on the findings of the study, the researchers' recommend the following:

1. Teachers are encouraged to grow professionally by attending more related seminars and in-service trainings on values to wider the horizon for their professional advancement.
2. Teachers should constantly use techniques and approaches to motivate and improve the attitudes of students towards academic works.
3. School heads and administrators are encourage to enhance the school programs and that will help every teacher to improve their strategies in teaching to build a stress –free learning environment beneficial for every student.
4. School should implement programs in mentoring students how to manage emotions, stress, anxiety, and build resiliency.

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LEADERSHIP SKILLS OF ADMINISTRATORS AND INSTRUCTIONAL PERFORMANCE OF FACULTY FROM SELECTED STATE UNIVERSITIES AND COLLEGES (SUCs) IN REGION III: BASIS FOR AN ENHANCEMENT PROGRAM

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ABSTRACT

The leadership skills of administrators are vital in every task and endeavor in organizations particularly in coping with some issues such as globalization, government regulations, increased competition, new trends, and sophisticated technology. It is imperative for the leaders to gain appropriate skills that are essential in order to cope with these changes and eventually influence their subordinates to strive even harder and perform much better in their jobs. The main thrust of this study is to determine the relationship between the leadership skills of administrators and instructional performance of faculty with the end result of developing and enhancing the leadership skills of administrators through a proposed Development Program. Using the quantitative method of research design to achieve the breadth of understanding the study, the investigation involved 149 respondents, 17 of which were administrators while 132 were faculty members. Likewise, these respondents were working in the different SUCs in Region III, Philippines during the Academic Year 2018-2019. To gather the relevant data, the self-rating of the administrators and assessment of faculty of their administrators' leadership skills were determined through a four-point rating scale. In particular, no significant relationship was found between the leadership skills of the administrators and the instructional performance of the faculty. On this account, the need to address this finding is truly evident. Hence, the results of this study will be utilized as basis for a Leadership Skills Development Program. With the developed and enhanced skills, administrators will be able to efficiently and effectively address the most pressing issues in the 21st century educational system especially in leading the school's human resources.

Keywords: administrators, continuous improvement, faculty, instructional performance, leadership skills

INTRODUCTION

Numerous educational changes in the 21st century due to globalization, government regulations, increased competition, new trends, and sophisticated technology are among the issues and concerns the education leaders will face during their career (Brown, 2011). It is imperative for the leader to gain appropriate skills that are necessary to cope with these changes and eventually influence their subordinates to strive even harder and perform much better in their jobs. The essence of good leadership will thrive and progress in this rapidly changing world especially in the field of education.

The leadership skills of administrators are vital given the complex challenges facing higher education. According to Ganta and Manukonda (2014), leadership is a kind of power where one person has the ability to influence or change the values, beliefs, behavior and attitudes of another person. A person with strong leadership ability will be a good example or role model to their employees because the leader who is able to effectively achieve some good results or achievement gains the trust and admiration of their employees, and inadvertently changes their values, beliefs, behavior and attitudes, for mimicry is the sincerest form of flattery (Grint, 2007). This statement is also supported by Northhouse (2017), who stated that leaders who possess strong leadership have the strength to influence others to achieve the goals and objectives of the organization. This statement reiterates that leadership skills can impact faculty performance through coaching, empowering, motivating, persuading, and influencing them to perform better in their jobs.

Similarly, Yukl (2010) stressed that leadership is the process of influencing others to understand and agree about what needs to be done and how to do it and the process of facilitating individual and collective efforts to accomplish shared objectives. The definition includes efforts not only to influence and facilitate the current work of the group or organizations, but also to ensure that it is prepared to meet future challenges. This statement proves that team effort is important in achieving organizational goals.

Northouse (2017) defines leadership as "a process whereby an individual influences a group of individuals to achieve a common goal."

This definition vividly suggests several compo-

nents central to the phenomenon of leadership. Some of them are as follows: (a) leadership is a process, (b) leadership involves influencing others, (c) leadership happens within the context of a group, (d) leadership involves goal attainment; and (e) these goals are shared by leaders and their followers.

The leadership skills of administrators are vital given the complex challenges facing higher education. These challenges are due to quality assurance systems, new rules and regulations, external accreditations of degree programs, and the improvement and maintenance of global rankings. This highlights the findings of Dilanco and Borabo (2014) that leadership skills of the administrators are central to the operational success of the learning institutions. Evidently, Guthrie and Scheurmann (2010) find support that quality leadership is an essential component of successful schools.

On the other hand, Wasim and Imran (2010) have another way to define a leader who has a strong leadership. For them, an effective leader is somebody who is capable of giving a clear direction to their employees, leading them to commit to their jobs and capable of working as a group to achieve the organization's goals and objectives. It also tells them that good leaders usually have a clear vision for the company and can easily identify the problems and obstacles that currently stand between them and the aims of the organization. In this way, they are able to efficiently and effectively bring about the necessary reforms that will bring the organization into the future while keeping abreast with contemporary changes in education.

Meanwhile, Guthrie and Schuermann (2010) further reiterate that quality leadership is an essential component of successful schools. The utilization of thoughtful and appropriate ways to develop and assess school leaders has an important influence on the quality of educational leadership and ultimately the quality of education in the nation's schools. As such, practical and focused leadership evaluation holds great promise for providing educators with valuable information that can be used to improve leadership practice. Recognizing the decisive role played by administrators, there have been multiple attempts to establish standards for school leaders. These standards seek to establish consensus within the field of educational administration regarding the common body of knowledge and set of competencies, skills, dispositions, and language that will ensure quality preparation and development of school leaders. The aforecited statements support the importance of leadership standards in education particularly in the higher education sector.

Leaders need to be attuned to the situation and vary their leadership behaviors to meet the needs of the organizations they lead (DeMeuse, Dai, & Hallenbeck, 2010). This idea suggests that leading should meet the needs of situation which is also the purpose of this investigation. Leadership skills and instructional performance go together as a means of achieving the organizations' goals and objectives. It is in this juncture that this study was conducted.

PURPOSE

The study aimed to determine the relationship of the leadership skills of the administrators and instructional performance of the faculty from selected State Universities and Colleges (SUCs) in Region III with the end result of proposing a Leadership Skills Development Program (LSDP) for continuous improvement.

STATEMENT OF THE PROBLEM

Specifically, the study sought to answer the following questions:

1. What is the profile of the respondents according to the following:
    - 1.1 Sex
    - 1.2 Age
    - 1.3 Highest educational attainment
    - 1.4 Number of years in the present position
    - 1.5 Academic rank?
2. How are the leadership skills of the administrators described in terms of:
    - 2.1 Technical
    - 2.2 Interpersonal
    - 2.3 Decision-making
    - 2.4 Administrative
    - 2.5 Conceptual?
3. Are there significant differences in the leadership skills when respondents are grouped according to their profile?
4. Are there significant differences between the leadership skills of the administrators based on their self-rating and faculty rating?
5. How are the level of instructional performance of the faculty member described based on the Faculty Evaluation Instrument in terms of:
    - 5.1 Commitment
    - 5.2 Knowledge of the subject matter
    - 5.3 Teaching for independent learning and
    - 5.4 Management of learning?
6. Are there significant relationships between leadership skills of administrators and instructional performance of the faculty?

7. What enhancement or development program may be proposed after the study is done?

REVIEW OF RELATED LITERATURE

As defined by Lussier and Achua (2016), leadership is the influencing process between leaders and followers to achieve organizational objectives through change. Leadership skills of administrators are vital in every organization and possessing multitude of these skills is important to every leaders. The literatures cited below were related to the framework used in this study that technical interpersonal, decision-making, administrative and conceptual. These are all necessary for leaders to be able to effectively and efficiently manage an organization in order to achieve its goals and objectives.

Findings of the study conducted by Bolanle (2013) revealed that secondary school principals in South Western Nigeria possessed technical, interpersonal, conceptual and administrative skills. A significant relationship was found between the principals' leadership skills and school effectiveness.

Leadership is an act of influencing the people to follow by guiding and setting an example in order to achieve change towards the organizations' goals and objectives. Leaders and their good leadership skills are essential components of a successful school (Guthrie & Schuermann, 2010).

Kirkpatrick and Locke as cited by Holtkamp (2014) stated that effective leaders differ from each other in a sense that they have a number of traits such as: drive, leadership motivation, honesty and integrity, cognitive ability, and knowledge of the business. Traits are just a precondition for effective leadership. A leader to be effective shall empower himself in formulating a vision and setting goals or by role modeling. Leadership traits enable a person to acquire necessary leadership skills to be an effective leader. In short, leadership skills are abilities to be an effective leader which are enabled by certain key traits.

A research study by Barrett and Breyer (2014) explains the role of administrators in instilling passion and motivating teachers through effective leadership. The study further addressed the concern on sustaining the teachers' passion for teaching and providing educators with the motivation through effective leadership and modeling.

Similarly, Jackson and Parry (2008) posited that leadership is a process where leaders use their skills and knowledge to lead and bring a group of employees in the desired direction that is relevant to their organization's goals and objectives.

Also, a recent research of Hassan, Gallear, and Sivarajah (2018) stimulates further studies to bring out knowledge that could be useful to deans in understanding how to use appropriate leadership skills in particular organizational settings and organizational culture that are needed to support them in their leadership practices as educational leaders. Deans could identify specific leadership practices and competencies with an end view of becoming more effective leaders.

Corollary, Findlay, H.J., Freeman, Hyacinth, and Findlay, H.E. (2016) pointed out in their study that there is a growing recognition that leadership development is imperative to different types of organizations, including institutions of higher learning. Pfeffer (2009) claims that institutions of higher education needs to develop leadership talent. This statement reiterates the important role of deans and the need for leadership development that could contribute to the improvement in higher education sector.

In a scholarly research conducted by Samuel (2012), he identified factors that influence leadership in schools. This includes interpersonal and communication factor, intellectual and work management factor, people and work management factor, purposeful inclusion; and values driven factor and gender factor and suggested recommendations on how to improve effective leadership in schools throughout Ghana particularly the establishment of professional development programs for both newly appointed and serving heads. These programs would enhance the leadership capacity of the principals in the schools and would create a more conducive learning environment.

Atkinson and Mackenzie (2015), on the other hand, concluded that if there is no effective leadership in an organization, no changes will be made, because there are no leaders that motivate and lead the organization's employees as well as provide a clear direction for the entire organization.

These definitions clearly suggest several components central to the phenomenon of leadership. Some of them are as follows: (a) leadership is a process; (b) leadership involves influencing others; (c) leadership happens within the context of a group; (d) leadership involves goal attainment; and (e) these goals are shared by leaders and their followers.

In summary, leadership skills as the influencing process between leaders and followers aim to achieve organizational objectives through change.

Leadership skills of administrators are vital in every organization and possessing multitude of these skills is important to every leaders. The literatures cited above are related to the framework used in this study that technical interpersonal, decision-making, administrative and conceptual are essential skills that school administrators should possess. These are all necessary for leaders to be able to efficiently and effectively manage an organization in order to achieve its goals and objectives.

Thus, it is imperative for administrators as leaders to gain leadership skills to influence their subordinates in achieving success in their endeavors in line with the mission and vision of their assigned organizations.

TECHNICAL SKILLS

A concept paper by Medina (2010) defined technical skills as skill; expertise or technical competence related to the field of workers. Technical skills or 'hard skills' are often associated with the use of tools; equipment related to work properly and efficiently as well as technical matters. Additionally, Yahya and Rashid (2002) articulated that technical skills can be known and understood more easily as these can be seen clearly with the naked eye.

Similarly, Ghalandari, K. (2012) defines technical skills as a knowledge about and proficiency in a specific type of work or activity. It includes competencies in a specialized area, analytical ability to use appropriate tools and techniques.

Technical skills can be acquired in formal and non-formal way. In a formal way, Medina (2010) explained that the common way is through academic channels, through the institutions of higher learning and attending courses and seminars.

Important or key skills according to target.jobs.co.uk for higher education administrators are good interpersonal, teamwork, IT, organizational, time management, negotiation, presentation, analysis and communication skills. As school administrators, one will normally work in areas such as admissions, quality assurance, data management and examinations, or in a specialist department such as finance, careers, marketing or human resources. All of these can be either centrally based or within faculties, departments or other smaller units (Prospects.ac.uk).

INTERPERSONAL SKILLS

Khan and Ahmad (2012), in their study showed that interpersonal skills are the abilities to motivate, communicate, and build teams which are important in becoming effective leaders, but it did not show which skill is more important at different levels of management.

Consequently, Miller (2012), in his article discussed the three levels of communication skills for leaders comprised of the core communication skills, team communication skills and strategic and external communication skills. As the leader gains more responsibility in an organization and undertakes more complex and demanding roles, the leader will need to improve core skills and become more effective in the higher-level team and strategic skills. To be effective, the skills should be acquired and developed in a sequence, that is - from core to strategic skills. Winston Churchill (as cited by Miller, 2012), one of the acknowledged great British Prime Ministers once said, "that the difference between mere management and leadership is communication." Management and leadership have been shown to be much more than communication. There is a little doubt that communication skills are the heart of effective leadership. Good communication skills alone; however, will not make an effective leader. Everything a leader does to influence others involves communicating. Good communication skills are the foundations of an effective leadership.

Additionally, the study of Bimpeh (2012) identified the factors that influence leaderships in schools. These included interpersonal and communication factor; intellectual and work management factor; purposeful inclusion and values driven factor, and gender factor. In response to the findings, the establishment of professional development programs for both newly appointed and serving heads aimed at enhancing the leadership capability of the principals in the schools was also recommended.

DECISION-MAKING SKILLS

A research study by Colakkadioglu and Celik (2016) explains that decision making is a critical cognitive process in every area of human life. In this process, the individuals play an active role and obtain outputs with their functional use of decision-making skills. Therefore, the decision-making process can affect the course of life; life satisfaction, and the social relations of an activity. Thus, this is also an important skill that administrators should develop.

In another study by Clemente (2007), she recommended that administrators of schools may consider the inclusion of decision making-skills and administrative skills development in the structure of a training program. She further recommended the conduct of regular evaluation to assess princi-

pals' management or leadership skills. This is to ensure improvement and sustainability of leadership skills particularly in the education sector.

ADMINISTRATIVE SKILLS

Amina and Alhakem (2015) pointed out in their article on "The Relation Between Component and Obstacles of Administrative Creativity in Sudan Organizations" confirmed the importance of a number of personal and managerial skills among managers. In the study, it was found that there is a positive correlation between those skills and administrative creativity of Sudanese institutions which showed a high level of personal and administrative skills for managers to enjoy their skills in debate and dialogue; the power of persuasion; producing new ideas; making the right decisions at the right time, and a high level of efficiency in planning and coordination between administrative units; streamlining procedures; and oversight and supervision that there is a positive function correlation between those skills and creativity. Personal skills and managerial skills comprise administrative creativity which are skills that need to be developed among leaders.

In an early work by Yossef and Rakha (2017), they revealed a high level of personal and administrative skills and a medium level of administrative creativity to Najran University administrative leaders as well as positive correlation between both personal and administrative variables and the levels of administrative creativity. Thus, personal and administrative skills are related and these are among the important competencies that leaders should develop.

CONCEPTUAL SKILLS

Essentially, Motlaq, M. A., Motlaq, M. A., Dareke, M., and Rezaei, H. (2012) in their study revealed that the conceptual skills training only increased the managers' job satisfaction and not their job performance. Conceptual skills training can be used to improve job satisfaction in women managers and organizational training. It is also a good basis in identifying the trainings that should be provided among school leaders.

Katz (2002) in his article, "Skills of an Effective Administrator" revealed the three categories of management skills: human skills, conceptual and technical skills which are very important skills. These are critical skills that leaders should possess in leading subordinates.

Conceptual skills, as defined by the Business Dictionary, is the ability to think creatively about, analyze and understand complicated and abstract ideas. Using a well-developed conceptual skills set, top level business managers need to look at their company as a holistic entity, to see the interrelationships between its divisions and to understand how the firm fits into and affects its overall environment.

Likewise, Ghalandari, K. (2012) in his study posited that conceptual skills are central to creating vision and strategic plan for the organization. For example, it would take conceptual skills for a CEO in a struggling manufacturing company to articulate a vision for a line of new products that would steer the company into profitability. Conceptual skill has to do with the mental work of shaping the meaning of organizational or policy-issues- understanding what a company stands for and where it is or should be going. Similarly, education administrators need creating or strategizing plans on how the organizations' vision and mission be realized.

The success of the faculty members depends on the leadership behavior displayed by deans and its effectiveness on their academic, scholarly, and developmental activities (Amir, Kannan, Sharma & Veeriah, 2016). Deans with strong leadership are capable of spearheading changes by designing important, realistic, and achievable objectives as well as by implementing strategies leading to goal accomplishment.

In South Carolina, Kochamba and Murray (2008), in their study on critical leadership skills needed by principals for the achievement of school effectiveness found technical, human relations, conceptual and transformative leadership skills critical for the achievement of school effectiveness. In Hong Kong, Pang and Pisapia (2012) found a link between strategic thinking (a component of conceptual skills) and effectiveness of schools. Richter, Lewis and Hagar (2012), found transformational, managerial and behavior management skills to be essential ingredients Principals need for the achievement of effective schools. In a related study, on effective schools in developing countries, Hoppey and Mcleskey (2013), discovered that the principal who had interpersonal skills, viewed his primary role as that of providing support for his teachers so he could put in his best to teaching, achieved school effectiveness.

METHODOLOGY

This study utilized a quantitative research design. Quantitative methods are intended to achieve breadth of understanding and test and confirm hypotheses based on an existing conceptual model (Tashakkori & Teddlie, 2003). This method placed primary emphasis on generalizability. It quantified

the responses of the respondents on the survey questionnaire.

The study utilized a population frame in determining the sample size. The researcher targeted all the deans as well as the program chairs and all faculty members as respondents. Out of the 166 total population, only 149 composed of 17 deans and program chairs and 132 faculty members were involved as respondents.

In this study, the researcher employed the Leadership Skills Questionnaire (LSQ) adapted from SAGE Publications to determine and assess the leadership skills of the school administrators. The researcher used the questionnaire with permission from the author. Specifically, the instrument has 18 items divided into administrative, interpersonal and conceptual skills. Twelve (12) items were also added from the concepts of Yukl which are included in the technical and decision-making skills. Overall, there were 30 items which assessed the leadership skills of the administrators.

The other instrument utilized in this research is the Qualitative Contribution Evaluation (QCE) for faculty which described the instructional performance of the faculty for the school year 2017-2018 as evaluated by the supervisor, students, peer and self. The faculty evaluation instrument was used to assess the teaching effectiveness of a faculty.

The QCE is a standard instrument currently used by all State Colleges and Universities (SUCs) in the Philippines in assessing the instructional performances of faculty. The QCE is an integral and effective component of the total quality assurance in public tertiary education. It is designed to make an effective motivator for the development of a culture of excellence in instruction, research, extension, and production. That QCE is viewed as an effective measure for faculty ranking among the public tertiary institution (NBC 461 QCE). The QCE data are already available in the office and will be requested by the researcher. The QCE rating was treated with utmost confidentiality to protect the privacy of the data.

RESULTS

1. Profile of the Respondents

1.1 Sex

Table 5. Sex of the Respondents

Sex	Faculty		Administrators		TOTAL	
	F	%	F	%	f	%
Female	75	56.8	11	64.7	86	57.7
Male	57	43.2	6	35.3	63	42.3
Total	132	100	17	100	149	100

As seen in Table 5, 75 or 56.8 percent of the faculty-respondents were female while 57 or 43.2 percent were male. On the other hand, among the administrator respondents, 11 or 64.7 percent were female and 6 or 35.3 percent were male.

Of the total respondents, 86 or 57.7 percent were female and 63 or 42.3 percent were male. It implies that the faculty members in the teacher education are dominated by females. In the Philippines, the dominance of the female teachers has been observed many, many years back.

This finds support to the study of Parker (2015) in the United States on the dominance of women in higher education. The investigation found out that today's faculty workforce in education has evolved with some interesting turns and twists compared years back that it was dominated by male educators. Fluctuations in women's participation rate have been influenced by the economy's history and society's expectations of females. American women today found their niche in teaching.

Similarly, it is not surprising to notice that majority of the college faculty members are women since traditionally, teaching has been reserved to women. Teaching, especially in primary education belongs to a range of career choices among women. Bocco (2003) highlighted in the article that while women's liberation did much to fight job stereotypes, some jobs are still predominantly female. These jobs include teaching, clerical work, childcare, and nursing.

Interesting findings were revealed by Gorska (2016) in her study on gender differences on leadership: (1) that women act in a more supportive ways giving subordinates more freedom, less supervision, and are more understanding and tolerant. Moreover, they treat rewards as motivational tool and organize work through lists; (2) Men and women do adopt different leadership style. Women tend to be more democratic when holding leadership positions. In addition, women are less likely to adopt an authoritarian leadership style than man. This is because of the lower level of acceptance for autocratic women than autocratic men from the subordinate side; and men tend to be more task-oriented, while women being relationship-oriented was not confirmed.

1.2 Age

As exhibited in Table 6, 51 or 38.6 percent of faculty respondents belonged to the age bracket of 30 years old and below; 10 or 7.6 percent were 31-35; 10 or 7.6 percent 36-40; 15 or 11.4 percent were 41-45; 16 or 12.1 percent were 46-50; 14 or 10.6 percent belonged to the 51-55; 12 or 9.1 per-

cent were 56-60 and 4 or 3.1 percent were 61 years old and above. It can be noted from the data that young educators comprised the roster of faculty in the Teacher Education in state universities and colleges.

Age	Faculty		Administrators		TOTAL	
	f	%	f	%	f	%
30 and below	51	38.6	2	11.8	53	35.6
31-35	10	7.6	2	11.8	12	8.1
36-40	10	7.6	3	17.6	13	8.7
41-45	15	11.4	3	17.6	18	12.1
46-50	16	12.1	3	17.6	19	12.8
51-55	14	10.6	3	17.6	17	11.4
56-60	12	9.1	1	5.9	13	8.7
61 and above	4	3.1			4	2.7
Total	132	100	17	100	149	100

Table 6. Age of the Respondents

Meanwhile, tabular data shows that 2 or 11.8 percent of the administrator respondents were both 30 and below; 2 or 11.8 percent belonged to the 31-35 years; 3 or 17.6 percent fell under the 36-40; 3 or 17.6 percent were 41-45 years old; 3 or 17.6 percent belonged to the age bracket of 46-50 years; 3 or 17.6 percent in the 51-55 years old; and 1 or 5.9 percent fell under the age bracket of 56-60 years of age. Based on the data, it can be gleaned that most administrators fell under the ages 36-55 accordingly.

These findings corroborate with the study of Medina (2006) highlighting that it is in this career cycle that individuals establish themselves in a particular position in their chosen career. Inocian and Hermosa (2014) likewise rejoin support in this finding that those ages within the bracket of 30-40 "represent the most productive years of one's career."

Data also revealed that the faculty workforce in higher education institutions comprised of young educators. The younger generations now are entering the academic profession to fill in the vacancy from institutions caused by separation and mobility of employees through promotion, retirement, transfer or resignation and even death.

This finding favors the study conducted by Altbach (2015) as it pointed out that younger generations today are entering the academic profession. They are not only the future of the entire academic enterprise, but they have special significance because in most countries the academic profession in general is aging and large numbers will be leaving the profession in the immediate future.

Evidently, Pricellas, Niez, Nierra,and Tubis (2016) found out that the opportunity of becoming a school administrator depends also on the age factor thus many are usually in the old age which denotes that the older someone is in the service, there is a tendency to serve much longer. Additionally, since 65 is the compulsory retirement age, it is normal that many reach the old age among school administrators.

Findings of Bremen (as cited by Thompson, 2012) in his study revealed that older leaders who believed they could leave behind a lasting legacy were frequently motivated and effective, while those who believed they would leave no legacy behind were often not as effective leaders. The study also found that female leaders were much more likely than male leaders to believe they could leave a positive legacy behind. Similarly, a 2007 study at the University of Nebraska-Lincoln found that female leaders frequently became more effective at using transformational style of leadership as they became older. To motivate older leaders and managers, there is a need to emphasize the concept of leaving a positive and enduring legacy.

In a similar investigation conducted in Germany by Frese, Rosing, and Zacher (n.d.), they concluded that legacy beliefs become more important for leadership behaviors as leaders grow older. Specifically, they argue that legacy beliefs are an important psychological resource for leaders to maintain effective and avoid ineffective leadership behaviors at higher age. They further argue that leaders with low legacy beliefs are not able to maintain high levels of engagement in the leadership role at higher ages. Leaders with low legacy beliefs may show effective and avoid ineffective leadership behaviors when they are younger because they are motivated to accomplish things at work and to move up the career ladder. At higher ages, however, these motivators become less important and need to be replaced by other motivators such as legacy beliefs to maintain effective and avoid ineffective leadership behaviors.

On the contrary, the study conducted by Boerrigter (2015) concluded that older leaders are not better or worse than younger leaders in achieving effective leadership. Further, the significant negative relationship in the current study between the leaders' negative affect and transformational leadership behavior contributes to the existing leadership literature, because this leadership literature tends to focus more on the relationship between positive affect and transformational leadership behavior while ignoring the relationship between negative affect and leadership as well as the followers' behavior.

The study of Thompson (2011) in Queensland, Australia about the relationship between age and wisdom among older leaders contradicts the literature cited above which was found that despite the correlation between wisdom and effective leadership, the study found no link between age and wisdom, or between age and leadership skills. Some

older leaders demonstrated higher levels of wisdom and more effective leadership while others did not. The study did not provide support for the idea that leaders become wiser with age.

Finally, in a recent study of Anbazhagan and Kotur (2014), it was uncovered that with an increase in age, relatively lesser authority is exhibited by the workers. Gender, too, is found to influence the leadership styles of the workers.

1.3 Highest Educational Attainment

Table 7. Highest Educational Attainment of the Respondents

Highest Educational Attainment	Faculty		Administrators		TOTAL	
	f	%	f	%	f	%
Bachelor's Degree	41	31.1	2	11.8	43	28.9
Master of Arts / Master of Science	58	43.9	6	35.3	64	43.0
Doctor of Philosophy/ Doctor of Education	33	25.0	9	52.9	42	28.2
Total	132	100	17	100	149	100

As shown in Table 7, 41 or 31.1 percent of the faculty respondents were Bachelor's Degree holders; 58 or 43.9 percent were holders of Master of Arts or Master of Science; and 33 or 25.0 percent finished their Doctoral Degrees. It can be noted that most of the faculty members continue to pursue graduate studies to enhance their knowledge and teaching competencies.

Evidently, completing a Master's degree is considered as a minimum requirement for regular permanent position in Higher Education Institutions (HEIs) particularly in State Universities and Colleges (SUCs). This is mandated by the joint Civil Service Commission (CSC) Memorandum Circular No. 22, s. 2016 and CHED Qualification Standards for Faculty Positions. Finishing Master's degree is meeting the minimum educational qualification set by CSC and CHED for their entry in the Philippine tertiary education. This implies that the faculty members aim for professional growth and development by finishing their advanced studies in line with their fields of specialization (Inocian & Hermosa, 2014).

Among the administrator respondents, 2 or 11.8 percent 35.3 percent were graduates of Bachelor's Degree; 6 or 35.3 percent were either Master of Science or Master of Arts graduates, and 9 or 52.9 percent finished either Doctor of Philosophy (Ph.D.) or Doctor of Education (Ed.D.) degrees.

Overall, there were 43 or 28.9 percent Bachelor's Degree holders; 64 or 43 percent Master of Science or Master of Arts graduates and 42 or 28.2 percent finished Doctor of Philosophy (Ph.D.) or Doctor of Education (Ed.D.) degrees respectively.

This shows that the educational attainment is an important consideration in designating an employee to administrative positions as mandated in CMO No. 74 and 75 Series of 2017. Pursuing higher degree is also a better way of updating employees in their field and a requirement for promotion. Some employees are much motivated to pursue both Masters and Doctorate degrees because of high salary equivalent and also a requirement for holding higher designations or positions in the organization. However, data show that there are two among the administrators who are graduates of Bachelor's degree. This is due to the vertical and lateral articulation of degree programs in Higher Education Institutions (HEIs). These BS graduates were designated as program chairs due to faculty alignment and policies on typology and strictly observed based on CHED guidelines (Lapiz, 2015). These administrators are currently pursuing their Master's degree to meet the requirement and be more qualified in their position or designation.

Educational attainment is pursued among several faculty members, not just for seeking for higher position and better salary, but for continuing professional stewardship (Inocian & Hermosa, 2014). Rojas, T., and Rojas, R. C. (2016) both confirm that preparation in academics and performance in career life highlights the importance of obtaining success in the public employment.

Attending in a graduate school for advanced studies in any field of endeavor is a component of a lifelong process (Anuran, Buenviaje, Encio & Refozar, 2016). Hence, it is trending in the Philippines to proceed to graduate school to finish another degree in order to get promotion in one's present job or meet the possibility of an increase of the current monthly salary.

In the graduate tracer study conducted by Inocian and Hermosa (2014) with regard to those who finished Master's degree in Education, major in Social Sciences, it purports that 55 percent of the respondents occupy "leadership positions as dean, chairman, principal, coordinator, curator, resident ombudsman, and academic supervisor". It denotes that educational attainment is of prime importance in designating administrators in education.

Similarly, it is interesting to note from the study of Besley, Montalvo and Querol (2011) in Europe that educational attainment has a large and statistically significant effect in one's career in education. In addition, it was found out that additional schooling increases the quality of civic awareness among the leaders and educational attainment is important and that growth is enhanced by having leaders who are more highly educated.

A contrasting idea was expressed by Pricellas,

Niez, Niera, and Tubis (2016) in their study as they revealed that "in previous days, the promotion of unqualified teachers to become "one of the leaders" had not been controlled- even if they are not qualified such as no board examinations, no master studies in management, no appropriate skills as leaders, and so on. Nowadays, promotions become more regulated as a result of numerous competitions such as continuous professional advancement in the graduate school and other qualifications. To become one of the leaders in institution has caught much attention among the policy makers.

In the CMO No. 74 and 75 series of 2017, educational qualification is an important requirement for designating administrators. To be designated as Dean, one should be a graduate of Doctor of Philosophy or Doctor of Education.

1.4 Number of Years in Service

As seen in the table, 50 or 37.9 percent of the faculty members were in the position for 1-5 years; 12 or 9.1 percent were 6-10 years; 14 or 10.6 percent were 11-15 years; 15 or 11.4 percent were 16-20 years; 18 or 13.6 percent were 21-25 years; 11 or 8.3 percent were 26-30 years; 3 or 2.3 percent were 31-35 years; and 9 or 6.8 percent were 36 years and above.

Table 8. Number of Years in Service of the Respondents

Years in Service	Faculty		Administrators		TOTAL	
	f	%	f	%	F	%
1- 5 years	50	37.9	15	88.2	65	43.6
6-10 years	12	9.1	2	11.8	14	9.4
11-15 years	14	10.6			14	9.4
16-20 years	15	11.4			15	10.1
21-25 years	18	13.6			18	12.1
26-30 years	11	8.3			11	7.4
31-35 years	3	2.3			3	2.0
36 years and more	9	6.8			9	6.0
Total	132	100	17	100	149	100

The table also showed that 15 or 88.2 percent of the administrator respondents were in their present position for 1-5 years while 2 or 11.8 percent were in the position for 6-10 years. It can be noted that the deans or program chairs came from 1-5 years for they were probably newly appointed in the position when this study was undertaken. It also implies developing and encouraging of more young leaders in the field of education.

Overall, 65 or 43.6 percent were in the position for 1-5 years; 14 or 9.4 percent has 6-10 years; 14 or 9.4 percent has 11-15 years; 15 or 10.1 percent has 16-20 years; 18 or 12.1 percent has 21-25 years; 11 or 7.4 percent has 26-30 years; 3 or 2 percent has 31-35 years; and 9 or 6.0 percent has 36 years and above. It can be noted that majority of the faculty were those hired or were given the regular position item through the creation of new positions from the additional funds released to the State Universities and Colleges (SUCs) by the Department of Budget and Management (DBM) in 2016.

In terms of teaching experiences, the longer the number of years the members of the faculty stay in the teaching profession, there is a likelihood for teachers to hone their expertise in their fields from novitiate, advance beginning, competent performing, proficient performing, and to being an expert (Inocian & Hermosa, 2014). This projects the faculty members' rise from the ranks from the first day of employment until the last day of retirement.

In the past, years in service was one of the contributory factors in selecting a leader in an educational institution because of the belief that the longer the years in service, the more the experiences one has and the ability to lead was already honed by such experiences. On the contrary, Pricellas, Niez, Niera, and Tubis (2016) pronounced in their study that the sole criterion which is the length of service is no longer applicable to promote teacher to a high level. Managing the school really needs certain leadership skills in order for the school administrators to become efficient and effective.

1.5 Academic Rank

Table 9. Academic Rank of the Respondents

Academic Rank	Faculty		Administrators		TOTAL	
	f	%	f	%	f	%
Instructor	70	53.0	6	35.3	76	51.0
Assistant Professor	23	17.4	2	11.8	25	16.8
Associate Professor	30	22.7	8	47.1	38	25.5
Professor	9	6.8	1	5.9	10	6.7
Total	132	100	17	100	149	100

Table 9 reveals that among the faculty respondents, it can be noted that 70 or 53.0 percent of these respondents belonged to Instructor position; 23 or 17 4 percent were Assistant Professors; 30 or 22.7 percent were Associate Professors; and 9 or 6.8 percent were Professors. It implies that most of the faculty members are new in the teaching job. They have not yet earned higher academic rank through the National Budget Circular (NBC) 461 known as the Philippine Association of State Universities and Colleges (PASUC) Faculty Position Classification for SUCs.

On the other hand, with regard to the administrator respondents, 6 or 35.3 percent were Instructors; 2 or 11.8 percent were Assistant Professors; 8 or 47.1 percent were Associate Professors and 1 or 5.9 percent was a full-fledged Professor.

Overall, there were 76 or 51.0 percent who belonged to the Instructor position; 25 or 16.8 percent were Assistant Professors; 38 or 25.5 percent were Associate Professors and 10 or 6.7 percent were full-fledged Professors. It implies that academic

rank is a consideration for holding administrative positions. The qualification for administrative positions as dean or department head is embedded in the CHED Memorandum Order (CMO) Nos. 74 and 75, s. 2017, Article VI, Sec. 13.

Academic rank is influenced by the number of years in service and highest educational attainment. This is further obtained through promotion and other merit system implemented in an institution. In the SUCs, this can be obtained through the evaluation known as the NBC 461. To be designated as Dean, one should be a graduate of Doctor of Philosophy (Ph.D.) or Doctor of Education (Ed.D.) irrespective of the academic ranks.

It is interesting to note from the study of Hong (2016) that positive relationship between consideration leadership (i.e. people-oriented leadership) and affective organizational commitment was stronger among US employees than Korean employees. Initiating structure leadership (i.e. task-oriented leadership) was negatively related to affective organizational commitment in the USA, whereas this relationship was positive in Korea. Further, these relationships were moderated by rank and seniority in Korea, but not in the USA. Specifically, the positive relationship between consideration leadership and affective organizational commitment was stronger when Korean employee's rank was higher, and seniority was lower.

The article on management and leadership (Rambeau, 2019) stipulated that terms like "strategic" (importance), "executive" (rank), and "global" (scope) imply class, something that the firm consciously destroys because the distinctions create division. This is more important than ever, since so many leaders seem confused about their role in uniting positive energy in people. Regardless of one's personality, rank, role, gender, race, or age, the individual demonstrated leadership which produces responses from others. By making things happen, for better or worse, others can now judge one's actions in order to: a) reject them; b) join them; and c) challenge them. An open feedback loop from others is therefore mandatory.

There are three skills whose importance depends on the individual's level: communicates powerfully and prolifically, collaborates and promotes teamwork, and builds relationships. For example, "For senior management, communicating powerfully and prolifically moves to the number two spot [despite being the fifth-most important of the skills overall] (Zenger & Folkman, cited by Yakowics, 2014). Additionally, "Only top executives do a new competency enter the mix, as the ability to develop a strategic perspective (which had been moving steadily up the lower ranks) moves into the number five position." (Yakowics, 2014).

2. Leadership Skills

Tables 10 to 14 exhibits the level of the leadership skills (TIDAC) of the administrators based on faculty rating and administrators' rating.

2.1 Level of Technical Leadership Skills of the Administrators

As viewed in Table 10, data revealed that the administrators were rated "Very Satisfactory" by the faculty members in all the items with regard to technical skills. Evidently, items on "having a good grasp of the job, knowledge and skills in leading the college" and "getting a task done by the deadline" were rated equally with the highest mean of 3.49 with a descriptive rating of "Very Satisfactory". On the other hand, the item on "conducting/ initiating in-service training to update the personnel" earned the lowest mean of 3.36 verbally interpreted as "Very Satisfactory" as well.

In summary, the overall mean of 3.42 finally described the technical skills of the administrators as "Very Satisfactory" in view of the ratings given by the faculty.

As to the self-rating of the administrators, it is reflected on the table that the item on "getting a task done by the deadline" garnered the highest mean of 3.76 with a descriptive rating of "Excellent" while the item on "conducting/ initiating in-service training to update the personnel" got the lowest mean of 3.47 interpreted as "Very Satisfactory".

Table 10. Level of Technical Leadership Skills of the Administrators

Technical Skills	Faculty			Administrators			TOTAL		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Performs job using modern equipment and technology	3.41	.629	VS	3.53	.514	E	3.42	.617	VS
Works in a fast -paced environment	3.39	.626	VS	3.65	.493	E	3.42	.616	VS
Has a good grasp of the job, knowledge and skills in leading the college	3.49	.671	VS	3.65	.493	E	3.51	.654	E
Conducts/ initiates in-service training to update the personnel	3.36	.713	VS	3.47	.514	VS	3.38	.692	VS
Delegates to subordinates responsibility and authority	3.40	.697	VS	3.53	.717	E	3.42	.698	VS
Gets a task done by the deadline	3.49	.612	VS	3.76	.437	E	3.52	.599	E
Overall	3.42	.504	VS	3.59	.323	E	3.44	.489	VS

The overall mean of 3.5980 finally described the administrators' technical skills as "Excellent".

It could be gleaned that the item on "getting a task done by the deadline" was rated the highest (Mean=3.52) as evidenced by the combined ratings of the faculty and the administrators while the item on "conducting/initiating in-service training to update the personnel" received the lowest rating (Mean=3.38).

Finally, based on the overall mean of 3.44, the technical skills of the administrators can be described as "Very Satisfactory."

This finding indicates that the administrators had the knowledge and skills in leading the college and see to it that jobs assigned to them are performed well. Apparently, the conduct of the in-service training was not regularly done as supported by the responses of some faculty members interviewed by the researcher.

Faculty B and D disclosed, "I was not sent to seminars or training even once" and "As far as I can remember with my 5 years of stay in this institution, I was only sent to trainings and seminars twice.".

Based on the responses of the faculty when asked how they rate the technical skills of their administrators from a scale of 1-5, this skill ranked fourth which is in contrary with the ratings obtained in the survey as well as on the self-rating provided by the administrators as it emerged as rank 2.

Significantly, Yahya and Rashid (2002) explained that technical skills can be known and understood more easily as these can be seen clearly with the naked eye. A concept paper by Medina (2010), defined technical skills as a skill; expertise or technical competence related to the field of workers. Technical skills or 'hard skills' are often associated with the use of tools; equipment related to work properly and efficiently as well as technical matters.

Similarly, Ghalandari, K. (2012) defines technical skills as a knowledge about and proficiency in a specific type of work or activity. It includes competencies in a specialized area, analytical ability to use appropriate tools and techniques.

Correspondingly, technical skills can be acquired in formal and non-formal way. In a formal way, Medina (2010) explained that this is possible through academic channels, through the institutions of higher learning and attending courses and seminars.

The important or key skills according to target.jobs.co.uk for higher education administrators are good interpersonal, teamwork, I.T., organizational, time management, negotiation, presentation, analysis and communication skills. Additionally, as an educational administrator, one will normally work in areas such as admissions, quality assurance, data management and examinations, or in a specialist department such as finance, careers, marketing or human resources. All of these can be either centrally based or within faculties, departments or other smaller units (Prospects.ac.uk, 2019).

2.2 Level of Interpersonal Leadership Skills of the Administrators

As seen in Table 11, the item on "respecting the opponent as the key to successful conflict resolution" was rated highest (Mean=3.67 and Mean=3.59) both by faculty and administrators with a descriptive rating of "Excellent." It is further noted that the said item garnered the highest rating based on the combined responses.

Table 11. Level of Interpersonal Leadership Skills of the Administrators

Interpersonal Skills	Faculty			Administrators			TOTAL		
Usually knows ahead of time how people will respond to a new idea of proposal	3.38	.612	VS	3.29	.470	VS	3.37	.597	VS
Understands that the social fabric of the organization is important.	3.45	.634	VS	3.47	.717	VS	3.45	.641	VS
Able to sense the emotional undercurrents in the group	3.36	.722	VS	3.59	.712	E	3.38	.722	VS
Uses emotional energy to motivate others	3.39	.718	VS	3.29	.686	VS	3.38	.713	VS
Respects the opponent as the key to successful conflict resolution	3.67	3.62	E	3.59	.507	E	3.66	3.41	E
Works hard to find consensus in conflict situations	3.45	.724	VS	3.41	.870	VS	3.44	.739	VS
Overall	3.45	.836	VS	3.44	.540	VS	3.45	.807	VS

Along this component, the item on "being able to sense the emotional undercurrents in the group" received the lowest rating (Mean=3.36) from the faculty with a descriptive rating of "Very Satisfactory" which is in contrary with the responses of administrators where it earned highest (Mean=3.59) with a verbal interpretation of "Very Satisfactory."

With the combined ratings of the faculty and the administrators on this leadership component, the item on "respecting the opponent as the key to successful conflict resolution" obtained the highest rating (Mean=3.66) verbally interpreted as "Excellent" while the item about "knowing usually ahead of time how people will respond to a new idea of proposal" got the lowest (Mean=3.37) with descriptive rating of "Very Satisfactory."

In summary, both the faculty and the administrators described their interpersonal skills as "Very Satisfactory."

The abovementioned findings indicated that the administrators possessed high respect with other people as well as good values in leading an organization. Administrators were rated highest in their interpersonal skills based on the ratings as supported by the interview with the faculty.

Faculty A firmly expressed, "Our dean has a very good interpersonal skill."

A recent study of Bimpeh (2012) identified the factors that influence leaderships in schools. These comprised of interpersonal and communication factor; intellectual and work management factor; purposeful inclusion and values driven factor, and gender factor. Particularly, the establishment of professional development programs for both newly appointed and serving heads aimed at enhancing the leadership capacity of the principals in the schools was recommended towards the end of the research.

Meanwhile, Khan and Ahmad (2012) in their study discussed that interpersonal skills are the abilities to motivate, communicate, and build teams which are essential towards becoming effective leaders. However, the research did not specify which skill is more important at different levels of management.

Similarly, Miller (2012) in his article enumerated the three levels of communication skills for leaders which are the core communication skills, team communication skills and strategic and external communication skills. As the leader gains more responsibility in an organization and undertakes more complex and demanding roles, the leader will need to improve core skills and become more effective in the higher-level team and strategic skills. To be effective, according to Miller (2012), the skills should be acquired and developed in a sequence, that is- from core to strategic skills. Winston Churchill (cited by Miller, 2012), one of the acknowledged great British Prime Ministers once said that the difference between mere management and leadership is communication. Management and leadership have been shown to be much more than communication. There is a little doubt that communication skills are the heart of effective leadership.

However, good communication skills alone will not make an effective leader. Everything a leader does to influence others involves communicating. Good communication skills are the foundations of an effective leadership.

2.3 Level of Decision-Making Leadership Skills of the Administrators

As found therein, the faculty members rated the items on "making appropriate decisions", and "overcoming barriers to get things done" highest (Mean=-3.48) verbally interpreted as "Very Satisfactory". On the other hand, the ability "to base decisions on explicit objective criteria" garnered the lowest rating (Mean=3.33) which was interpreted as "Very Satisfactory."

As for the faculty members, this component deserves an overall rating of "Very Satisfactory" as evidenced by the overall mean of 3.42.

Table 12. Level of Decision-Making Leadership Skills of the Administrators

Decision-Making Skills	Faculty			Administrators			TOTAL		
Emphasizes fairness in decision – making	3.45	.670	VS	3.65	.493	E	3.48	.653	VS
Bases decisions on explicit objective criteria	3.33	.726	VS	3.47	.717	VS	3.34	.724	VS
Undertakes appropriate consultation	3.43	.632	VS	3.71	.470	E	3.46	.621	VS
Makes appropriate decisions	3.48	.693	VS	3.65	.702	E	3.50	.694	E
Does not allow the decisions to drift	3.36	.702	VS	3.35	.862	VS	3.36	.719	VS
Overcomes barriers to get things done	3.48	.648	VS	3.53	.717	E	3.48	.654	VS
Overall	3.42	.562	VS	3.56	.543	E	3.44	.560	VS

With regard to the self-rating of the administrators, the item on "undertaking appropriate consultation" was rated highest (Mean=3.71) verbally interpreted as "Excellent" while the item on "not allowing the decisions to drift" was rated lowest (Mean=3.35) which was described as "Very Satisfactory."

Overall, the administrators are deeply convinced that this component deserves an "Excellent" rating as supported by the overall mean of 3.56.

As regards the results of the combined assessment, the item on "making appropriate decisions" was rated highest (Mean=3.50) which was de-

scribed as "Excellent", while the item on "not allowing the decisions to drift" garnered the lowest rating (Mean=3.34) verbally interpreted as "Very Satisfactory."

Overall, the assessments of the faculty and administrators in terms of the decision-making skills resulted to a "Very Satisfactory" rating as supported by an overall mean of 3.44.

The finding clearly indicates that the administrators act immediately on issues concerning the welfare of the college or department. Faculty D when asked to describe his dean replied without hesitation, "He is responsive to the needs of the teacher."

A research study by Colakkadioglu and Celik (2016) explained that decision making is a critical cognitive process in every area of human life. In this process, the individuals play an active role and obtain outputs with their functional use of decision-making skills. Therefore, the decision-making process can affect the course of life, life satisfaction, and the social relations of an activity. Thus, this is also an important skill that administrators should develop.

In another study by Clemente (2007), it was recommended that administrators of schools may consider the inclusion of decision making-skills and administrative skills development in the structure of a training program. She further recommended the conduct of a regular evaluation to assess the principals' management or leadership skills. This is to ensure improvement and sustainability of leadership skills particularly in the education sector.

2.4 Level of Administrative Leadership Skills of the Administrators

As exhibited therein, the item on "encouraging and supporting others for professional growth" was rated highest (Mean=3.54) verbally interpreted as "Excellent" while the item on "obtaining and allocating resources for the college" was rated lowest (3.43) with a verbal interpretation of "Very Satisfactory".

Interestingly, the assessment of the latter item is in contrary with the self-rating given by the administrators wherein it earned the highest rating (Mean=3.82) which was described as "Excellent."

Overall, the faculty members firmly believe that this component of leadership skills deserve a "Very Satisfactory" rating as evidenced by the overall mean of 3.47. On the other hand, the administrators' self-rating was "Excellent" as supported by the overall mean of 3.63.

Table 13. Level of Administrative Leadership Skills of Administrators

	Faculty			Administrators			TOTAL		
Works well with the detailed aspects of the job	3.46	.623	VS	3.47	.514	VS	3.46	.610	VS
Encourages and supports others for professional growth	3.54	.647	E	3.76	.437	E	3.56	.629	E
Manages people and resources to achieve the organization's goals and objectives	3.48	.659	VS	3.76	.437	E	3.52	.643	E
Responds to people's requests and concerns	3.44	.680	VS	3.59	.507	E	3.46	.663	VS
Obtains and allocates resources for the college	3.43	.656	VS	3.82	.393	E	3.48	.643	VS
Outsources to support the programs of the college	3.47	.635	VS	3.35	.702	VS	3.46	.642	VS
Overall	3.47	.527	VS	3.63	.389	E	3.49	.514	VS

With regard to their combined assessments, the item on "encouraging and supporting others for professional growth" was rated highest (Mean=3.56) and described as "Excellent" while the items on "working well with the detailed aspects of the job," "responding to people's requests and concerns," and "outsourcing to support the programs of the college" were rated lowest (Mean=3.46) verbally interpreted as "Very Satisfactory."

Overall, the combined assessments recorded an overall mean of 3.49 and described as "Very Satisfactory."

The findings suggest that the administrators are supportive to the faculty and work hand-in-hand for the college. Faculty D disclosed that "Her dean is not only a good leader, but also a good manager. She manages people and resources to achieve the organization's goals and objectives".

Meanwhile, Amina and Alhakem (2015) in their article entitled, "The Relation Between Component and Obstacles of the Administrative Creativity in Sudan Organizations" confirmed the importance of a number of personal skills and managerial skills of managers. The research found that there is a positive correlation between those skills and administrative creativity of Sudanese institutions which showed a high level of personal and administrative skills for managers to enjoy their skills in debate and dialogue; the power of persuasion; producing new ideas; making the right decisions at the right time, and a high level of efficiency in planning and coordination between administrative units; streamlining procedures and oversight and supervision. Further, it was revealed that there is a positive function correlation between those

skills and creativity. Certainly, personal skills and managerial skills comprise administrative creativity which are skills that need to be developed among leaders.

In an early work of Yossef and Rakha (2017), they revealed a high level of personal and administrative skills and medium level of administrative creativity to Najran University administrative leaders as well as positive correlation between both personal and administrative variables and the levels of administrative creativity. Thus, personal and administrative skills are related, and these are among the important competencies that leaders should develop.

2.5 Level of Conceptual Leadership Skills of the Administrators

As presented therein, the item on "flexibility about making changes in the organization" was rated highest (Mean=3.45) with a verbal interpretation of "Very Satisfactory" while the item on "addressing and undertaking immediate action when problems arise" got the lowest rating (Mean=3.37) which was described as "Very Satisfactory".

Surprisingly, the assessment of the latter item is in contrast with that of the administrators which was given the highest rating (Mean=3.65), with a verbal interpretation of "Very Satisfactory." As a whole, the overall mean rating of faculty was 3.42 described as "Very Satisfactory."

On the other hand, with regard to the self-ratings of the administrators, the item on "discussing organizational values and philosophy" was also rated highest (Mean=3.65) described as "Excellent," while item on "seeing the big picture comes easily" was rated lowest (Mean=3.29) described as "Very Satisfactory." Overall, the administrators gave an "Excellent" rating in this component as evidenced by the overall mean of 3.50.

In terms of the combined assessments of both faculty and administrator regarding conceptual skills, the item on "dealing and solving problems in a democratic" emerged as highest (Mean=3.50) and described as "Excellent" while item on "seeing the big picture comes easily" got the lowest rating (Mean=3.38) with a verbal interpretation of "Very Satisfactory."

As a whole, the combined assessment resulted to an overall mean of 3.43 verbally interpreted as "Very Satisfactory."

The finding implies that the administrators apply a democratic way of leading the college. This is well-supported by the response of Faculty D when asked how she will describe her dean.

Table 14. Level of Conceptual Leadership Skills of the Administrators

Conceptual Skills	Faculty			Administrators			TOTAL		
Deals and solve problems in a democratic way	3.48	.624	VS	3.59	.507	E	3.50	.611	E
When problems arise, immediate action is undertaken to address them	3.37	.681	VS	3.65	.702	E	3.40	.687	VS
Sees the big picture comes easily	3.38	.660	VS	3.29	.686	VS	3.37	.661	VS
Makes strategic plans for the college/institution	3.43	.690	VS	3.47	.717	VS	3.44	.691	VS
Discusses organizational values and philosophy	3.42	.678	VS	3.65	.493	E	3.45	.662	VS
Is flexible about making changes in the organization	3.45	.702	VS	3.35	.862	VS	3.44	.720	VS
Overall	3.42	.538	VS	3.50	.514	E	3.43	.534	VS

"I may describe him as democratic, because he shows fairness and flexibility in leading his subordinates," articulates Faculty D.

Faculty rating is generally lower than self-rating in all the aspects of leadership skills as shown in the data. While there is no significant difference in the self-rating and faculty rating, there is more room for improvement in 4/5 indicators.

Motlaq, M. A., Motlaq, M. A., Dareke, and Rezaei, (2012) in their study revealed that the conceptual skills training only increased the managers' job satisfaction and not their job performance. Conceptual skills training can be utilized to improve job satisfaction in women managers and organizational training. It is also a good basis in identifying the trainings that should be provided to school leaders.

Katz (2002) in his article entitled, "Skills of an Effective Administrators" listed the three categories of management skills: human skills, conceptual and technical skills which are very important skills. These are essential skills that leaders should possess in leading their subordinates.

"Conceptual skills," as defined by the Business Dictionary, is the ability to think creatively about, analyze and understand complicated and abstract ideas. Using a well-developed conceptual skills set, top level business managers need to be able to look at their company as a holistic entity, to see the interrelationships between its divisions and to understand how the firm fits into and affects its overall environment.

Likewise, Ghalandari (2012) in his study posit-

ed that conceptual skills are central to creating vision and strategic plan for the organization. For example, it would take conceptual skills for a CEO in a struggling manufacturing company to articulate a vision for a line of new products that would steer the company into profitability. Conceptual skill has to do with the mental work of shaping the meaning of organizational or policy-issues- understanding what a company stands for and where it is or should be going.

Similarly, educational administrators need creating or strategizing plans on how the organizations' vision and mission be realized.

The success of the faculty members depends on the leadership behavior displayed by the deans and its effectiveness on their academic, scholarly, and developmental activities (Amir, Kannan, Sharma & Veeriah, 2016). Deans with strong leadership are capable of spearheading changes by designing important, realistic, and achievable objectives as well as by implementing strategies leading to goal accomplishment.

In South Carolina, Kochamba and Murray (2008), in their study on critical leadership skills needed by principals for the achievement of school effectiveness found technical, human relations, conceptual and transformative leadership skills critical for the achievement of school effectiveness. In Hong Kong, Pang and Pisapia (2012) found a link between strategic thinking (a component of conceptual skills) and effectiveness of schools. On the other hand, researchers such as Richter, Lewis and Hagar (2012) found transformational, managerial and behavior management skills to be essential ingredients that the school principals need for the achievement of effective schools. In a related study, on effective schools in developing countries, Hoppey and Mcleskey (2013) discovered that the principal who had interpersonal skill viewed his primary role as to that of providing support for his teachers so they could put in their best to teaching thereby achieving school effectiveness.

2.6.1 Leadership Skills of Administrators by SUCs (Technical Leadership Skills)

As seen on Table 15, in terms of the technical skills, the SUC A obtained a mean of 3.31 with a verbal interpretation of "Very Satisfactory". In particular, they obtained the highest rating in "getting a task done by the deadline" as evidenced by the mean of 3.45.

Table 15. Technical Leadership Skills

Technical Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Performs job using modern equipment and technology	3.16	.679	VS	3.43	.634	VS
Works in a fast-paced environment	3.34	.708	VS	3.29	.659	VS
Has a good grasp of the job, knowledge and skills in leading the college	3.34	.847	VS	3.54	.576	E
Conducts/ initiates in-service training to update the personnel	3.26	.760	VS	3.46	.693	VS
Delegates to subordinates' responsibility and authority	3.29	.732	VS	3.32	.723	VS
Gets a task done by the deadline	3.45	.645	VS	3.46	.637	VS
Overall	3.31	.583	VS	3.42	.479	VS

Technical Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Performs job using modern equipment and technology	3.58	.578	E	3.53	.554	E
Works in a fast-paced environment	3.31	.471	VS	3.55	.597	E
Has a good grasp of the job, knowledge and skills in leading the college	3.38	.637	VS	3.68	.526	E
Conducts/ initiates in-service training to update the personnel	3.31	.736	VS	3.43	.675	VS
Delegates to subordinates' responsibility and authority	3.31	.736	VS	3.63	.586	E
Gets a task done by the deadline	3.38	.637	VS	3.63	.540	E
Overall	3.37	.477	VS	3.57	.435	E

As for the administrators in SUC B, they gave an overall "Very Satisfactory" rating as supported by the overall mean of 3.42. Specifically, the item on "having a good grasp of the job, knowledge and skills in leading the college," got the highest mean of 3.54 interpreted as "Excellent."

Moreover, SUC C administrators rated their technical skills "Very Satisfactory" as supported by an overall mean of 3.37. In particular, they excel in "performing their job using modern equipment and technology" which garnered the highest mean of 3.58.

Lastly, the administrators of SUC D outshine in various domains of the technical skills as evidenced by an overall mean rating of 3.57. They are particularly outperforming in their attribute of "having a good grasp of the job, knowledge and skills in leading the college" as this item obtained the highest mean of 3.68.

Obviously, the abovementioned findings denote that the performances of the administrators from the four SUCs are on a high level.

2.6.2 Interpersonal Leadership Skills

Table 16 presents the ratings of the interpersonal skills of the administrators from the four SUCs.

As viewed therein, all administrators from SUCs A (Mean=3.26), B (Mean=3.29), and C (Mean=3.26) recorded an overall mean rating of "Very Satisfactory" while only those from SUC D had an "Excellent" rating (Mean=3.76).

Table 16. Interpersonal Leadership Skills

Interpersonal Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Usually knows ahead of time how people will respond to a new idea of proposal	3.34	.708	VS	3.25	.645	VS
Understands that the social fabric of the organization is important	3.29	.732	VS	3.36	.621	VS
Able to sense the emotional undercurrents in the group	3.42	.826	VS	3.18	.723	VS
Uses emotional energy to motivate others	3.42	.858	VS	3.29	.763	VS
Respects the opponent as the key to successful conflict resolution	3.24	.913	VS	3.21	.686	VS
Works hard to find consensus in conflict situations	3.45	.795	VS	3.46	.693	VS
Overall	3.36	.697	VS	3.29	.560	VS

Interpersonal Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Usually knows ahead of time how people will respond to a new idea of proposal	3.35	.562	VS	3.53	.506	E
Understands that the social fabric of the organization is important	3.42	.578	VS	3.68	.526	E
Able to sense the emotional undercurrents in the group	3.12	.711	VS	3.58	.549	E
Uses emotional energy to motivate others	3.23	.652	VS	3.55	.552	E
Respects the opponent as the key to successful conflict resolution	3.27	.778	VS	3.65	.640	E
Works hard to find consensus in conflict situations	3.19	.895	VS	3.60	.496	E
Overall	3.26	.540	VS	3.76	1.155	E

In particular, administrators from SUCs A and B both "work hard to find consensus in conflict situations" as this obtained the highest mean ratings of 3.45 and 3.46 respectively which were interpreted as "Very Satisfactory."

The administrators from SUC C, on the other hand, were found to be good in "understanding that the social fabric of the organization is important" as this earned the highest mean of 3.42 with a verbal interpretation of "Very Satisfactory."

Lastly, the SUC D administrators likewise excel in "understanding that the social fabric of the organization is important" as this earned the highest mean of 3.68.

The findings imply that the administrators composed of deans and program chairs do perform exemplary with regard to their interpersonal skills. Significantly, this finding is well-supported by the experiences of their subordinates when asked to assess the deans as well as the program chairs.

Faculty A and D articulated with sincerity, "My dean and program chair manifest high interpersonal skills especially when it comes to emotional concerns."

2.6.3 Decision-making Leadership Skills

The administrators from SUC C, on the other hand, were found to be good in "understanding that the social fabric of the organization is important" as this earned the highest mean of 3.42 with a verbal interpretation of "Very Satisfactory."

Table 17 shows that the assessment of the decision-making skills of the school administrator.

Table 17. Decision-making Leadership Skills

Decision-Making Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Emphasizes fairness in decision –making	3.34	.708	VS	3.36	.621	VS
Bases decisions on explicit objective criteria	3.18	.834	VS	3.32	.612	VS
Undertakes appropriate consultation	3.37	.751	VS	3.43	.634	VS
Makes appropriate decisions	3.42	.758	VS	3.43	.742	VS
Does not allow the decisions to drift	3.29	.835	VS	3.29	.600	VS
Overcomes barriers to get things done	3.42	.722	VS	3.39	.685	VS
Overall	3.34	.648	VS	3.37	.535	VS

Decision-Making Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Emphasizes fairness in decision –making	3.35	.797	VS	3.70	.516	E
Bases decisions on explicit objective criteria	3.08	.796	VS	3.63	.540	E
Undertakes appropriate consultation	3.23	.587	VS	3.63	.490	E
Makes appropriate decisions	3.31	.679	VS	3.68	.572	E
Does not allow the decisions to drift	3.15	.732	VS	3.63	.540	E
Overcomes barriers to get things done	3.31	.679	VS	3.70	.464	E
Overall	3.24	.580	VS	3.66	.399	E

As seen therein, three of SUCs, SUCs A, B and C garnered a "Very Satisfactory" ratings as evidenced by overall ratings of 3.34, 3.37 and 3.24 accordingly while SUC gave an "Excellent" rating in their decision-making skills as evidenced by an overall mean of 3.66.

In particular, the SUC A administrators gave a "Very Satisfactory" rating in the items "making appropriate decisions" as well as "overcoming barriers to get things done" as they both obtained the highest mean of 3.42.

Meanwhile, the SUC B administrators gave a "Very Satisfactory" rating on the items as regards "undertaking appropriate consultation" and "making appropriate decisions" as they both recorded a mean of 3.43.

On the other hand, the administrators from SUC C earned a "Very Satisfactory" rating on the item "emphasizing fairness in decision–making" as evidenced by the mean rating of 3.35.

Surprisingly, the SUC D administrators outshine in "emphasizing fairness in decision –making as well as in "overcoming barriers to get things done" as they both recorded a mean rating of 3.70.

The findings denote that the deans and program chairs possess exemplary performance in decision-

making skills.

Interestingly, Faculty A expressed with kindness during the interview, "My dean has bottom-up leadership. She listens to the faculty concerns before making decisions".

Colakkadioglu and Celik (2016) put emphasis in their study the importance of the decision-making process. It can affect the course of life; life satisfaction, and the social relations of an activity. Thus, this should be developed to further enhance the critical cognitive process in every area of human life particularly the administrators.

In another study, Clemente (2007) recommended that the administrators of schools may consider the inclusion of decision making-skills and administrative skills development in the structure of a training program. She added that there is a need to conduct regular evaluation to assess principals' management or leadership skills. This can also be applicable to middle managers particularly the deans and the program chairs in higher education institutions. This is to ensure improvement and sustainability of leadership skills specifically in the sector of education.

2.6.4 Administrative Leadership Skills

As viewed in Table 18, the administrators from SUCs A, B and C obtained a "Very Satisfactory" ratings in the administrative skills as evidenced by the overall mean ratings of 3.39, 3.47 and 3.34.

Table 18. Administrative Leadership Skills

Administrative Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Works well with the detailed aspects of the job	3.37	.751	VS	3.43	.573	VS
Encourages and supports others for professional growth	3.53	.687	E	3.57	.573	E
Manages people and resources to achieve the organization's goals and objectives	3.39	.679	VS	3.46	.693	VS
Responds to people's requests and concerns	3.37	.786	VS	3.43	.690	VS
Obtains and allocates resources for the college	3.32	.702	VS	3.43	.690	VS
Outsources to support the programs of the college	3.37	.714	VS	3.50	.638	E
Overall	3.39	.591	VS	3.47	.537	VS

Administrative Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Works well with the detailed aspects of the job	3.35	.562	VS	3.65	.533	E
Encourages and supports others for professional growth	3.23	.765	VS	3.73	.506	E
Manages people and resources to achieve the organization's goals and objectives	3.35	.745	VS	3.68	.526	E
Responds to people's requests and concerns	3.27	.667	VS	3.63	.540	E
Obtains and allocates resources for the college	3.38	.697	VS	3.58	.549	E
Outsources to support the programs of the college	3.46	.647	VS	3.55	.552	E
Overall	3.34	.532	VS	3.63	.419	E

Meanwhile, only the administrators from SUC D garnered an "Excellent" rating in this component as supported by an overall mean of 3.63.

In particular, the item on "encouraging and supporting others for professional growth" emerged as the highest among the administrators from SUC A and B (Mean=3.53; Mean=3.57). On the other hand, SUC C administrators were found "Very Satisfactory" in "outsourcing to support the programs of the college" as this recorded a mean of 3.46.

Lastly, the item on "encouraging and supporting others for professional growth" emerged as the item with a highest mean (Mean=3.73) among the SUC D administrators verbally interpreted as "Excellent."

The findings imply that the administrators' administrative skills from the four SUCs are commendable.

This finding can be validated from the response of the Faculty C who humbly expressed her comment for her dean, "Her sense of professionalism really radiates and knows how to develop the college."

2.6.5 Conceptual Skills

Table 19. Conceptual Skills

Conceptual Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Deals and solves problems in a democratic way	3.47	.725	VS	3.39	.497	VS
When problems arise, immediate action is undertaken to address them	3.26	.795	VS	3.29	.535	VS
Sees the big picture comes easily	3.29	.835	VS	3.46	.693	VS
Makes strategic plans for the college/institution	3.37	.819	VS	3.25	.701	VS
Discusses organizational values and philosophy	3.21	.843	VS	3.43	.573	VS
Is flexible about making changes in the organization	3.39	.718	VS	3.32	.723	VS
Overall	3.33	.663	VS	3.36	.511	VS

Conceptual Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Deals and solves problems in a democratic way	3.27	.667	VS	3.70	.516	E
When problems arise, immediate action is undertaken to address them	3.27	.778	VS	3.60	.545	E
Sees the big picture comes easily	3.19	.402	VS	3.53	.554	E
Makes strategic plans for the college/institution	3.35	.629	VS	3.68	.526	E
Discusses organizational values and philosophy	3.35	.689	VS	3.68	.474	E
Is flexible about making changes in the organization	3.31	.884	VS	3.68	.474	E
Overall	3.29	.493	VS	3.64	.380	E

As exhibited in Table 19, the administrators from SUCs A, B, and C were rated Very Satisfactory in all items about conceptual skills as evidenced by the overall mean ratings of 3.33, 3.36 and 3.29 respectively. Surprisingly, the SUC D administrators excel in all items as supported by the overall mean of 3.64.

Specifically, the SUC A administrators were rated "Very Satisfactory" as it obtained the highest mean of 3.47 in "dealing and solving problems in a democratic way." Meanwhile, the administrators of SUC B obtained the highest rating of "Very Satisfactory" in "seeing the big picture comes easily" as supported by a mean rating of 3.46.

On the other hand, the SUC C administrators garnered highest mean ratings (Mean=3.35) for both items such as "making strategic plans for the college/institution" and "discussing organizational values and philosophy" with a verbal interpretation of "Very Satisfactory."

Finally, the administrators of SUC D outshine in "dealing and solving problems in a democratic way" as supported by the mean rating of 3.70.

The data imply that the administrators' conceptual skills are exemplary.

A study conducted by Motlaq, M. A., Motlaq, M. A., Dareke, and Rezaei (2012) revealed that the conceptual skills training can be used to improve job satisfaction in women managers and organizational training. Further, it can be a good basis in identifying what trainings should be provided to school leaders.

Katz (2002) in his article, "Skills of an Effective Administrator" emphasized the importance of management skills, human skills, conceptual, and technical skills which are very vital skills for leaders in leading subordinates.

3. Comparison of the Leadership Skills and the Demographic Profile

Tables 15, 16, 17, 18, and 19 exhibit the comparison of the leadership skills and the demographic profile of the respondents.

3.1 Leadership Skills and Sex

Table 20 shows that there is a significant difference on the assessment of the respondents regarding leadership skills particularly on technical skills when they are grouped according to sex as evidenced by the p-value of 0.031 which is less than 0.05 level of significance.

Result further indicates that the male respondents gave a higher assessment in terms of the administrators' technical skills than the female. This may imply that technically, administrators perform their duties and responsibilities as stated in their terms of reference.

Table 20. Comparison of the Leadership Skills when Respondents are Grouped According to Sex

Leadership Skills	Sex	Mean	S.D.	t-value	p-value	Sig
Technical Skills	Male	3.540	.38066	2.179	P = 0.031 < 0.05	S
	Female	3.374	.54709			
Interpersonal Skills	Male	3.593	1.00526	1.897	P = 0.060 > 0.05	NS
	Female	3.341	.60710			
Decision-Making Skills	Male	3.532	.46841	1.775	P = 0.078 > 0.05	NS
	Female	3.368	.61150			
Administrative Skills	Male	3.527	.45908	.764	P = 0.446 > 0.05	NS
	Female	3.461	.55228			
Conceptual Skills	Male	3.487	.46306	1.077	P = 0.283 > 0.05	NS
	Female	3.392	.57948			

It is noted further that the interpersonal, decision-making, administrative, and conceptual skills yield no significant difference on the assessment of the respondents' regarding these skills when they are grouped according to sex as supported by the p-values of 0.060, 0.078, 0.446, and 0.283 respectively which are all greater than 0.05 level of significance.

This finding implies that the respondents' assessments share the same insights in the abovementioned components of leadership skills when grouped according to their sex.

A study conducted by Gorska (2016) found that leadership may be influenced by sex, where women act in a more supportive ways giving subordinate more freedom; less supervision, and are more understanding and tolerant. Hence, women tend to be more democratic. Moreover, they treat rewards as motivational tool and organize work through lists. This finding supports the description of Faculty D of his administrator when asked how he will describe him. He simply uttered, "He is democratic."

Another study conducted by Bremen (as cited by Thompson, 2012) discovered that female leaders were much more likely than male leaders to believe they could leave a positive legacy behind.

3.2 Leadership Skills and Age

Table 21. Comparison of the Leadership Skills when Respondents are Grouped According to Age

Leadership Skills		Mean	S.D.	F-value	p-value	Sig
Technical Skills	30 and below	3.494	.43726			
	31-35	3.458	.37013			
	36-40	3.474	.39585			
	41-45	3.546	.39937	.532	P = 0.809 > 0.05	NS
	46-50	3.342	.52550			
	51-55	3.304	.71501			
	56-60	3.385	.63240			
	61 & above	3.458	.41667			
	Total	3.444	.48923			

Leadership Skills		Mean	S.D.	F-value	p-value	Sig
Interpersonal Skills	30 and below	3.620	1.06186			
	31-35	3.583	.42935			
	36-40	3.436	.39988			
	41-45	3.352	.49800	.801	P = 0.588 > 0.05	NS
	46-50	3.307	.59645			
	51-55	3.186	.91644			
	56-60	3.333	.66319			
	61 & above	3.375	.47871			
	Total	3.447	.80657			
Decision-Making Skills	30 and below	3.509	.43291			
	31-35	3.500	.47673			
	36-40	3.526	.41859			
	41-45	3.343	.56439	.505	P = 0.830 > 0.05	NS
	46-50	3.421	.59153			
	51-55	3.265	.88987			
	56-60	3.397	.69568			
	61 & above	3.375	.47871			
	Total	3.437	.55968			
Administrative Skills	30 and below	3.550	.44528			
	31-35	3.611	.36469			
	36-40	3.474	.37790			
	41-45	3.528	.45103	.496	P = 0.837 > 0.05	NS
	46-50	3.395	.61164			
	51-55	3.373	.72536			
	56-60	3.410	.67225			
	61 & above	3.375	.47871			
	Total	3.489	.51431			
Conceptual Skills	30 and below	3.509	.45104			
	31-35	3.597	.35858			
	36-40	3.462	.36103			
	41-45	3.343	.44455	.863	P = 0.537 > 0.05	NS
	46-50	3.333	.61111			
	51-55	3.226	.85176			
	56-60	3.449	.62132			
	61 & above	3.500	.43033			
	Total	3.432	.53377			

Table 21 reveals that there is no significant difference on the assessment of the respondents regarding the leadership skills of the administrators when grouped according to age as denoted by the p -values which are all greater than the 0.05 level of significance.

Evidently, the results imply that the respondents share common insights as regards various leadership skills components across age categories.

Boerrigter (2015) concluded in his study that older leaders are not better or worse than younger leaders in achieving effective leadership.

Consequently, an investigation conducted by Bremen (as cited by Thompson, 2012) concluded that older leaders who believed they could leave behind a lasting legacy were frequently motivated and effective, while those who believed they would leave no legacy behind were often not as effective leaders.

On the other hand, a research conducted by Thompson (2012) in Queensland, Australia with regard to the relationship between age and wisdom among older leaders found that despite the correlation between wisdom and effective leadership, the study found no link between age and wisdom, or between age and leadership skills. Some older leaders demonstrated higher levels of wisdom and more effective leadership while others did not. Unfavorably, the study did not provide support for the idea that leaders become wiser with age.

On the contrary, the study of Anbazhagan and Kotur (2014) revealed that with increase in age, relatively lesser authority is exhibited by the workers and gender too is found to influence the leadership styles of the workers.

3.3 Leadership Skills and Highest Educational Attainment

Table 22. Comparison of the Leadership Skills when Respondents are Grouped According to Highest Educational Attainment

Leadership Skills		Mean	S.D.	F-value	p-value	Sig
Technical	Bachelor's Degree	3.501	.47797			
	Master of Arts/ Master of Science	3.376	.52918	.811	P = 0.447 > 0.05	NS
	Doctor of Philosophy/ Doctor of Education	3.411	.49322			
	Total	3.424	.50417			
Interpersonal	Bachelor's Degree	3.501	.47506			
	Master of Arts/ Master of Science	3.457	1.1259	.260	P = 0.771 > 0.05	NS
	Doctor of Philosophy/ Doctor of Education	3.364	.55817			
	Total	3.448	.83629			
Decision	Bachelor's Degree	3.569	.43934			
	Master of Arts/ Master of Science	3.345	.64274	2.109	P = 0.126 > 0.05	NS
	Doctor of Philosophy/ Doctor of Education	3.374	.52379			
	Total	3.422	.56188			
Administrative	Bachelor's Degree	3.577	.43954			
	Master of Arts/ Master of Science	3.405	.56205	1.309	P = 0.274 > 0.05	NS
	Doctor of Philosophy/ Doctor of Education	3.455	.55633			
	Total	3.471	.52684			
Conceptual	Bachelor's Degree	3.545	.41336			
	Master of Arts/ Master of Science	3.356	.61768	1.577	P = 0.210 > 0.05	NS
	Doctor of Philosophy/ Doctor of Education	3.389	.51144			
	Total	3.423	.53756			

As seen in Table 22, it was unveiled that there is no significant difference on the perceptions of the respondents regarding the leadership skills of administrators when grouped according to highest educational attainment as supported by the p-values which are all greater than the 0.05 level of significance.

This implies that the respondents share the same insights in terms of the various components of leadership skills across highest educational attainment.

The findings support the idea that regardless of

their educational attainment, enhancement or development to further improve their leadership skills is essential especially with regard to the items that were found weak among these respondents.

On the contrary, a study conducted by Besley, Montalvo and Querol (2011) in Europe revealed that educational attainment has a large and statistically significant effect and found out that additional schooling increases the quality of civic awareness among the leaders and educational attainment is important and that growth is enhanced by having leaders who are more highly educated.

3.4 Leadership Skills and Years in the Present Position

Table 23. Comparison of the Leadership Skills when Respondents are Grouped According to Years in the Present Position

Leadership Skills		Mean	S.D.	F-value	p-value	Sig
Technical Skills	1-5	3.5641	.42153			
	6-10	3.3452	.30287			
	11-15	3.3810	.42077	1.601	p = 0.140 > 0.05	NS
	16-20	3.3444	.49788			
	21-25	3.4907	.57301			
	26-30	3.1364	.72960			
	3135	3.4444	.34694			
	36 and more	3.2778	.64550			
	Total	3.4441	.48923			
Interpersonal Skills	1-5	3.6231	.97507			
	6-10	3.3810	.51236			
	11-15	3.3095	.45694			
	16-20	3.2000	.65526	.921	P = 0.492 > 0.05	NS
	21-25	3.4352	.72115			
	26-30	3.2121	.77850			
	3135	3.2778	.34694			
	36 and more	3.2778	.70218			
	Total	3.4474	.80657			
Decision Skills	1-5	3.5590	.45399			
	6-10	3.3571	.57682			
	11-15	3.3690	.49862			
	16-20	3.2111	.55085	1.121	P = 0.353 > 0.05	NS
	21-25	3.4907	.72191			
	26-30	3.2879	.72300			
	3135	3.3333	.44096			
	36 and more	3.2778	.74536			
	Total	3.4374	.55968			
Administrative Skills	1-5	3.6205	.40879			
	6-10	3.4167	.51784			
	11-15	3.3214	.42599			
	16-20	3.4000	.51870	1.699	P = 0.114 > 0.05	NS
	21-25	3.5648	.64711			
	26-30	3.2879	.65443			
	3135	3.1667	.28868			
	36 and more	3.2593	.72701			
	Total	3.4888	.51431			
Conceptual Skills	1-5	3.5692	.42786			
	6-10	3.3333	.53509			
	11-15	3.3333	.44817			
	16-20	3.2444	.50343	1.347	P = 0.233 > 0.05	NS
	21-25	3.4352	.66701			
	26-30	3.2121	.80654			
	3135	3.3333	.33333			
	36 and more	3.3519	.67415			
	Total	3.4318	.53377			

As viewed therein, there is no significant difference on the assessment of the respondents regarding the leadership skills of administrators when grouped according to the years in the present position as evidenced the obtained p-values which are all greater than the 0.05 level of significance.

The results simply confirm that the respondents share insights in common as regards the various components of the administrators' leadership skills irrespective of their number of years of service in their current position.

3.5 Leadership Skills and Academic Rank

Table 24. Comparison of the Leadership Skills when Respondents are Grouped According to Academic Rank

Leadership Skills		Mean	S.D.	F-value	p-value	Sig
Technical Skills	Instructor	3.50	.446			
	Asst. Prof.	3.44	.369	.922	P = 0.432 > 0.05	NS
	Assoc. Prof.	3.36	.616			
	Professor	3.32	.539			
	Total	3.44	.489			
Interpersonal Skills	Instructor	3.58	.925			
	Asst. Prof.	3.44	.393	1.85	P = 0.141 > 0.05	NS
	Assoc. Prof.	3.23	.760			
	Professor	3.25	.625			
	Total	3.45	.807			
Decision Skills	Instructor	3.51	.475			
	Asst. Prof.	3.49	.383	1.7	P = 0.192 > 0.05	NS
	Assoc. Prof.	3.31	.762			
	Professor	3.23	.568			
	Total	3.44	.560			
Administrative Skills	Instructor	3.55	.465			
	Asst. Prof.	3.49	.345	1.10	P = 0.353 > 0.05	NS
	Assoc. Prof.	3.41	.646			
	Professor	3.30	.647			
	Total	3.49	.514			
Conceptual Skills	Instructor	3.50	.472			
	Asst. Prof.	3.43	.326	1.24	P = 0.296 > 0.05	NS
	Assoc. Prof.	3.32	.713			
	Professor	3.28	.578			
	Total	3.43	.534			

As presented therein, there is no significant difference on the perceptions of the respondents regarding the leadership skills of administrators when grouped according to their academic ranks as denoted by the p-values which are all greater than 0.05 level of significance.

The results simply confirm that the respondents share insights in common as regards the various components of the administrators' leadership skills irrespective of their academic ranks.

Apparently, a study conducted by Amir, Kannan, Sharma and Veeriah (2016) concluded that the success of the faculty members depends on the leadership behavior displayed by the deans and its effectiveness on their academic, scholarly, and developmental activities. It was also found that the deans with strong leadership are capable of spearheading changes by designing important, realistic, and achievable objectives as well as by implementing strategies leading to goal accomplishment.

4. Comparison of the Self Rating and Faculty Rating of the Leadership Skills of the Administrators

It can be gleaned from Table 25 that there is no significant difference on the perceptions between the self-rating and faculty rating on leadership skills of the administrators as supported by the obtained p-values which are all higher than 0.05 level of significance.

Overall, it was found that both respondents share common perspectives about the leadership skills of the school administrators.

Table 25. Comparison of the Self-Rating and Faculty Rating of the Leadership Skills of the Administrators

Leadership Skills	Groupings	Mean	S.D.	t-value	p-value	Sig
Technical Skills	Faculty	3.4242	.50417	-1.383	P = 0.169 > 0.05	NS
	Administrator	3.5980	.32306			
Interpersonal Skills	Faculty	3.4482	.83629	.034	P = 0.973 > 0.05	NS
	Administrator	3.4412	.53987			
Decision Skills	Faculty	3.4217	.56188	-.950	P = 0.343 > 0.05	NS
	Administrator	3.5588	.54308			
Administrative Skills	Faculty	3.4710	.52684	-1.182	P = 0.239 > 0.05	NS
	Administrator	3.6275	.38877			
Conceptual Skills	Faculty	3.4230	.53756	-.559	P = 0.577 > 0.05	NS
	Administrator	3.5000	.51370			

5. Instructional Performance of Faculty

Table 26 shows the performance of the faculty members from the four SUCs along the various components of the leadership skills such as commitment, knowledge of the subject matter, teaching for independent learning, and management of learning.

Faculty members from SUC A were consistently rated "Outstanding" in all four indicators with the "Knowledge of the Subject Matter" that emerged as the highest (Mean=4.59). Meanwhile, SUC B faculty members were rated Very Satisfactory in the four indicators with the "Knowledge of the Subject Matter" as the highest as well as evidenced by a mean rating of 4.15.

On the other hand, the faculty members from the SUC C obtained "Very Satisfactory" to "Outstanding" ratings. Specifically, "Commitment' emerged as the highest (Mean=4.31) with verbal interpretation of "Outstanding."

Lastly, SUC D faculty members garnered a rating of "Very Satisfactory" in all four indicators with "Commitment" that obtained the highest rating (4.19)

The results simply imply that the instructional performance of faculty members from the four SUCs are laudable but may still need further enhancement.

A recent study of Villaganas, V.D., Villaganas, A. A., Villaganas, M.A.C., and Inocian (2017) asserted that the performance of the teachers should be periodically evaluated particularly by supervisors and students for continual improvement. Along with this, the Philippine higher education urges the vertical and lateral articulation of specialization of degrees from the undergraduate to the graduate level of education to ensure quality of higher education degree offerings through outcomes-based and typology-based quality assurance. It is expected that the teachers' self-efficacies are accelerated to the fullest once this noble undertaking in higher education in the Philippines be fully in place.

Table 26. Instructional Performance of the Faculty

Leadership Skills	SUC A			SUC B		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Commitment	4.54	.119	O	4.13	.624	VS
Knowledge of the Subject Matter	4.59	.096	O	4.15	.670	VS
Teaching for Independent Learning	4.30	.056	O	3.96	.608	VS
Management of Learning	4.34	.066	O	3.94	.663	VS
Instructional Performance	4.44	.045	O	4.05	.633	VS

Leadership Skills	SUC C			SUC D		
	Mean	S.D.	V.I.	Mean	S.D.	V.I.
Commitment	4.31	.510	O	4.19	.604	VS
Knowledge of the Subject Matter	4.28	.478	O	4.16	.580	VS
Teaching for Independent Learning	3.79	.458	VS	3.78	.575	VS
Management of Learning	3.74	.487	VS	3.69	.565	VS
Instructional Performance	4.03	.459	VS	3.95	.561	VS

A similar opinion by Medallon (2013) emphasized the importance of faculty performance in attaining goals and organizational commitment. The study revealed that the desired level of performance among faculty is not met due to certain circumstances. In effect, the immediate head should make interventions in the areas where the faculty has limited expertise.

6. Relationship between the Leadership Skills of the Administrators and the Instructional Performance of the Faculty

Table 27. Relationship Between the Leadership Skills of the Administrators and the Instructional Performance of the Faculty

		Commitment	Knowledge of the Subject Matter	Teaching for Independent Learning	Management of Learning	Performance
Technical Skills	Pearson r	-.144	-.158	-.160	-.162	-.160
	V.I.	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship
	Sig. (2-tailed)	.099 (NS)	.070 (NS)	.066 (NS)	.063 (NS)	.067 (NS)
Interpersonal Skills	Pearson r	-.270**	-.289**	-.278**	-.275**	-.285**
	V.I.	Low Relationship	Low Relationship	Low Relationship	Low Relationship	Low Relationship
	Sig. (2-tailed)	.002 (VS)	.001 (VS)	.001 (VS)	.001 (VS)	.001 (VS)
Decision-Making Skills	Pearson r	-.154	-.143	-.167	-.164	-.160
	V.I.	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship
	Sig. (2-tailed)	.077 (NS)	.102 (NS)	.055 (NS)	.060 (NS)	.067 (NS)
Administrative Skills	Pearson r	-.181*	-.170	-.182*	-.189*	-.185*
	V.I.	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship
	Sig. (2-tailed)	.038 (S)	.052 (NS)	.037 (S)	.030 (S)	.034 (S)
Conceptual Skills	Pearson r	-.135	-.146	-.162	-.174*	-.157
	V.I.	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship	Negligible Relationship
	Sig. (2-tailed)	.124 (NS)	.094 (NS)	.063 (NS)	.045 (S)	.072 (NS)

Table 27 exhibits the correlation coefficients of the leadership skills of the administrators and the instructional performance of the faculty.

As seen therein, the technical skills were found to have a negative "negligible correlation" with the five areas on instructional performance such as commitment, knowledge of the subject matter, teaching for independent learning, management of learning and performance as evidenced by correlation coefficients obtained. Certainly, the findings also denote that there are no sufficient pieces of evidences that will prove its relationship as the values exceed the p-values of 0.05 hence, "not significant."

With regard to interpersonal skills, the correlation coefficients indicate a negative "low correlation" with the five components of the faculty members' instructional performance. Furthermore, it was noted that this relationship did not occur by chance since the p-values obtained are less than 0.05 thus, "very significant."

Meanwhile, in terms of the respondents' decision-making skills, negative "negligible correlation" was likewise established based on the correlation coefficients obtained. The data also prove that there is no adequate statistical evidence that will prove this relationship since the p-values obtained are greater than 0.05 hence, "not significant."

As regards the administrative skills, a negative "negligible correlation" was found in all the areas of the teaching performance as well. However, all the items except for "knowledge of the subject matter" can be further proven as this garnered a p-value which is greater than 0.05. Thus, findings imply that the other components of the teaching performance and its connection with the administrative skills can be well-supported by adequate statistical proof as they obtained p-values less than 0.05 hence "significant."

Lastly, the conceptual skills likewise exhibited a negative "negligible correlation" with the five components of the instructional performance assessment of the faculty members based on the correlation coefficients. Similarly, no statistical bases can be established as they all garnered p-values greater than 0.05 except for "management of learning" which earned a p-value of less than 0.05 thus, "significant".

Commitment, knowledge of subject, teaching for independent learning and management of learning were slightly influenced by the leadership skills (interpersonal skills) of the administrators.

A recent study of Villaganas, V.D., Villaganas, A. A., Villaganas, M.A.C., and Inocian, (2017) asserted that performance of teachers should be periodically evaluated particularly by supervisors and students for continual improvement. Along with this, the Philippine higher education urges the vertical and lateral articulation of specialization of degrees from the undergraduate to the graduate level of education to ensure quality of higher education degree offerings through outcomes-based and typology-based quality assurance. It is expected that teachers' self-efficacies are accelerated to the fullest once this noble undertaking in higher education in the Philippines be fully in place.

Additionally, the investigation conducted by Punongbayan and Bauyon and (2015) revealed that the success or failure of the students is basically dependent on the kind of instruction students received from the teachers and students' achievement which is a product of quality teacher in every classroom. Therefore, faculty should exercise their full potential in teaching to become excellent to be able to produce quality students.

Similarly, the result finds support to the investigation of Murcia, Pedreño, and Torregrosa, (2015) as regards the importance of a valid and reliable instrument for evaluating the performance of a university professor. The instrument used in the current study is in congruence with the instrument that was used in the aforecited investigation.

Consequently, an investigation conducted by Lyde, Grieshaber, and Byrns, (2016) presented practical issues faculty members face using formative processes to improve teaching through the

Multi-Source Method for Evaluation (MME). The primary purpose of the MME is to facilitate growth and professional development. This method could serve as a guide in the design of an action plan for continuous improvement among faculty in higher education institutions.

A similar opinion by Medallon (2013) emphasized the importance of faculty performance in attaining goals and organizational commitment. The study revealed that the desired level of performance among faculty is not met due to certain circumstances. The immediate head should make interventions in the areas where the faculty has limited expertise. The faculty should be reminded of the holistic approach to teaching and learning.

Meanwhile, Nadeem, Rana, Lone, Maqbool, S., Naz, and Ali (2011) enumerated the factors that influenced teaching competencies and performance particularly among female teachers. These factors are poor salary, over workload, bad conditions of school buildings, lack of library facility, lack of teaching and learning materials, status of teacher, respect in society, professional attitude of teachers, mental health, teachers morale, responsibilities at home, distance of residing area, stress, political interference, posting in the far flung areas, discrimination, lack of cooperation, working relations with staff and head teacher; and working environment. These issues greatly affect the teacher's performance and should be properly addressed by education authorities.

In another study conducted by Galeon (2015), he supported and considered the evaluation of employee's performance essential in most organizations. This is a valid proof in determining how the individual employee contributes in attaining the goals of the organization, most especially the education sector. Feedback from the evaluation was used as basis for the teacher's developmental needs.

Commitment as posited by Salandanan (2012) supported the two most important attributes of a teacher which is competence, values and attitudes. The innate values and disposition that a teacher possesses are of utmost importance in creating winning interaction among students and associates. This idea will somehow relate with the interpersonal skills of the administrators. If both leaders and subordinates possess these skills, a good working relationship would prevail in the workplace.

Additionally, faculty employing a variety of teaching methodologies (Salandanan, 2012) results in creating beneficial interactions and positive responses among students. The greatest concern is in evolving a conducive classroom atmosphere. These attributes of faculty can be further enhanced through the technical, administrative, and conceptual skills displayed by the administrators.

According to Cox (2016), classroom set up is an important component in a learning environment because it is an essential piece of classroom management to support both teaching and learning. A well-structured classroom management plan design has the ability to improve learning and behavior. This is supported by a recent study at the University of Salford cited by Cox (2016) that a well-designed classroom can boost student performance by 25%. This means that faculty's classroom design can have a significant impact on the students' performance. It is essential to thoughtfully and clearly consider all facets of the classroom design. This can be well performed if leaders apply the leadership skills and support faculty classroom activities.

The findings of Jackson and Parry (2008) in their study corroborates with the present investigation unveiling that leaders use their skills and knowledge to lead and bring a group of employees in the desired direction that is relevant to their organization's goals and objectives. Hassan, Gallear, and Sivarajah (2018) substantiates the idea on what leadership skills can be well-utilized in the workplace. Deans need to use appropriate leadership skills in particular organizational settings and organizational culture that are needed to support them in their leadership practice as leaders.

Another factor that contributes to quality teaching is the teacher's knowledge of the subject matter. Knowing the subject matter means that one has a command of his discipline and the capacity of calling upon resources (Sharma, 2011). But what really makes teaching effective? As a teacher by profession, he should be willing to engage rigorous self-examination of his own teaching philosophy, methodology and effectiveness. The Four Aces of Learning as enumerated by Bulger (2012) represent a consolidated way of thinking about the "process" of teaching as it influences the "product" (student learning). These are: (a) Outcomes-enable students to focus their attention on clear learning goals; (b) Clarity- involves the clarity of instruction and explanations concerning the course organization and content; (c) Engagement- suggests that students learn by doing, and (d) Enthusiasm- more effective teachers display a high level of enthusiasm that reflects their professional competence and confidence. Giving more emphasis on the need for quality teachers, a question was put forward: Are qualified teachers really quality teachers? Considerable disagreement surrounds what specific teacher attributes indicate quality and how to better invest resources to provide quality teachers for all students. Answers to these questions have potentially important implications for the efficiency and

equity of public education.

Rice (2003) even posited the highlights of the empirical evidence which include: (a) Teacher experience-Several studies have found a positive effect of experience on teacher effectiveness; specifically, the "learning by doing" effect is most obvious in the early years of teaching; (b) Teacher preparation programs and degrees- research suggests that the selectivity/prestige of the institution a teacher attended has a positive effect on student achievement particularly at the secondary level; (c) Teacher certification- research has demonstrated a positive effect of certified teachers on high school mathematics achievement when the certification is in mathematics; (d) Teacher coursework- Teacher coursework contributes both the subject area taught and pedagogy contributes to positive education outcomes, and (e) Teachers' own test scores. Tests that assess the literacy levels or verbal abilities of teachers have been shown to be associated with higher levels of student achievement. Most of the research do not seek to capture interactions among the multiple dimensions of teacher quality, and as a result, there are major gaps in the research that still need to be explored (Agsalud, 2017).

7. Leadership Skills Development Program (LSDP)

The researcher crafted a Leadership Skills Development Program (LSDP) as an outcome of this study. It was based on the result obtained on the self-rating rating of the administrators as regards leadership skills wherein administrative, technical, decision-making conceptual and interpersonal were rated highest to lowest respectively while for the faculty ratings -administrative, interpersonal, technical, conceptual and decision-making skills were ranked first, second, third, fourth and fifth accordingly.

Though these abovementioned skills were rated "Very Satisfactory," it is deemed recommended that a training program be proposed for further enhancement or development of leadership skills to address the current issues, concerns and trends in higher education.

SUMMARY OF FINDINGS

Based on the collated data, the following are the results of the study:

1. The demographic profile of the respondents is as follows:
   - 1.1 Majority of the respondents were females.
   - 1.2 Most of the respondents belonged to ages 30 and below.
   - 1.3 There were 51 or 38.6 percent of the faculty respondents who belonged to the age bracket of 30 years old and below.
   - 1.4 Majority, 58 or 43.9 percent of the respondents have finished Master of Arts or Master of Science degrees.
   - 1.5 Most of the respondents are working in the SUCs for at least 1 year. Among the faculty respondents, 50 or 37.9 percent were in the position for 1-5 years.
   - 1.6 Majority acquired Instructor positions. Among the faculty respondents, it can be noted that 70 or 53.0 percent of them belonged to the Instructor position.
2. The leadership skills of administrators were rated "Very Satisfactory" based on the self-rating and faculty ratings on technical, interpersonal, decision-making, administrative and conceptual skills.
3. Male respondents rated the administrators higher than female.
4. The administrators' self-rating was higher compared to the faculty rating.
5. There is no significant difference between the leadership skills of the administrators' self-rating and the faculty rating.
6. There is no significant relationship between the leadership skills of administrators and the instructional performance of the faculty.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

1. The leadership skills of the administrators in terms of technical, interpersonal, decision-making, administrative and conceptual are "Very Satisfactory." Specifically, the following leadership skills of the administrators ranked first, second, third, fourth and fifth accordingly: administrative, technical, decision-making, conceptual, and interpersonal skills according to their self-assessment. On the other hand, the ratings of the faculty with regard to administrative, interpersonal, technical, conceptual and decision-making emerged as the first, second, third, fourth, and fifth respectively.
2. The study revealed that there are no significant differences in the leadership skills of the administrators when grouped according to their profile as evidenced by the p-values which are greater than 0.05 level of significance. Thus, the null hypothesis (H01) was accepted.
3. It was found out that there are no significant differences between the leadership

skills of the administrators' self-rating and the faculty rating as supported by the p-values of 0.169, 0.973, 0.343, 0.239 and 0.577 for technical, interpersonal, decision-making, administrative, and conceptual respectively which are all greater than 0.05 level of significance. Thus, the null hypothesis (H02) was honored.

4. The instructional performance of the faculty members was described as "Outstanding" and "Very Satisfactory" based on the Faculty Evaluation Instrument.
5. This study found out that there is no significant relationship between the leadership skills of the administrators and the instructional performance of the faculty thereby accepting the null hypothesis, (H03).
6. A Leadership Skills Development Program (LSDP) is proposed to further enhance the leadership skills of the administrators.

RECOMMENDATIONS

The following recommendations are advanced by the researcher based on the findings and conclusions generated in the study:

1. The administrators should maintain their competence as leaders as well as continue upgrading themselves for the advancement of their performances. Equally contributory to their leadership skills are the academic qualifications wherein most of the administrators finished relevant degrees in their field. Hence, pursuing graduate studies is recommended to enhance professional development.
2. The institutionalization of a Development Program for the Administrators is proposed in order to further enrich the administrators' leadership skills. This recommendation is based on the ratings obtained on the leadership skills of administrators' self-rating where administrative, technical, decision-making, conceptual, and interpersonal skills ranked first, second, third, fourth, and fifth respectively while based on the ratings of faculty, the administrative, interpersonal, technical, conceptual and decision-making emerged as first, second, third, fourth, and fifth in ranks respectively. Though leadership skills were rated "Very Satisfactory," the need for a training program is advocated to further enhance the administrators' leadership skills.
3. A follow- study may be conducted along with additional variables such as other personal attributes and job competencies (e.g. analytical skills, problem solving skills, innovative skills) to assess whether there is an improvement in the leadership skills of administrators, thus resulting to a much-improved instructional performance among faculty.
4. A longitudinal study among administrators/ faculty is endorsed to determine the impact of the sustained high leadership skills on instructional performance.
5. Since the study is delimited to four SUCs, it is hereby recommended that future study should consider all administrators of Teacher Education Programs from all other SUCs in the region to further validate the findings of this research.
6. Future researchers may conduct investigations along this line with the involvement of various entities of the academic departments of participating schools or Higher Education Institutions (HEIs).

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EMPOWERING WOMEN: SOCIO-ECONOMIC IMPACTOF MICROFINANCING

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ABSTRACT

The issue of poverty eradication has long been one of the main priorities in development policies, yet the gender dimension of the problem and the necessity to address the particular concerns of women in poverty gained recognition only after the Beijing Conference in 1995. Poverty and hunger have greater impact on women, they are also among the cause of gender inequality and lack of empowerment, (UN Development Fund for Women). Micro Financing Programs are organized in Puerto Princesa City. They are established towards the upliftment of the least privileged citizens through the development of income generating projects and job creating small and micro-enterprises. It adheres closely to its role as catalyst of change by increasing productivity through self-sufficient business development and holistic transformation. The study was conducted in Barangay Irawan, Puerto Princesa. A structured questionnaire was prepared in gathering data. Majority of the respondents were middle aged housewife beneficiaries and attained secondary level of education. Some have early marriages that forced them to quit schooling because of child rearing and financial deficiencies. The beneficiaries chose to start with Sari-Sari Store and Small eatery because these kind of businesses need no expertise and they can choose to stay at home while working. There are positive impacts on the livelihood of the beneficiaries because loans granted helped them to start up or expand their existing businesses. Earnings helped them in sending their children to school, acquiring appliances and big help in the hospitalization of any family member. With the intervention of Microfinancing programs in reforming the lives of marginalized entrepreneurs, women are great partners in economic development thus empowering them can build a strong family and a better nation.

INTRODUCTION

Puerto Princesa City, which forms part of the Philippine's last frontier, is a City rich in natural resources. Nature has chosen Puerto Princesa as the road to economic and sustainable development (www.puertoprincesa.ph). With these development, people of this City has the equal opportunities to have a better life as they take part on the social economic responsibility over these resources. There are still people in the city that live within the poverty line because of unemployment .In cases of a large family, some cannot send all their children to school because education accounts for a substantial amount of a family's monthly expenses. Although public schools are offered free by the government, there are still many supplemental fees to spend. (Rich, 2018).

To augment the day to day expenses, the women of the households resorted to have sidelines in e-shopping companies, or having an ukay-ukay stall, or just a small buy- and- sell retailing business called sari-sari store. With this meager income, problem arises as to where they could get the spare money to use as a capital for their small businesses or savings for the future of the family.

These economic problem of the marginalized have created a need for financial lending and borrowing services hence, micro-finance institutions came to market to offer solutions to the these economic issues.

Microfinance structure has been designed with the aim of giving low income people an easy access to socio-economic services. It gives borrowers an opportunity to be self-employed and be alleviated from poverty (Muhammad Hunus, 1983, as cited by Hassan (2017). A microfinance institutions offer financial services to marginalized members through loans. Some are in the form of insurance, deposit and other services. (http:// www.microfinanceinfo.com/micro-financial-institutions/)

Most of the borrowers of microfinance institutions are women. They are the ones who are responsible in budgeting the income for the day to day family expenses.

The main objective of this study was to know how the women are empowered as borrowers and the socio-economic impact of microfinancing.

The data were gathered at Purok Maunlad of Barangay. Irawan, Puerto Princesa City in September 2018. The selected population were the members of the Center for Agriculture and Rural Development (CARD), Inc.

STATEMENT OF THE PROBLEM

This research entitled "Empowering Women: Socio-economic Impact of Micro-financing on the Women Borrowers of Barangay. Irawan, Puerto Princesa City" sought to answer the following

questions:

1. What is the demographic profile of the respondents in terms of:
   a. Age
   b. Civil Status
   c. Educational Attainment
   d. Occupation/Main Source of Income
   e. Number of Family members
   f. Number of Dependent/children in school
   g. Monthly Income
2. What is the micro-financing members profile in terms of the following:
   a. Knowledge about microfinance
   b. Main reason for joining microfinance
   c. Number of years as a member
   d. Main purpose of loan borrowings
   e. Main reason for members refusal to avail loan in banks
   f. Number of times member availed financial assistance from MFIs
   g. Average amount of financial assistance availed from MFIs
3. What are the services of micro-financing that affect the social and economic development of the borrowers?
4. What is the socio-economic impact of micro-financing institutions to the women borrowers in terms of:
   a. Financial Status
   b. Acquisition of assets
   c. Hospitalization
   d. Livelihood

REVIEW OF LITERATURE

Microfinance is increasingly being considered as one of the most effective tools of reducing poverty. Microfinance has a significant role in bridging the gap between the formal financial institutions and the rural poor. They are pivotal organizations that make individual microcredit loans directly to micro-entrepreneurs, impoverished women and poor families. (http://www.microfinanceinfo.com/micro-financial-institutions/)

In the study of Patient et al,(2016), it was concluded that microfinance credit was a factor that could be explored to enhance women social economic development in Rwanda. This led women to get involved in various aspects of making major economic decisions in the family. Trainings on loan use, entrepreneurial, financial control and on saving were very important aspects in ways to improve the means of women's livelihood. Borrowed loans from the Microfinance institutions enabled them to start small and medium enterprises thus meeting the demands of household expenses is being solved. Saving part of the earnings was allotted for specific reasons but more for entrepreneurial activities. Rwanda women experienced the positive impact both economically and socially.

In the evaluation study of Asian Development Bank (2007, the result indicated that the microfinance projects had positive effects on the status of women, particularly in the household. The changes observed that they have greater role in generation of cash and involvement in making major household expenditures, acquisitions of assets, entrepreneurial ventures and savings. Enthusiasm to acquire more skills and expanding their network of friends and support system were observed too.. There was increased role of women in accessing finance; managing their businesses, joint decision making, and sharing of household responsibilities thus these improved the partners marital relationship.

In the thesis study of Khan, M. .and , Rahman, M .(2007) it was noted that most of the women started their business by taking loan more from Micro Finance Institutions compared to other sources. The increased income provided financial help to their families in their daily life. These poor women brought about a positive change to their financial and social situation and started taking active part in the decision making process of the family and society. Amongst the positive impacts of Microfinancing was the schemes which are highly associated to build up social and economic empowerment through the creation of employment opportunity. It was observed that most of the family members of borrowers contributed to run the business directly or indirectly.

In the study of Ferka, A.,(2011), the researcher concluded that there was a noticeable and positive impact of microfinance activities on the living standards, empowerment and poverty alleviation among the marginalized in the society. They suggested that there was a need to improve macroeconomic policies and the regulatory framework which would make the financial system function effectively and efficiently.

According to the study of Dhakal, C., (2016), Microfinances mainly focused on uplifting the socio-economic status of women. Educated and empowered women can support the finances of the family as well manage the health and education of the children. Skills training provided can enhance their capacity to earn and sustain its economic status.

Ablorh, William (2011), in his study revealed that access to microfinance has contributed immensely to the economic empowerment of women through improvement in their businesses. The study showed that access to microfinance had improved the status of women both at the family level and in society as a whole. At the family level, the study reported an improvement in household income and

its standard of living . In the aspect of social level, there was an enhanced confidence level thus increased degree of socialization and positive outlook in terms of aspiring to future leadership positions.

According to the study of Smile D, et al (2013), Most respondents used their loans for business and other secondary activities. Majority of the beneficiaries were able to repay their loans easily though minority had difficulty but still did not default in the repayment of their dues- so they can go in for more loans . Some positive impacts as observed and noted were reported higher profit levels after they had invested their loans into their businesses and the effects were better financially resourced to send their children to school, access healthcare facilities or provide clothing to their family. Again a majority indicated they now have better housing conditions and can now participate fully in communal activities due to their improved financial standard.

Zaidi, H.(2017), on his study showed that Akhuwat's loans have significantly improved the conditions of the borrowers in terms of their monthly income, expenditures, access to education/ health, and household assets. The impact was much larger for old borrowers than new borrowers. They've concluded that Akhuwat's non-traditional approach of lending to the poor and its model of mutual brotherhood between lenders and borrowers presents great lessons to bring positive change in the society.

According to the study of Rich, Bryan (2018), , Micro-credit loans and life insurance allowed the families to make ends meet, sent their children to school, and gave them a sense of value in their lives.

RESEARCH METHODOLOGY

A descriptive type of research was used in this study and respondents were selected through purposive sampling.

The population of the study was consist of one hundred fifty (150) women borrowers of Center for Agriculture and Rural Development, (CARD) Inc.in Barangay. Irawan, Puerto Princesa City. A sample of eighty-eight (88) women borrowers were selected as respondents.

The researchers used a set of questionnaire in gathering data . The instrument was adopted with some revisions from the dissertation of Ablorh, W. (2011), and in the study of Dzisi, S. et al . (2013). The researchers made use of the Likert's Scale Type with the following guides: 5-Strongly Agreed; 4-Agree; 3-Neutral 2-Disagree; and 1-Strongly Disagree. The statistical tools used were frequency count, percentage, rank and weighted mean.

FINDINGS

The Demographic Profile of the Respondents

Age: Most of the respondents belonged to 41 year old and above which constituted 56.82 % of the total sample. Majority do not have permanent job and because of age requirement can no longer employ themselves in private or government agencies. These respondents become members of the Microfinance institutions.

Civil Status: 71. 60% constituted the married respondents. Increased financial needs motivated married women to become member.

Educational Attainment: Majority of the respondents are high school graduates followed by Elementary and vocational levels. Only 9.09% reached the college level. There is no opportunity to attain higher level of education because of poverty that's why regular employment is also a problem.

Main Source of Income: 71. 59% or majority operated a small business , followed employment with 21.59% and farming with 6.82%.

Number of Family members: Majority of the respondents have 4 to 6 members and most of them are still dependent elementary and high school students.

Family Monthly Income: 62.50% or the majority is earning between P 5,000.00 to P10,000.00.

This income is not enough for the sustenance of the family and even below the poverty line.

The Microfinancing Members Profile

Knowledge about Microfinancing: Majority learned from friends and been motivated by them to become members. Some from relatives while others through promotional activities of the Microfinance Institutions.

Reasons for Joining Microfinancing: Primarily the main reason is to avail of the Credit loan and the Savings services .This implies the need of the women borrowers to augment the financial needs of the family.

Number of years as a member: 45.45% and majority are members for more than 5 years and only 11.36% have been members for less than a year. From the interview conducted, according to the respondents the longer you stay as member, the higher amount of loan you can avail. Thus, these too implies the loyalty and trust relationship be-

tween the member borrowers and the Microfinance Institution.

The Main Purpose of Loan Borrowings: To expand the existing business followed by for domestic use, to start a new business and for investment purposes. Most of the member borrowers revealed that they have existing small Sari Sari stores to expand. This implies that loan releases were for majority old time members who have been grantees for many times because of their good credit standing.

Main Reasons of member borrowers for Refusal in Availing loans from Banks: Inability to meet collateral requirement ranked one with 57.95%, followed by high interest rate charges with 23.86%, Bureaucracy in the process of loan with 13.64% and other reasons with 4.55%.

According to the respondents, collateral requirements are hard to comply because mostly land titles are required and they preferred Microfinancing Institutions because of the minimal interest charges on their loans and easy access due to minimal requirements.

Number of Times member borrowers availed financial assistance from Microfinancing Institutions: Majority availed four times or more with 71.59%, and the rest between 1 to 3 times. This implies the trust of the institution to the member borrowers and to support the expansion of their businesses and other financial needs. Likewise their capacity to pay are reflected with their good credit standing.

Average Financial Assistance Availed from Microfinance Institutions: Majority availed between P5, 000.00 to P10,000 with 44.32%, followed by P10, 000.00 and above with 39.77% and the least below P5,000.00 with 15.91%.. The amount loaned reflected the capacity of the borrower to pay in installment on basis.

Microfinancing services that affect the social and economic development of the member borrowers.

Microfinance Credit: Majority of the respondents used the loans for the expansion or to start with their small business, followed by for educational purposes and last with Health purposes.

Loans granted for business use are prioritized by the borrowers because through this, they managed to earn income used for acquisition of assets needed in their business expansion. These is also found out in the study of Smile et al (2013) that loan borrowers used the money for business purposes because it is easier to get return of investment. Respondents attested that through these they have improved financial conditions and uplifted their economic status.

Microfinance Savings: Majority chose the Pledge Savings because through compulsory savings they can control their expenses and have voluntary deposit as forced savings as it is being collected regularly by the institution's staff. According to the conducted interview, savings help the borrowers to be worry free in times there are emergencies and spare them from further loan. In the study of Patient (2016), through savings, women are more likely to develop socially and economically. Micro insurance and Maagap Savings were also considered but not much availed by the member borrowers.

Trainings: The Microfinance institutions conducted trainings intended for the betterment of their member borrowers. Among the trainings, Trainings on Business and Livelihood, Microfinance products and services and Microfinance and Credit discipline ranked the most. Other trainings are on Health and Disaster Preparedness. According to the respondents Trainings are of great help to have a continues learning of how to effectively and efficiently manage their finances and be a better business entrepreneurs. In the study of Dhakal (2016) if women are involved in activities other than household chores and be given opportunities to be educated, they can be empowered to support family. Skills training are of great help to enhance the borrowers capacity to become a better member of the family and society.

The Socio-Economic Impact of Microfinancing Institutions to the Women borrowers:

Table 1. FINANCIAL STATUS AFTER JOINING MICRO-FINANCE INSTITUTIONS (n=88)

	Frequency	Percentage	Rank
Much Better	60	68.18%	1
Little Better	18	20.45%	2
Same	10	11.36%	3
Little Worse	0	0.00%	4.5
Much Worse	0	0.00%	4.5
TOTAL	**88**	**100%**	

Majority of the respondents (68.18%) expressed that their financial status Is much better compared to their previous condition when they were not yet members of Microfinance Institutions. 20.45% stated that it is a little better, 11.36% stated same condition.

This implies that borrowers are responsible with regards to their financial management. According to one interviewed every single centavo spent is well accounted for.

Table 2. ASSETS ACQUIRED AFTER JOINING MICRO-FINANCE INSTITUTIONS (n=88)

Assets	Frequency/ items	Percentage	Rank
Motorcycle	15	17.05%	2
Four-wheel vehicle	4	4.55%	7.5
Livestock	2	2.27%	9
Washing Machine	8	9.09%	6
Refrigerator	12	13.63%	3.5
Televisions	12	13.63%	3.5
Electric Fans	20	22.73%	1
Air Cooler	0	0.0%	10
Air Conditioner	2	2.27%	7
Cellphones/Tablets	9	10.23%	5
Computers/Laptops	4	4.55%	7.5
TOTAL	**N=88**	**100%**	

The respondents attested to have acquired assets out of the proceeds of their earnings. The top three items are electric fans, motorcycle, refrigerator and television set. These are considered necessary in the operation of their business. This implied that borrowers have their minds set of expanding and improving their respective means of livelihood.

In the study of Asian Development Bank (2007), microfinance projects have positive effects on the status of women particularly in the acquisition of assets.

Table 3. FINANCIAL CAPABILITY IN TERMS OF HOSPITALIZATION/HEALTH CARE (n=88)

	Before Joining MFI		After joining MFI	
	Frequency	Percentage	Frequency	Percentage
Cannot Finance hospitalization	40	45.45%	6	6.82%
Can Finance	48	54.55%	82	93.18%
TOTALS	**N=88**	**100%**	**N=88**	**100%**

There is an increase capability of the members to avail medical care and treatment. It is attributed to the savings being practiced by the borrowers for family emergencies. Micro saving is highly patronized by the women borrowers.

Table 4. OVERALL ASSESSMENT ON ATTAINMENT OF THE LOAN PURPOSE AND LIVELIHOOD IMPROVEMENT (n=88)

Statement	Frequency		TOTAL	Percentage	
	Yes	No		Yes	No
Attained the purpose	86	2	88	97.73%	2.27%
Generally improved	82	6	88	93.18%	6.82%

Almost 97.73% of the women borrowers attested that the main purpose of the loan was attained and implemented. The expansion of their existing businesses or to start up were fully operationalized. This implies that through their Credit, Savings and Training service of Microfinancing Institutions, marginalized borrowers are assisted, supported to have a better life. The Socio economic impact of the institution is positively realized.

CONCLUSION

Based on the findings, the following are the consolidated conclusions. Majority of the Microfinance institutions borrowers are married, unemployed women, belonged to 41 years old and above. Respondents learned the existence and services offered by the institution through friends and relatives. Because of limited family income to support dependent children, education and hospitalization, most of them availed from the Credit services .Money loaned are used to start their small or expanded their existing businesses. Borrower members have good credit standing as reflected in terms of loan availment of three or more times with an amount to commensurate their capacity to pay. Reasons for preference to avail loan from Microfinancing institutions are for the reasons of easy access with minimal requirements and lower interest charges compared to other credit agencies. Other services of Microfinancing like Savings, the Pledge savings is patronized more because there is a forced savings on the part of the borrower and it is a source of fund in times of family emergencies. Training services particularly on the Livelihood is a very good source of knowledge to enhance entrepreneurial skills of the members.

The respondents attested that they are able to have a steady source of income, support children's education and health care. A larger group are able to acquire assets which further improved and enhanced their existing business.

If women will be given equal opportunities to be exposed and educated as entrepreneurs, they can be empowered and very strong support to the family and society in general.

RECOMMENDATIONS

Based on the findings and the conclusions given for the study, the following recommendations are suggested:

1. For the CARD, Inc. a microfinance institution, that they continue to serve more women households because of its impact on their social and economic development through trainings on capacity building enhancement of the women borrowers.
2. During weekly center meeting on Fridays, teambuilding and community development

is encouraged to build and enhance camaraderie among members as one family. This will serve as a venue for members to interact with each other, discuss plans and activities, and suggest solutions to problems encountered within the group. A regular monitoring of their members status in life as well,

3. For the members, that they religiously abide in the contract with CARD, Inc. in terms of religiously paying their loan amortizations to be able to gain trust and confidence of the microfinance institution.
4. For the members of the CARD, Inc., that they continue to spread and share the good benefits of micro-finance to those who are marginalized and encourage membership in the institution.

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THE EFFECT OF CAMPUS WELLNESS PROGRAM TO STUDENTS' ACADEMIC BEHAVIOR AND PERFORMANCE

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ABSTRACT

The main purpose of the study is to ascertain the campus wellness program and its effect to students' academic behavior and performance in public high schools. Physical fitness has been implicated in a host of mental health and academic problems (Erickson, et.al, 2000). That is why DepEd educate public school students on how to live a healthy life (D.M. No. 201, s. 2018). The researchers' used the descriptive survey method to attain the primary goal of this study with the aid of questionnaires to determine students' behavior and academic performance. Moreover, there were 300 students and 225 teachers as research respondents in this study. After tabulating data to documentary and statistical analysis, the t-test for independent samples revealed that the campus wellness program has no direct effect to students' academic performance since the computed correlation coefficient value is greater than the level of significance; however, the campus wellness program influenced the students' behavior. Therefore, it is concluded that wellness program in school can influence to the holistic well -being of the students particularly on their behavior. Based from the conclusions drawn it was recommended that the school should strictly implement the campus wellness program as prescribed by the Department of Education; there is a need of full support from the school administration to ensure cooperation from the teachers and program application; there should be a design activity to cater the need of school wellness to the teachers and students; and there should be a regular monitoring and evaluation of the program.

Keywords: Academic, Behavior, Campus Wellness Program, Effect, Performance, Students

INTRODUCTION

Children who are unhealthy are at higher risk for school problems than students who are free from medical problems. Students with poor health have a higher probability of school failure grade retention, and drop out. The relationship between student health and academic success is complex. Common manageable factors of student health are nutrition, maintaining health weight, and physical fitness. Furthermore, the efficacy of educational programs to improve nutrition, maintain healthy weight, and increase physical fitness evaluated (Shaw, Gomes, Polostskaia & Jankowska, 2015).

A joint program by Nestlé Philippines and the Department of Education (DepEd) to promote a lifestyle of wellness among young people reaches 7 million grade school and high school students was implemented under Division Memorandum No. 201, s. 2018. It is called the Nestlé Wellness Campus, is a part of the Nestlé for Healthier Kids initiative and reaches almost 50% of the total public grade school and high school students in the country. It serves to educate public school students and their parents on how to live a healthy life, by choosing healthier food and drink options and physical activity all year round.

Highlights of the program include various nutrition modules taught in schools. Topics range from managing portions of choosing nutritious and varied options (Pinggang Pinoy, Go, Grow and Glow foods); and moving more, sitting less. Pinggang Pinoy is a concept from the Food and Nutrition Research Institute which is an easy-to-understand food guide that illustrates the right food portions per meal to meet the energy and nutrient needs of Filipinos. Go, Grow and Glow foods are carbohydrates, proteins, and vegetables and fruits, respectively.

Students who are active physically tend to have better performance in school such as grades, attendance, memory, and classroom behaviors. The higher physical activity the higher the physical fitness levels are associated with improved cognitive performance (e.g., concentration, memory) among students (Fedewa AL & Ahn S, 2011).

REVIEW OF LITERATURE

Every individual is unique in combinations to all these aspects. In an individual these aspects are well crafted, orderly and in harmonious flow with each other. Any disturbance or imbalance at one layer is reflected through blockage of energy at all other layers and emerges are disease. It characterized by preservation, growth and development of different aspects of self.

Wellness is a concept that captures in many ways the broader definition of health. Shortly after, Dunn (1961) coined the phrase "high level wellness" to refer to a state of optimal health that included a zest of life, sense of meaning and purpose, sense of social responsibility, developing ways to maximize an individual's potential for well-being and acquiring skills for adapting to the challenges of a changing environment. Over the years, wellness has been conceptualized as a multidimensional model of psychological well-being, which comprises six distinct components. These include autonomy, environmental mastery, personal growth, purpose in life positive relations with others, and self. However, this model fails to incorporate the physical aspects of wellness and thus limiting usefulness in addressing wellness as a whole (Degges-White et al., 2003).

The model of holistic wellness (Hettler, 1984) in university and community settings mentioned about the six broad dimensions of health-related behaviors and these are the physical wellness (e.g. diet, exercise, sleep, smoking, alcoholic use and personal hygiene); emotional wellness (e.g. self-identity and self- esteem); spiritual Wellness (e.g. sense of peace and connectedness with the universe), social wellness (e.g. sense of community and social support), occupational wellness (e.g. job satisfaction) and intellectual wellness (e.g. creative stimulating mental activities). Moreover, a person who strives for holistic wellness is one who is aware of all aspects of wellness and continuously works to incorporate these elements into one's daily life. In other words, the pursuit of wellness is a lifelong endeavour; an educational facility is ideal setting for wellness promotion (Harrington, 2016). Regardless of the number of wellness dimensions, researchers agree that wellness is a multidimensional, positive and affirming concept that enormous practical benefits (Meisemlan, 2016).

According to Taras (2005) the relationship was not substantiated between academic achievement and physical activity. However, it was found out that participation in a school free breakfast program was associated with improvement in grades in math (Kleinman et al., 2002). Results of this study supported a relationship between the physical self-composite and academic achievement.

Students who are active physically tend to have better performance in school such as grades, attendance, memory, and classroom behaviors. The higher physical activity the higher the physical fitness levels are associated with improved cognitive performance (e.g., concentration, memory) among students (Fedewa AL & Ahn S, 2011).

Furthermore, there are other eight dimensions of wellness: occupational, emotional, spiritual, environmental, financial, physical, social, and intellectual. Each dimension is equally vital in the pursuit of optimum health. One can reach an optimal level of wellness by understanding how to maintain and optimize each of the dimensions of wellness. Physical dimension of wellness is the most common aspect of wellness and the one most people think of when they consider themselves, or others, well or ill. Physical wellness incorporates all aspects of lifestyle choices and the physical self. Exercise, sleep, diet, personal hygiene, and the use of drugs or alcohol, among others, are all lifestyle choices that affect a person's physical self (Eberst, 1984).

The school psychologists are expanding their role to build a host of protective factors to build resilience in school- aged children at preventative at risk and clinical levels, there is a need to provide evidence-based interventions with implementation support to improve nutrition, maintain healthy, weight and increase student physical fitness (Shaw, Gomes, Polotskaia & Janskowska, 2015).

In addition, children who are unhealthy are at higher risk for school problems than students who are free from medical problems. Students with poor health have a higher probability of school failure grade retention, and drop out. The relationship between student health and academic success is complex. Common manageable factors of student health are nutrition, maintaining health weight, and physical fitness. Furthermore, the efficacy of educational programs to improve nutrition, maintain healthy weight, and increase physical fitness evaluated (Shaw et. al, 2015).

Health and wellness is a matter of choice. At every moment in life we face a situation where we make a choice. This choice could be constructive or destructive; positive or negative, for harmony and balance or against harmony and balance towards order and health or a way from order and health. This choice is in both perception and reaction. And the end of result is effect health or ill health.

The Department of Science and Technology's Food and Nutrition Research Institute (DOST-FNRI) developed the "pinggang pinoy", a nutrition tool intended to guide meal planners in preparing healthy food that is proportional according to current nutritional guidelines for different age groups. The three food groups are called Go, Grow and Glow because these terms describe the function of each food group in the body.

According to Albert Bandura (1986) in his Social Cognitive Theory (SCT), learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behavior. It emphasized on social influence, and its external

and internal social reinforcement in which individuals acquire and maintain behavior, while also considering the social environment in which individuals perform the behavior. The theory takes into account a person's past experiences, which factor into whether behavioral action will occur. These past experiences influences reinforcements, expectations, and expectancies, all of which shape whether a person will engage in a specific behavior and the reasons why a person engages in that behavior.

Another is the McClelland (1961) in his Human Motivation Theory identified three motivators that he believed the individual possessed: a need for achievement, a need for affiliation, and a need for power. People will have different characteristics depending on their dominant motivator. This theory, people have motivating drivers that are directly linked to need regardless of age, gender, culture or race.

When people do not wish to perform at the forefront and prefer to avoid unpleasant situations, this need will surface. People have fear of failure, fear of rejection and even fear of success. By avoiding situations that may trigger these fears, they think to have found a safe solution.

The Department of Education (DepEd) issued DO 43, s. 2011 or the Strengthening the School Health and Nutrition Programs for the Achievement of the Education for All (EFA) and Millennium Development Goals (MDGs). Through the Health and Nutrition Center (HNC) is strengthening the School Health and Nutrition Programs (SHNP) into its key programs and aligning all its activities into one seamless whole. This is envisioned to make the department better able to determine the effectiveness and relevance of its programs, and to make these more responsive to the DepEd's mission of enhancing the student's motivation and capacity for learning, improving learning outcomes, reducing absenteeism, and ensuring that school-age children are able to stay in school as enunciated in the Education For All (EFA) and Millennium Development Goals (MDGs).

Wellness is an active process of becoming aware of and making choices toward a healthy and fulfilling life. Wellness is more than being free from illness; it is a dynamic process of change and growth.

STATEMENT OF THE PROBLEM

The primary aim of this study was to determine the campus wellness program and its effect to students' behavior and academic performance. Further, it aims to answer the following question:

1. What is the demographic profile of the respondents in terms of:
   1.1 Students' Respondents:
      1.1.1 age;
      1.1.2 sex;
      1.1.3 year level; and
      1.1.4 academic performance?
   1.2 Teacher Respondents:
      1.2.1 age;
      1.2.2 sex; and
      1.2.3 year level handled?

2. What campus wellness program is commonly practice in school in terms of:
   2.1 pinggang pinoy program/wellness plate;
   2.2 program benefits;
   2.3 wellness health goals; and
   2.4 healthy lifestyle?

3.What behavior of students as perceived by the student respondents and teacher-respondents?

4.Is there a significant relationship between the campus wellness program to the academic performance and student behavior?

5.Is there a significant difference among the perception of the student and teacher respondents on student behavior?

6.What enhancement program maybe proposed in the basis of the findings?

Null Hypotheses

1.There is no significant relationship between the campus wellness program to the academic performance and student behavior

2.There is no significant difference among the perception of the student and teacher respondents on student behavior?

METHODOLOGY

Design

To evaluate the campus wellness program and its effect to students' academic behavior and performance, the researchers utilized the mix-method through descriptive, and survey method. The researcher conducted a documentary analysis for the purpose of collecting the student's academic performance. It consist of 300 students and 225 teachers as respondents as it was randomly chosen 30 male and female in every public high school of the said district.

Instrument

The researcher utilized the modified questionnaire from Nestle Wellness Program wherein there

were four (4) different designed activities were conducted, and another researcher made survey questionnaire for student behavior consist of 20 items.

The designed activities were in a checklist form are grouped into four namely: 1) pinggang pinoy program, 2) program benefits and 3) wellness health goals and 4.healthy lifestyle. On the student's behavior towards school, family, peer and community which consist of twenty (20) items. The checklist serves as a tool in monitoring the wellness program in school.

Documentary analysis was employed in this study in order to obtain the academic performance of the pupils. The said document was gathered from the class adviser. It was kept confidential and secured by the researcher.

FINDINGS

Below is the summary of the result of this study on the campus wellness program: its effect to students' behavior and academic performance in the district of Ubay, Bohol, Philippines

Table 1. Profile of Student-Respondents
N = 300

1.1.1 Age	Frequency	Percentage (%)	Rank
12 years old	4	1.34	5
13 years old	52	17.33	4
14 years old	85	28.33	2
15 years old	90	30.00	1
16 years old and above	69	23.00	3
Total	**300**	**100.00%**	
1.1.2 Sex			
Male	110	36.67	2
Female	190	63.33	1
Total	**300**	**100%**	
1.1.3 Grade Level			
Grade 8	100	33.33	2
Grade 9	110	36.67	1
Grade 10	90	30.00	3
Total	**300**	**100%**	

There were ninety (90) student-respondents at the age 15 which ranked the highest of the total sample size. In contrast, the lowest frequency goes to age 12 years old with a frequency of four (4) or 1.34% of the sample size. This is coherent with the enrolment profile of the selected public secondary schools in Ubay 1, 2, & 3 districts for the school year 2018-2019.

On other hand, in terms of sex, it reveals that majority of the respondents were female with a frequency of one hundred-ninety (190) or 63.33% of the total sample size. In contrast, there were only one hundred- ten (110) males or 36.67% of the sample size. As to the record, the student population of the selected public secondary schools in Ubay 1, 2 & 3 districts has been consistently dominated by female students since then.

As to the year level, the respondents were Grade 9 students with a frequency of one hundred-ten (110) or 36.67%, followed by Grade 8 students with one hundred (100) or 33.33%, and only ninety (90) or 30% Grade 10 students of the sample size. The percentage distribution is the actual reflection of the student population (as to year level) of the selected secondary public schools in Ubay 1, 2, 3 districts in this school year 2018-2019. This data attributed to the implementation of campus wellness program.

Table 2. Profile of Teacher-Respondents
N =225

1.2.1 Age	Frequency	Percentage (%)	Rank
20 – 29 years old	108	48.00	1
30 – 39 years old	102	45.33	2
40 – 49 years old	13	5.78	3
50 – 59 years old	2	0.89	4
60 years old and above	0	0	5
Total	**225**	**100.00%**	
1.2.2 Sex			
Male	93	41.33	2
Female	132	58.67	1
Total	**225**	**100%**	
1.2.3. Grade Level Handled			
Grade 8	79	35.11	2
Grade 9	82	36.44	1
Grade 10	64	28.44	3
Total	**225**	**100%**	

The demographic profile of teacher-respondents in which ages 20- 29 years old has a frequency of one hundred- eight (108) or 48.00%, while ages 30-39 counts one hundred- two (102) frequency or 45.33%; whereas ages 40- 49 covered thirteen (13) frequency or 5.78% and ages 50- 59 years got the lowest rank and has a frequency of two (2) or .89%.

It is reflected the sex of the teacher-respondents has a frequency of one hundred thirty- two (132) or 58.67% while male has a frequency of ninety- three (93) or 41.33%. The result shows that there were more female teacher respondents than male comprises the whole population of teaching profession in Ubay districts.

The year level handled by the teacher-respondents was reflected. It was vivid on the data presented that most of them handled Grade 9 with a frequency of eighty two (82) or 36.44% followed by Grade 8 which has a frequency of seventy-nine (79) or 35.11%. However, few of the teacher-respondents handled Grade 10 which possessed sixty-four (64) as to frequency or 28.44%.

These data showed that most of the teacher-respondents implies the young professionals and as

part of their professional development program, teachers set health and wellness goals for themselves and their students.

Based on the data presented on table 3.1 the level of student-respondents' academic performance of Ubay 1,2, & 3 got the grade point average of (90-100) or outstanding with a frequency of one hundred thirty -eight (138) or 46.00% and out of 300 students there were only sixteen (16) or 5.33% who got fairly satisfactory. In turn, academic success is an excellent indicator for overall well-being of the youth and primary predictor and determinant of person's health outcomes.

Table 3.1 Level of Student-Respondents' Academic Performance
N =300

Descriptor	Grading Scale	Frequency	Percentage (%)	Rank
Outstanding (O)	90-100	138	46.00	1
Very Satisfactory (VS)	85-89	97	32.33	2
Satisfactory (S)	80-84	49	16.33	3
Fairly Satisfactory (FS)	75-79	16	5.33	4
Did Not Meet Expectations	Below 75	0	0.00	5
Total			**100%**	

Leading national education recognize the close relationship between health and education, as well needed to foster health and well-being within the educational environment for all students. This means that most of the student-respondents were good enough in their academic performance since many of them belong to the highest grading scale which is outstanding.

Table 3.2 Campus Wellness Program in School as to Pinggang Pinoy/Wellness Plate
N =300

Statement	WM	DI	Rank
Select go foods that provide energy and other nutrients such as rice, corn, bread & etc.)	3.73	SA	3
Eat grow foods from different protein sources like fish, chicken, meat & others)	3.64	SA	4
Choose glow foods that give vitamins and minerals like fruits and vegetables.	3.79	SA	1
Avoid more carbonated drinks and "chichirya".	3.46	SA	6
Drink 8 to 10 glasses of water daily.	3.60	SA	5
Include drinking healthy beverages like milk, milo and juices.	3.77	SA	2
Average Weighted Mean (AWM)	**3.66**	**Strongly Agree**	

Legend:

Rating Scale	Descriptive Interpretation (**DI**)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree
1.00 – 1.74	Strongly Disagree (SD)

Weighted Mean (**WM**)

The respondents marked strongly agree on Pinggang Pinoy/Wellness Plate. The students like to eat fruits and vegetables as they think it can help maintain good health. In connection, nutrition tool for preparing healthy food on a per meal basis. It was developed by the Department of Science and Technology's Food and Nutrition Research Institute (DOST-FNRI).

On the Program Benefits. The students considered wellness can help them do better in school. The most important aspect of a student is how to improve its performance in school and this was the respondents were trying to figure out.

Table 3.3 Campus Wellness Program in School as to Program Benefits
N =300

Statement	WM	DI	Rank
Do better in school	3.55	SA	1
Be more alert	3.51	SA	2
Boost performances	3.44	SA	3
Manage my weight	3.34	SA	6
Feel full	3.42	SA	4
Powers up the brain	3.39	SA	5
Average Weighted Mean (AWM)	**3.44**	**Strongly Agree**	

Legend:

Rating Scale	Descriptive Interpretation (**DI**)
3.25 – 4.00	Strongly Agree (SA)
2.50 – 3.24	Agree (A)
1.75 – 2.49	Disagree
1.00 – 1.74	Strongly Disagree (SD)

Weighted Mean (**WM**)

As to program benefits that most of the respondents answered statement number 1 "Do better in school" as the first in rank with a weighted mean of 3.55 or Strongly Agree while the lowest in rank in this category is the statement number 4 "Manage my weight" with 3.34 weighted mean or described as Strongly Agree. The most important aspect of a student is how to improve its performance in school and this was the respondents were trying to figure out.

Meisemlan (2016) confirmed that regardless of the number of wellness dimensions, researchers agree that wellness is a multidimensional, positive and affirming concept those enormous practical benefits. Moreover, a person who strives for holistic wellness is one who is aware of all aspects of wellness and continuously works to incorporate these elements into one's daily life. In other words, the pursuit of wellness is a lifelong endeavour; an educational facility is ideal setting for wellness promotion (Harrington, 2016).

Table 3.4 Campus Wellness Program in School as to Wellness Health Goals

Statement	WM	DI	Rank
Perform wellness dancercise thrice a week	3.39	SA	3
Avoid poor diet by consuming junk-foods	3.34	SA	4

Statement	WM	DI	Rank
Always eat breakfast	3.55	SA	2
Maintain the right body weight at present age	3.77	SA	1
Exercise at least 30 minutes to 1 hour daily	3.29	SA	5
Average Weighted Mean (AWM)	**3.47**	**Strongly Agree**	

Legend: Rating Scale Descriptive Interpretation (**DI**) Weighted Mean (**WM**)
3.25 – 4.00 Strongly Agree (SA)
2.50 – 3.24 Agree (A)
1.75 – 2.49 Disagree
1.00 – 1.74 Strongly Disagree (SD)

On Wellness Health Goals. The result of this category was strongly agree, the data indicated that they wish to maintain the right body weight at present age because teenagers gave high regards to their body figure and body weight.

Wellness health goals of the respondents, they assumed that maintaining the right body weight at present age is very important and has the highest weighted mean of 3.77 or Strongly Agree. Meanwhile the lowest weighted mean of 3.29 was statement 5 "Exercise at least 30 minutes to 1 hour daily". It implies that the respondents set goals to have a healthy body and mind but it may or may not happen without discipline and commitment.

Table 3.5 Campus Wellness Program in School as to Healthy Lifestyle
N=300

Statement	WM	DI	Rank
Go to bed at 9 PM	3.09	A	4
Wake up as early as five in the morning	3.07	A	5
Engage in sports like basketball, volleyball, etc.	3.16	A	3
Find time for recreations (online games, dating with friends, watching movies, reading books, etc.)	3.33	SA	2
Practice proper diet (choosing food pyramid)	3.05	A	6
Go to the doctor for regular check up	3.55	SA	1
Average Weighted Mean (AWM)	**3.21**	**Agree**	

Legend: Rating Scale Descriptive Interpretation (**DI**) Weighted Mean (**WM**)
3.25 – 4.00 Strongly Agree (SA)
2.50 – 3.24 Agree (A)
1.75 – 2.49 Disagree
1.00 – 1.74 Strongly Disagree (SD)

Healthy Lifestyle. In this factor, the most of the respondents agree in this category. They tried to maintain a healthy lifestyle by doing necessary physical activities.

As to healthy lifestyle, it conveys that statement number 6 "Go to the doctor regularly" with a weighted mean of 3.55 or describe as Strongly Agree. Meanwhile, the lowest weighted mean is item number 5 "Practice proper diet (choosing food pyramid)" with 3.05 or Agree. This means that the respondents tried to maintain a healthy lifestyle by doing necessary physical activities.

These lifestyle choices are important to the firm because physical wellness decisions by an individual directly impact firm value (Johnson & Johnson, 2003). Smoking and drinking (especially in excess) are all personal choices that affect physical wellness.

In overall, the respondents strongly agree on campus wellness program in school with the average weighted mean 0f 3.44. The practice of proper diet (choosing food pyramid) got the highest weighted mean of 3.66 with the descriptive interpretation of Strongly agree while the lowest obtain a weighted mean of 3.21 or describe as Agree was the healthy lifestyle.

The results reveals that "Wellness Campus Program were really was implemented in school to educate the students in the elementary and high schools on wellness such as choosing healthier food and drinks, balancing the physical fitness exercise and good nutrition and living a healthier life (Division Memorandum No. 201, s. 2018).

On behavior towards school, the lowest weighted for this category was item number 4 "Usually forget the lesson during examination" for teachers while item number 3 "Able to do assignment on time" for the students with weighted mean of 3.28 and 2.87 respectively.

Table 4 Students' Behavior as Perceived by the Respondents
N1 =225 ;N2 = 300

Statement	Teachers			Students		
Behavior Towards School	**WM**	**DI**	**Rank**	**WM**	**DI**	**Rank**
Have good attention span and sees work through to the end.	3.45	SA	2	3.41	SA	1
Easily cope up with the teacher's instruction	3.48	SA	1	3.21	A	3
Able to do assignment on time	3.29	SA	4	2.87	A	5
Usually forget the lesson during examination	3.28	SA	5	3.17	A	4
Easily distracted and the concentration wanders during discussion	3.37	SA	3	3.22	A	2
Average Weighted Mean (AWM)	**3.37**	**Strongly Agree**		**3.18**	**Agree**	
Behavior Towards Family						
Generally well behaved, usually does what parents request	3.44	SA	1	3.26	SA	2
Often offers to help to parents, brothers, sisters, and elders.	3.25	SA	5	3.34	SA	1
Kind and sharing to siblings	3.35	SA	4	3.04	A	4
Sometimes lies and cheat parents	3.39	SA	2	2.98	A	5
Usually open up problems to parents	3.37	SA	3	3.20	A	3
Average Weighted Mean (AWM)	**3.36**	**Strongly Agree**		**3.16**	**Agree**	
Behavior Towards Peer						
Shares readily with peers the toys, treats, pencils, books, etc.	3.70	SA	3	3.00	A	2.5
Generally liked by other students	3.84	SA	1.5	3.46	SA	1
Constantly toying or squirming other student	3.84	SA	1.5	2.94	A	4
Has at least one good friend	3.32	SA	5	3.00	A	2.5
Often fights with other children or bullies them	3.33	SA	4	2.91	A	5
Average Weighted Mean (AWM)	**3.61**	**Strongly Agree**		**3.06**	**Agree**	

Statement	Teachers			Students		
Behavior Towards Community						
Gets along better with neighbours	3.60	SA	1	3.28	SA	2
Help the community in clean and green environment	3.56	SA	2	3.27	SA	3
Considerate of other people's feelings	3.40	SA	3	3.23	A	4
Sharing and getting information from other people	3.29	SA	5	3.21	A	5
Easily influenced in the community	3.30	SA	4	3.50	SA	1
Average Weighted Mean (AWM)	**3.43**	**Strongly Agree**		**3.30**	**Strongly Agree**	
Overall AWM	**3.44**	**Strongly Agree**		**3.18**	**Agree**	

Legend:

Rating Scale	Descriptive Interpretation (**DI**)	Weighted Mean (**WM**)
3.25 – 4.00	Strongly Agree (SA)	
2.50 – 3.24	Agree (A)	
1.75 – 2.49	Disagree	
1.00 – 1.74	Strongly Disagree (SD)	

In addition to the results, children who are unhealthy are at higher risk for school problems than students who are free from medical problems. Students with poor health have a higher probability of school failure grade retention, and drop out. The relationship between student health and academic success is complex. Common manageable factors of student health are nutrition, maintaining health weight, and physical fitness. Furthermore, the efficacy of educational programs to improve nutrition, maintain healthy weight, and increase physical fitness evaluated (Shaw et. al, 2015).

On other hand, as behavior towards family, the statement number 1 "Generally well behaved, usually does what parents request" got the highest weighted mean of 3.44 for the teachers while statement number 2 "Often offers to help to parents, brothers, sisters, and elders" with a weighted mean of 3.34 or described as strongly agree. Meanwhile, the lowest weighted mean for this category for teachers was statement number 2 "Often offers to help to parents, brothers, sisters, and elders" with a weighted mean of 3.25 or strongly agree while for the students was statement number 4. "Sometimes lies and cheat parents" with 2.98 or Agree. It can be observed that there was a contradictory of respondents' perception in this category.

In term of behavior towards peer, both respondents perceived that they were generally liked by other students with the highest weighted. It states that there is a friendly environment inside the school where the students has enjoyed. In their lowest responses, have at least one good friend for teacher's perception and for the student's perception was often fights with other children or bullies them. This scenario reverses each other but this is very common to all school where students engaged in friendship and the other fought each other.

Lastly, as to behavior towards community, statement number 1 "Gets along better with neighbours" got the highest weighted mean of 3.60 for the teachers while item 5 "Easily influenced in the community" for the students has the highest weighted mean of 3.50 or described as strongly agree. It was noted that the respondents have similar responses as to the lowest weighted mean was 4 "Sharing and getting information from other people" with 3.29 and 3.21 respectively.

This means that most of the young individuals were really learned and emulated behavior from their significant others. An individual's environment has been shown to influence behavior, and any change in wellness should take into consideration an individual's environments are more conducive to wellness than others (Hughes, 2006). Some make an effort to live and work in an urban environment and are quiet happy.

The teacher- respondents viewed that peer highly influenced the students' behavior as they experienced being together and sharing of interest. On the part of the student respondents, they perceived that community affects their behavior. This could create unforgettable memories upon living in their respective environment where they belong.

Table 5. Relationship Between the Campus Wellness Program in School and Students' Academic Performance and Behavior
N = 300

Campus Wellness Program and……	r	p-value at α=0.05	Interpretation	Decision
Academic Performance	0.046	0.432	Not Significant	Accept Ho
Behavior	0.129	0.026	Significant	Reject Ho

The table shows the result that Campus Wellness Program in School has no direct effect to students' academic performance since the computed correlation coefficient value of 0.046 with a p-value of 0.432 which is greater than 0.05 level of significance thus, the null hypothesis is accepted.

Moreover, the result shown that there is a significant relationship between Campus Wellness Program and students' behavior since the computed correlation coefficient value of 0.129 with the p-value of 0.026 which is lesser than 0.05 level of significance thus, the null hypothesis is rejected. The result denotes that Campus Wellness Program implemented in school has a direct effect to students' behavior thus improves students' behavior towards school, family and peers. The result denotes that Campus Wellness Program implemented in school has a direct effect to students' behavior.

Table 6 Difference Between the Perception of the Respondents on Students' Behavior
N = 300

Variable	Mean		Mean Difference	t	p-value at α=0.05	Interpretation	Decision
	Teachers	Students					
Students' Behavior	3.31	3.09	0.219	6.07	<0.001	Significant	Reject Ho

It shows the difference between the perceptions of the respondents on the students' behavior. The result revealed that there is a significant difference between the perception of the teacher-respondents and student-respondents on the students' behavior since the computed t-value of 6.07 with a p-value of <0.001 is lesser than 0.05 level of significance hence, the null hypothesis is rejected. This means that the respondents have comparable perceptions on students' behavior towards their school, family, peers and community.

Students' attitudes and behaviors are predicted by teaching practices most proximal to these measures, including teachers' emotional support and classroom organization. However, teachers who are effective at improving test scores often are not equally effective at improving students' attitudes and behaviors (David & Kraft, 2017).

CONCLUSION

There was no significant relationship between campus wellness program and its effects to students' academic performance; however, there is a significant relationship between the campus wellness program and its effect to students' behavior. Therefore, it is concluded that wellness program in school can influence to the holistic well-being of the students.

RECOMMENDATION

Based from the conclusions drawn from the study, the researchers came up with the following recommendations:

The school should implement the campus wellness program as prescribed by the Department of Education; a need of full support from the school administration in order to ensure cooperation from the teachers and program application; a design activity to cater the need of school wellness to the teachers and students; and a regular monitoring and evaluation of the program.

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GEOTHERMAL EDUCATION INTEGRATION PROGRAM, A LOCALIZED CURRICULUM: AN ASSESSMENT

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ABSTRACT

Prior to the Geothermal Education (GeoEd) Integration Program implementation, geothermal issues resulting to destructions of geothermal facilities were frequent. Thus, Department of Education and Philippine Geothermal Production Company came up with the program. The researchers have utilized descriptive method of research to evaluate its effectiveness. The 793 respondents were composed of school heads, teachers, students and parents in both elementary and secondary schools of Tiwi while the Statistical Treatment used were weighted mean and Analysis of Variance. Majority of school heads and teachers in geothermal schools have fully implemented GeoEd Program in both Revised Basic Education and K to 12 Curriculums. However, in non-geothermal schools, it was moderately implemented. Major benefits derived from GeoEd program were: common misconceptions on the negative impact of geothermal energy were corrected; community learned that as a renewable energy, it contributes to the community's economic sustainability; developed environmental awareness of the community that resulted to their care of the geothermal facilities. It is then recommended that to sustain the program, it must be revisited and new school heads and teachers must be capacitated. School heads should conduct close monitoring and supervision of the localized curriculum. Every teacher should practice on-site experiential teaching approach for the integration of GeoEd concepts. Encourage schools to render community extension services in geothermal barangays. Pilot schools should have geothermal Science Centrum and miniature geothermal facility for simulation activity. Naga National High School should also be a "Center of Excellence" for the GeoEd Program.

Keywords: geothermal, education, localized, curriculum, assessment

INTRODUCTION

Tiwi, Albay is one of the famous municipalities in the Bicol Region due to the unique natural resources the hot springs and the "geyser". The abundant "hot springs" of the municipality is one of the sources of energy in the Luzon Grid, known as "Geothermal Energy", Presently the geothermal energy production is owned and operated by the Philippines Geothermal Production Company Inc. (PGPCI).

According to Vicedo (2015), few people outside of the energy industry are aware that the Philippines is a major player in geothermal power development worldwide. Next to the US, the Philippines is second in terms of total installed plant capacity out of twenty four (24) countries utilizing geothermal energy for electric power generation. Not surprising since the Philippines is on the western boundary of the Pacific Ring of Fire, a continuous chain of volcanic centers surrounding the Pacific Ocean. It is this favorable location which has endowed the Philippines with a high potential for geothermal energy. Electric power generation from geothermal energy presently accounts for about 18% of the country's power requirement.

The country currently hosts seven (7) major operating geothermal fields spread across the country from Luzon to Mindanao with a total capacity of 1970 megawatts (MW). Two of these fields were developed by Chevron Geothermal Philippines Holdings, Inc. (formerly Philippine Geothermal Inc., then Unocal Philippines, Inc.) and the rest by Energy Development Corp., now part of the Lopez Group of Companies (formerly Philippine National Oil Company-Energy Development Corp.).

The birth of the Philippines' geothermal industry is often always attributed to the 1970s oil crisis but in fact, investigation of the country's potential for utilizing geothermal energy for electric power generation began in the early 1960s. The defunct Commission on Volcanology or ComVol, (the precursor of the current Philippine Institute of Volcanology and Seismology or PHIVOLCS) began investigating the Tiwi hot springs and boiling pools in Albay in 1964. It was headed by the late Dr. Arturo P. Alcaraz, the acknowledged father of Philippine geothermal development. In 1967, a pilot plant with a capacity of 2.5 kWe in Barangay Cale, Tiwi, Albay was turned on to power the first light bulbs utilizing electricity from geothermal.

For the past years of geothermal exploration to production in the municipality of Tiwi, Albay, several problems were encountered. Prior to the implementation of the Geothermal Education (GeoEd) Integration Program, geothermal issues such as looting, massive destructions of the geothermal facilities, cutting of trees that may results to forest and watershed destructions and other related incidents were frequent. Researchers believed in the

old African proverbs that "It takes a village to raise a child" which connotes that education plays a vital role to transform the society/community. Thus, the Department of Education, Philippine Geothermal Production Company (PGPCI), the Local Government Unit and other stakeholders came up with the program "Geothermal Education Integration across the Learning Areas in the Basic Education Curriculum.

RESEARCH METHODOLOGY

The researchers have utilized the descriptive method of research for the evaluation of the program so as to determine the scope of the effectively of the program to the community. The respondents of this study were as follows: Thirty eight (38) school heads in both elementary and secondary schools, two hundred thirteen (213) teachers, forty (40) parents and five hundred two (502) Grade 6 and Grade 10 students of Tiwi. The Statistical Treatment of the data collected used in this study was the weighted mean and Analysis of Variance (ANOVA).

REVIEW OF RELATED LITERATURE

History records show the Philippine Congress, recognizing the potential and benefits of geothermal development, enacted Republic Act No. 5092, otherwise known as the Geothermal Law in 1967. That same year, Dr. Arturo P. Alcaraz and his team came to Tiwi and lit a light bulb using steam-powered electricity coming from MountMalinao.

That was the first geothermal power generated in the Philippines. By 1982, Tiwi became the world's first water-dominated geothermal system to produce more than 160 megawatts (MW). Its currently installed capacity is 289 MW.

Electric power is measured in units called watt. A watt is equal to one joule (the quantity of energy that can be generated from a fuel such as oil or gas) per second. The total generating capacity of a power plant is measured in kilowatt (KW) for 1,000 watts, and megawatt (MW) for one million watts.

"Geothermal energy offers significant environmental and economic advantages over fossil fuels in generating electricity," said the Chevron Geothermal Philippines Holdings, Inc. (CGPHI) in a statement. "As a renewable energy source, geothermal energy creates significantly less greenhouse gasses."

Greenhouses gases include carbon dioxide from burning fossil fuels, chlorofluorocarbons from air conditioners and refrigerators, methane gas from landfills and rice fields, and the nitrogen compound, nitrous oxide, from burning fossil fuels and fertilizers. Global warming is believed to be caused by increased concentrations of these gases emitted by human activities into the atmosphere.

Geothermal energy also offers substantial economic benefits. Since 1977, geothermal energy has saved the Philippine government over US$7 billion in costs associated with the import of fossil fuels.

One can have a good view of the Tiwi Geothermal Power Plant by visiting the Naglagbong Geothermal People's Park (more popularly known as Nag Park). According to locals, the park used to have hot springs, vents, boiling mud pools and silica center mounds. People visiting the place would boil eggs from steaming holes.

A hydrothermal eruption in 1980 ended the park's thermal activities. Since then, it was transformed into a park with the combined efforts of the local government, National Power Corporation, and Philippine Geothermal, Inc.

FINDINGS

This chapter presents the data analysis wherein, the order and presentations of the results follows the sub-problems found in Chapter 1.

Table 1 reveals the level of involvement of school heads in the full implementation of the Geo Ed program in the geothermal schools. The four (4) indicators obtained overall results of "always". These were presented in descending order. Most of the school heads have said that they have included the GeoEd program in crafting the School Improvement Plan (SIP) as utilized by them for the school operation for the next three years (4.56). Also, the GeoEd program was included in their instructional and supervisory plans, and majority of the school heads have rendered technical assistance to the teachers who were in need of geothermal concepts in teaching (4.55) respectively. Likewise, they have monitored the instructions including the integration of the GeoEd concepts across the learning areas (4.54). The overall result of the survey revealed that majority of the school heads assigned in the geothermal schools such as Biyong Elementary School, Cale Elementary School, Cararayan-Naga Elementary School, Sto Cristo Elementary Schools, Lourdes Elementary School and Naga National High School have fully supported the implementation of the GeoEd program. Relative to this, they have developed other intervention programs/ activities so as for the teachers and other stakeholders to be involved in the cited localized curriculum.

Furthermore, school heads have ensured that the GeoEd programs were fully integrated in the Revised Basic Education Curriculum and the K to 12 Curriculum.

Table 1 – Level of Involvement of the School Heads in the Implementation of the Geothermal Education Program in Geothermal Schools

Items	Revised Basic Education Curriculum		K to 12 Curriculum		Ave. Wm	Interpretation	RAnk
	Wm	Interpretation	Wm	Interpretation			
1. Monitored the implementation of Geothermal Education Integration Across the Learning Areas	4.53	Always	4.55	Always	4.54	Always	4
2. Rendered technical assistance to the teachers in need of geothermal concepts in teaching	4.55	Always	4.55	Always	4.55	Always	3.5
3. Included the Geothermal Integration plan in the re-crafting the school improvement plan for the next three years	4.56	Always	4.56	Always	4.56	Always	1
4. Included in the supervisory plan for the monitoring of the Geothermal Education integration across the disciplines	4.55	Always	4.55	Always	4.55	Always	3.5
Ave. Wm.	**4.55**	**Always**	**4.55**		**4.55**	**Always**	

The data on Table 2 reveals the level of involvement of the school heads in the implementation of the Geothermal Education Program for non-geothermal schools. Based on the data presented the overall results was "moderate", meaning the GeoEd program was moderately integrated across the disciplines. Furthermore, the data showed that majority of the school heads have always integrated the GeoEd program in the old Revised Basic Education Curriculum such as including it in the supervisory plan, rendering technical assistance related to GeoEd teaching and monitoring on the implementation of the program (4.52) respectively. In addition, they included the GeoEd program for the crafting of the school improvement. Based on the overall results school heads stressed they were included the GeoEd program in their instructional and supervisory plan because they were capacitated by the curricularist of the localized curriculum. However, in the K to 12 they have seldom included this program on their monitoring and supervisory plan, because they think that this program is not so relevant to the non-geothermal schools. However, in the lesson exemplar there are topics related to the natural resources protection and conservation that are found and can be integrated in teaching across the learning areas.

Table 2– Level of Involvement of the School Heads in the Implementation of the Geothermal Education Program in Non-Geothermal Schools

Items	Revised Basic Education Curriculum		K to 12 Curriculum		Ave. Wm	Interpretation	RAnk
	Wm	Interpretation	Wm	Interpretation			
1. Monitored the implementation of Geothermal Education Integration Across the Learning Areas	4.52	Always	1.59	Seldom	3.06	Moderate	2
2. Rendered technical assistance to the teachers in need of geothermal concepts in teaching	4.53	Always	1.58	Seldom	3.06	Moderate	2
3. Included the Geothermal Integration plan in the re-crafting the school improvement plan for the next three years	4.51	Always	1.48	Seldom	3.00	Moderate	3
4. Included in the supervisory plan for the monitoring of the Geothermal Education integration across the disciplines	4.54	Always	1.57	Seldom	3.06	Moderate	2
Ave. Wm.	**4.55**	**Always**	**4.56**	**Seldom**	**3.05**	**Moderate**	

Table 3 reveals the level of involvement of the teachers in the implementation of the GeoEd program in the geothermal schools. Based on the overall results, the six (6) indicators assessed by the teachers has the overall results of "always". The results were presented in descending orders: familiarized with the geothermal education concepts found in the lesson exemplars, utilized the lesson exemplar of the geothermal education and the content of the lesson exemplar are aligned to content standards and learning standards of the K to 12 curriculum (4.56) "always"; developed the higher order thinking skills of the learners (4.55); integrated geothermal education concepts in selected topics/ content standards in every learning area (4.54); and in the individual teacher's action plan the geothermal education concepts are integrated (4.53). Based on the overall results teachers in the geothermal schools have integrated "GeoEd" concepts both in the Revised Education Curriculum and K to 12 Curriculum. Aside from this, most of the teachers either seasoned and newly hired teachers knows on how to integrate the said program because their school heads and key teacher were able to render technical assistance among the newly hired teacher in forms of Teacher Induction Program (TIP). The localized curriculum particularly the "GeoEd" is one of the focuses in the induction program and the School Learning Action Cell (SLAC).

Table 3– Level of Involvement of the Teachers in the Implementation of the Geothermal Education Program (Geothermal Schools)

Items	Revised Basic Education Curriculum		K to 12 Curriculum		Ave. Wm	Interpretation	Rank
	Wm	Interpretation	Wm	Interpretation			
1. Integrated geothermal education concepts in the selected topics/ content standards in every learning area.	4.54	Always	4.54	Always	4.54	Always	5
2. In the individual teacher's action plan the geothermal education concepts are integrated.	4.53	Always	4.53	Always	4.53	Always	6
3. Familiarized with the geothermal education concepts found in the lesson exemplars.	4.55	Always	4.56	Always	4.56	Always	2
4. Utilized the lesson exemplar of the geothermal education.	4.56	Always	4.56	Always	4.56	Always	2
5. The content of the lesson exemplar are aligned to content standards, learning standards of the K to 12 Curriculum.	4.56	Always	4.56	Always	4.56	Always	2
6. Developed the higher order thinking skills of the learners.	4.55	Always	4.55	Always	4.55	Always	4
Ave. Wm.	**4.55**	**Always**	**4.55**	**Always**	**4.55**	**Always**	

Gleaned on Table 4 are the data derived from the respondents' answers on the level of involvement of the teachers in the implementation of the GeoEd Program in the non-geothermal schools. It could be noted that in the Revised Basic Education Curriculum (RBEC) most of the trained teachers have integrated the GeoEd Concepts in teaching across the disciplines. They really found out that the content of the lesson exemplar were aligned to the learning competencies found in the Elementary Learning Competencies/Philippines Secondary School Learning competencies (4.56). There are topics that can be integrated in all disciplines like English, Filipino, Mathematics, Science, Araling Panlipunan, MAPEH and even TLE. The lesson exemplar utilized by the teachers have jibed with the competencies in the ELC/PSSLC, and there were activities found in the lesson exemplar that are similar to the activities found in the ELC/ PSSLC that could really develop the higher order thinking skills of the learners (4.55) respectively. However, in the K to 12 curriculum majority of the teachers have seldom integrated the GeoEd concepts in teaching in the different learning areas, merely because they found that the lessons and skills in all activities does not jibe with the content standards, learning standards and the learning competencies found in the teacher's guide and learners modules. Aside from this, most of the teachers have said the integration of the GeoEd concepts in teaching were not so applicable because of the fact they are very far from the Geothermal areas like for instance, Nagas Elementary School, Sogod Elementary School, Joroan Elementary School, Maynonong Elementary School, Misibibis Elementary School, Mayong Elementary School and Joroan High School. This is the reason why most of the teachers were not so interested to integrate the GeoEd concepts in teaching. However, in Science and Araling Panlipunan, the topic about the sources of energy in the Philippines, geothermal energy was integrated as one of the indigenous and cleanest energy found in the municipality of Tiwi, Albay.

Table 4– Level of Involvement of the Teachers in the Implementation of the Geothermal Education Program (Non-Geothermal Schools)

Items	Revised Basic Education Curriculum		K to 12 Curriculum		Ave. Wm	Interpretation	Rank
	Wm	Interpretation	Wm	Interpretation			
1. Integrated geothermal education concepts in the selected topics/ content standards in every learning area.	4.55	Always	1.52	Seldom	3.04	Moderate	2
2. In the individual teacher's action plan the geothermal education concepts are integrated.	4.53	Always	1.53	Seldom	3.03	Moderate	4.5
3. Familiarized with the geothermal education concepts found in the lesson exemplars.	4.54	Always	1.51	Seldom	3.03	Moderate	4.5
4. Utilized the lesson exemplar of the geothermal education.	4.55	Always	1.51	Seldom	3.03	Moderate	4.5
5. The content of the lesson exemplar are aligned to content standards, learning standards of the K to 12 Curriculum.	4.56	Always	1.53	Seldom	3.05	Moderate	1
6. Developed the higher order thinking skills of the learners.	4.55	Always	1.51	Seldom	3.03	Moderate	4.5
Ave. Wm.	**4.55**	**Always**	**1.52**	**Seldom**	**3.04**	**Moderate**	

Showed on Table 5 are the results of the survey gathered from the schools heads, teachers and community. Based on the overall results of the survey there were five (5) major benefits derived from the GeoEd program strongly agreed by most of the re-

spondents. Aside from school heads, teachers, pupils/students, the results of the assessment were validated by the respondents from selected respondents in the community. The results were as follows: the common misconceptions about the negative impact of "geothermal energy" were corrected (4.56); students and community have learned that "geothermal energy" is a renewable energy of the locality (4.55); geothermal energy contributed much to the economic sustainability of the community; students are encouraged to share their ideas about economics and environmental impact of geothermal energy in the community; developed the environmental awareness of every learner, gradually due the GeoEd program the 90% of the learners living near the geothermal facilities became stewards of the environmental protection and conservations. In addition, pupils/students and community have gradually learned to protect the geothermal facilities. Moreover, students and parents have also learned that they are the important stakeholders of the company and whatever benefits derived from the geothermal production; economically speaking this will contribute to the economic sustainability of the municipality.

Table 5– Benefits of integrating Geothermal Education Concepts Across the Disciplines

Items	School Heads/ Teachers		Community		Ave. Wm.	Interpretation	Rank
	Wm.	Interpretation	Wm.	Interpretation			
1. Common misconceptions about the negative impact of "geothermal energy" were corrected.	4.55	SA	4.56	SA	4.56	SA	1
2. Students have learned that "geothermal energy" is a renewable energy of the locality.	4.55	SA	4.55	SA	4.55	SA	2
3. Geothermal energy contributed much to the economic sustainability of the community.	4.54	SA	4.54	SA	4.54	SA	4
4. Students are encouraged to share their ideas about economics and environmental impact of geothermal energy in the community.	4.54	SA	4.54	SA	4.54	SA	4
5. Developed the environmental awareness of every learner.	4.54	SA	4.54	SA	4.54	SA	4
Ave. Wm.	4.54	SA	4.54	SA	4.54	SA	

Test of the significant effect of integrating Geothermal Education concepts on the level of awareness of the learners, parents and community

Table 4 – Two-way ANOVA to test the significant effect of the integrating the geothermal education concepts on the level of awareness of the learners and of the community

Source of Variance	Degrees of Freedom	Sum of Square	Mean Square	Observed F	Tabular F .05
School heads, teachers	3	68	64	38.967	9.925
Students Community	3	48	54	47.834	5.841
Total	6	116			

It is gleaned on Table 4 the data on Two-way ANOVA to test the significant effect of integrating geothermal education concepts on the level of awareness of the learners and of the community. The results have shown that F-value obtained from the school heads and teachers is 38.967 which is significant at .05 level of probability with 3 degrees of freedom with tabular value of 9.925. Likewise, from the students and community the F-value is 47.834, which is greater than the tabular value of 5. 841 with 3 degrees of freedom at .05 level of confidence. Thus, the result is significant; therefore, GeoEd program had contributed more on the level of awareness and stewardship of the students and parents living near the geothermal facilities.

CONCLUSIONS

The following conclusions are formulated based on the findings of the study:

- Majority of the school heads and teachers assigned in the geothermal schools have fully implemented the GeoEd Program in both the Revised Basic Education Curriculum and the K to 12 curriculum.
- In the non-geothermal schools, the program was moderately implemented.
- The full implementation of the GeoEd program contributed much in the reformation of learners and parents to become stewards in the protection and conservation of the renewable and non-renewable resources of the community.
- The community also learned that they are important stakeholders of the company.

RECOMMENDATION

It is then recommended that the preceding actions be done in order to sustain the Geothermal Education Integration Program:

- Revisit the program.
- Retrain the new school heads and teachers to be capacitated of the GeoEd Program.
- School heads should conduct close monitoring and supervision of the GeoEd integration in the curriculum.

- School heads should render technical assistance for the integration of the localized curriculum.
- Every teacher should practice on site experiential teaching approach for the integration of the GeoEd concepts in every learning area.
- Sustain the GeoEd program and encourage the teachers and school heads to render community extension services in the geothermal barangays.
- Pilot schools should have a miniature geothermal facility for the simulation activity. Geothermal science centrum should be put up in the pilot school.
- Naga National High School should be a "Center of Excellence" for the GeoEd Program.

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ORGANIZATIONAL CULTURE OF STATE UNIVERSITIES AND COLLEGES

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ABSTRACT

Generally, organizational culture varies in different schools. Its role in the development of the school had a greater impact as far as administrators, school heads, and instructors were concerned. This paper intended to identify the culture of the school and effectively evaluate and assess the educational programs and its implementation in order to achieve the best performance particularly in State Universities and Colleges in Negros Occidental, Philippines. The researcher used the descriptive approach involving 161 respondents from three State Universities and Colleges represented, 46 administrators, 24 school heads and 121 instructors. A descriptive type of research was applied. The researcher used a questionnaire for organizational culture with ten questions each which involved three aspects of culture such as individualized, balkanized and collaborative. Results show that collaborative culture was the most evident school organizational culture which posted evident and highly evident respectively. There was significant difference in the Collaborative Culture when grouped according to administrators, school heads and instructors.

Keywords: Organizational Culture, State Universities and Colleges, Individualized, Balkanized, Collaborative

INTRODUCTION

State Universities and Colleges (SUC) in the Philippines is a chartered public higher education institution established by law, administered, and financially subsidized by the national government and considered as a corporate body (data.gov.ph, 2013) and governed by CHED.

Within SUCs organization, cultures were developed. Since organizational culture has come of age, it has become one of the major issues in academic research and education whether in organization theory or in management practices (Alvesson, 2014).

Thus, culture is made up of a set of characteristics which had been developed over the years. It is deeply rooted from highly held values, customs, traditions, and norms that are further strengthened and maintained through the organization's mission and vision statements. One cannot only come to understand the dynamic evolutionary forces that govern a culture but also can explain how the culture is learned, passed on, and changed (Zarate, 2012). Providing a high quality service is a necessity for service organization and educational institutions, especially colleges and universities.

On this premise, this paper was conducted to determine the most evident organizational culture of State Universities and Colleges and how it affects the performance of the school. The findings of this study will be used as a baseline in developing a program to help the SUCs administrators and school heads to appropriately respond and find solutions to any problem that may arise in the future and to attain success in their work as leaders or working professionals. It specifically determined the most evident organizational culture; individualized, balkanized and collaborative; the profile of the administrators, school heads and instructors in terms of age, sex, length of service, educational attainment and school address.

STATEMENT OF THE PROBLEM

This study was designed to determine the organizational culture of State Universities and Colleges during the Academic Year 2015-2016.

Specifically, this study sought to answer the following questions:

1. What is the profile of the administrators, school heads, and instructors in the following variables?
   1.1. age
   1.2. sex
   1.3. length of service
   1.4. educational attainment
   1.5. school address

2. What is the most evident school organizational culture among State Universities and Colleges according to the following aspects as perceived by administrators, school heads and instructors?
   2.1. Culture of Individualism
   2.2. Balkanized Culture
   2.3. Collaborative Culture

3. Is there significant difference in the organizational culture being practiced among State Universities and Colleges when grouped according to administrators, school heads and instructors?

THEORETICAL / CONCEPTUAL FRAMEWORK

The theoretical framework of this study was anchored on the model of culture introduced by Schein (1980). According to Schein, there were 4 categories of culture: the first is Macro-cultures where nations and occupations exist globally, the second is Organizational Cultures, those values and beliefs shared within the organization, the third is Subcultures, those are groups within the organizations, and the last is Micro-cultures or known as microsystems exist within the organizations. Generally, the present study focuses on the category of organizational culture.

The theory of culture presented by Schein (1992,1999) was characterized by the deeper level of basic assumptions, values and beliefs that becomes shared and taken for granted as the organization continues to be successful. This theory promotes distinctive culture which has long term employment opportunities. This creates in an employee a sense of security and commitment to the organization; participants become invested in the organization.

The theory was related to the present investigation since the researcher would like to determine the most evident organizational culture. This study measured the most evident organizational culture of administrators, school heads and instructors of State Universities and Colleges.

To measure the most evident organizational culture of the three (3) groups of respondents the concept of Hargreaves (1992) particularly on culture is now the basis of the present study. He had identified three components of culture: the culture of individualism, balkanized and collaborative with ten indicators for each component represented.

REVIEW OF RELATED LITERATURE

According to Beytekin, et al in 2010, organizational culture is a vital element of effective management practices in universities. Lately, researchers are motivated to study on the organizational concept to provide managerial effectiveness in the universities. Strong-culture proponents suggest that the mere presence of a shared system of beliefs, values, and symbols is not sufficient to enhance organizational performance. Culture's strength in this study reflects the extent to which the beliefs and values central to the organization aren't aligned with the actual management policies and practices.

Culture is a very powerful part of what goes on in school. It is because culture is the key factor in productivity and success. A culture that supports and recognizes the importance of certain kinds of learning goals, improvements or changes will not just happen so easily. It takes time and effort in order to survive and will be useful after a long period of time. Culture affects what people focus on. It also affects motivation. Motivation affects productivity. Finally, culture affects willingness of staff members, students, parents and teachers; administrators provide ample time and opportunities into continuous improvement and refining their craft. Therefore, culture is the key to productivity (Deal & Peterson, 2010).

Moreover, culture is shared beliefs and values. Values are beliefs of what is desirable. They are reflections of the underlying assumptions of culture and lie at the next level of analysis. Shared values define the basic character of the organization and give the organization a sense of identity. If members know what their organization stands for, if they know what standards they should uphold, they are more likely to make decisions that will support these standards. They are also more likely to feel part of the organization and that organizational life has important meaning (Hoy, 2013).

METHODOLOGY

The study was designed to determine the most evident organizational culture of State Universities and Colleges in Negros Occidental, Philippines. The descriptive research design was used in the study, if used properly it can help an organization better define and measure the significance of something about a group of respondents and the population they represent (Penwarden, 2014). Stratified random sampling was employed in the selection of the respondents specifically in instructors and the total population for administrators and school heads. It involved 191 respondents composed of 46 administrators, 24 school heads and 121 instructors.

A total of thirty (30) items were used as indicators of such behavioral preferences in the instrument in organizational culture, ten (10) items for each culture represented in the study such as: Individualized, Balkanized and Collaborative. The respondents were asked to respond by choosing an answer out of five given options. The corresponding rating scale, verbal description and interpretation are as follows:

Rating Scale	Verbal Description	Interpretation
4.21-5.0	Highly Evident	Very clear demonstration & observation of culture all the time
3.41-4.20	Evident	Very clear demonstration & observation of culture often time
2.61-3.40	Slightly Evident	Sometimes has very clear demonstration & observation of culture
1.81-2.60	Less Evident	Rarely has clear demonstration & observation of culture
1.00-1.80	Not Evident	Never has very clear demonstration & observation of culture

To establish the validity of the instrument, it was submitted for scrutiny to five experts, they include: Ph.D. holder in English, Ph. D. in Psychology, and three Ph.D. holders who were administrators in their respective schools and colleges. The results were subjected to data treatment, tabulated and interpreted. The over-all average rating was 4.09 and interpreted as "above average." This confirmed the jury's approval of the instrument. For the reliability testing Cronbach Alpha (Brown, 2002) was used which yielded the result of 0.96 which revealed a "very high" reliability.

Subsequently, the test instrument was given and administered personally by the researcher to the respondents in three identified State Universities and Colleges (SUC's) by groups. The data were gathered, pooled and recorded in appropriate tables. These were analyzed, computed and interpreted.

Frequency count and percentage were used to present the profile of the respondents. Mean was utilized to identify the level of the most evident organizational culture of the respondents. Kruskal Wallis was used to determine the significant difference on the levels of organizational culture when grouped according to respondents, length of service, educational attainment and school address however, when grouped according to age and sex, the Mann-Whitney U test was applied.

Table 1 Total Population of the Respondents

State Universities and Colleges	Respondents		Total Population of Administrators and School Heads	Total Population of Instructors		Total Population of the Respondents
	School Administrators	School Heads		Total Population	Sample Population	
1. **SUC A**	24	8	32	91	64	96
2. **SUC B**	12	8	20	54	38	58
3. **SUC C**	10	8	18	27	19	37
Total	**46**	**24**	**70**	172	**121**	**191**

The general profile of the respondents of SUCs was mainly composed of 40 years old and below with a frequency of 67 of the population. While respondents with 41 years old and above had a frequency of 124 of the population. There were more administrators, school heads and instructors who were 41 years old and above.

In terms of sex, majority or 111 of the respondents were females and 80 were males. There were more male administrators but more school heads and instructors who were females.

In the educational attainment, there were 14 with Bachelor's Degree, 123 with Master's Degree and 54 with Doctorate Degree.

There were more administrators and school heads who had Doctorate Degrees while more instructors were Master's Degree holders and there were still school head and instructors who were Bachelor's Degree holders.

In terms of the length of service, respondents were characterized by 46 administrators, 24 school heads and 121 instructors for a total of 191. All of the school heads' population belong to a range of 1 -10 years of service while majority of the instructors had served within 1-10 years. There were more administrators who served 1-10 years.

For the school address, majority of the respondents were taken from SUC A in a frequency of 96 followed by the respondents from SUC B at 58 and SUC C at 37.

Table 2 PROFILE OF THE RESPONDENTS

Variables	Category	Administrators	School Heads	Instructors	Total	Percentage
		f	f	f	F	(%)
Age	40 years old and below	10	9	48	67	35.08
	41years old and above	36	15	73	124	64.92
	Total	**46**	**24**	**121**	**191**	**100**
Sex	Male	28	10	42	80	41.88
	Female	18	14	79	111	58.12
	Total	**46**	**24**	**121**	**191**	**100**
Educational Attainment	Bachelor	0	0	14	14	7.33
	Masters	17	16	90	123	64.40
	Doctorate	29	8	17	54	28.27
	Total	**46**	**24**	**121**	**191**	**100**
Length of Service	1-10 years	32	24	57	113	59.16
	11-20 years	8	0	31	39	20.42
	21-30 years and more	6	0	33	39	20.42
	Total	**46**	**24**	**121**	**191**	**100**
School Address	SUC A	24	8	64	96	50.26
	SUC B	12	8	38	58	30.37
	SUC C	10	8	19	37	19.37
	Total	**46**	**24**	**121**	**191**	**100**

School Organizational Culture among State Universities and Colleges (Culture of Individualism).

Results reveal that in State Universities and Colleges, the organizational culture is "slightly evident" in the culture of individualism which describes that teachers in the organization never observe each other's teaching and receive moderate feedback or support from other profession. It has an overall mean of 3.40 which is interpreted as "slightly evident." Administrators and school heads had the mean of 3.27 and 3.40 respectively and both had the same interpretation as "slightly evident" while it was "evident" for the instructors with the mean of 3.54. This implies that culture of individualism was not evident in the school organizational culture.

Hargreaves (1992) stated that culture of individualism was the dominant form of school culture. Teachers in school never observe each other's teaching and receive little feedback or support from other profession. Teachers in this kind of culture were isolated and they seldom collaborate with their peers.

Table 3 School Organizational Culture among State Universities and Colleges (Culture of Individualism)

Aspect of Culture	State Universities and Colleges						Overall Mean	Interpretation
Culture of Individualism	**Administrators**	**Interpretation**	**School Heads**	**Interpretation**	**Instructors**	**Interpretation**		
1. Receive little feedback on support	3.43	Evident	3.46	Evident	3.55	Evident	3.48	Evident
2. Give priority to my own needs over those of others.	3.15	Slightly Evident	3.38	Slightly Evident	3.69	Evident	3.41	Evident
3. Understand that privacy is important to make an established teaching practice.	3.63	Evident	3.79	Evident	3.90	Evident	3.77	Evident
4. Believe that discipline and experiences have different levels of respect.	3.93	Evident	4.17	Evident	4.07	Evident	4.06	Evident
5. Understand that each subject offered should have separate and specific culture.	3.57	Evident	4.04	Evident	4.07	Evident	3.89	Evident
6. Perform only when I feel good.	2.43	Less Evident	2.83	Slightly Evident	2.55	Less Evident	2.60	Less Evident
7. Understand that the school is a private sector.	2.65	Slightly Evident	2.88	Slightly Evident	3.29	Slightly Evident	2.94	Slightly Evident
8. Work only when I feel like working.	2.30	Less Evident	2.38	Less Evident	2.46	Less Evident	2.38	Less Evident
9. Take into account the past experiences when making decisions about the future.	3.85	Evident	3.42	Evident	3.91	Evident	3.73	Evident
10. Need to fulfill the role meant for me, rather than try to determine my own future.	3.74	Evident	3.71	Evident	3.88	Evident	3.78	Evident
Subtotal	**3.27**	**Slightly Evident**	**3.40**	**Slightly Evident**	**3.54**	**Evident**	**3.40**	**Slightly Evident**

School Organizational Culture among State Universities and Colleges (Balkanized Culture)

Table 4 presents another aspect of organizational culture used in the study which is balkanized culture. It had ten indicators. In the following items which observe each other's teaching…, display a socially minded individual…, show emotions freely in a group, expect others to be good, make significant decisions…, fix any problem…, and lead forcing collaboration result shows that it was "evident". While slightly evident in work for the school…, and protest and compete for scares resources. However, "highly evident" in prefer jobs that are meaningful and important. Administrators, school heads and instructors had the same result as "evident." Results show that the overall mean was 3.70 which interpreted as "evident."

Moreover, the results are "evident" but has a lower mean which implied that in balkanized culture as Hargreaves (1992) stated, it is made up of separate and sometimes competing groups, jockeying for position and supremacy like loosely connected. and independent. Balkanization can lead to poor communication, inconsistent expectations of students, poor long term monitoring of student growth and conflict over school resources. Balkanization is most apparent in high school due in part to their division into specialized subjects and departments. He concluded that a root cause of balkanization is the fact that some groups are valued more than others (Hargreaves, 1992).

Table 4 School Organizational Culture among State Universities and Colleges (Balkanized Culture)

Aspect of Culture	State Universities and Colleges						Overall Mean	Interpretation
Balkanized Culture	**Administrators**	**Interpretation**	**School Heads**	**Interpretation**	**Instructors**	**Interpretation**		
1. Observe each other's teaching with peers.	3.37	Slightly Evident	3.54	Evident	3.56	Evident	3.49	Evident
2. Work for the school to prevent change rather than support change.	2.89	Slightly Evident	3.21	Slightly Evident	3.06	Slightly Evident	3.05	Slightly Evident
3. Display a socially minded individual like engaging in conversation but do not ask tough questions.	3.11	Slightly Evident	3.79	Evident	3.67	Evident	3.52	Evident
4. Protest and compete for scares resources.	2.83	Slightly Evident	3.08	Slightly Evident	3.07	Slightly Evident	2.99	Slightly Evident
5. Show emotions freely in a group	3.85	Evident	3.96	Evident	4.07	Evident	3.96	Evident
6. Expect others to be good.	3.76	Evident	4.04	Evident	4.02	Evident	3.94	Evident
7. Prefer jobs that are meaningful and important.	4.26	Highly Evident	4.17	Evident	4.37	Highly Evident	4.27	Highly Evident
8. Make significant decisions for people in a group.	4.09	Evident	3.88	Evident	4.08	Evident	4.02	Evident
9. Fix any problem and use the right methods.	4.02	Evident	4.00	Evident	4.00	Evident	4.01	Evident
10. Lead forcing collaboration and controlling situations.	3.50	Evident	3.79	Evident	3.75	Evident	3.68	Evident
Subtotal	**3.57**	**Evident**	**3.75**	**Evident**	**3.77**	**Evident**	**3.70**	**Evident**

School Organizational Culture among State Universities and Colleges (Collaborative Culture)

Results show that collaborative culture was the most evident school organizational culture among the administrators, school heads and instructors. It was 'highly evident" in the indicators 'agree to values and collective vision for the school', 'willing to accept change as part of professional growth',

'create the form of collaboration by establishing structure and expectation for teachers' and 'show openness, trust and respect to people in the school.' The remaining indicators posted "evident." Moreover, administrators and school heads posted "evident" as shown in the result while instructors posted "highly evident." The overall mean as represented by three cultures used in the study was "evident" to all the respondents.

The findings were in relation to the concepts of Peterson & Deal (2010) that much of the early literature on school culture was directed toward change and school improvement; and assumes that understanding culture was a prerequisite to making schools more effective.

Peterson and Deal (2010) added, that effective schools have strong cultures with the following characteristics: shared values and consensus on "how we get things done around here", the principal or dean as a hero or heroine embodies core values; distinctive rituals that embody widely shared beliefs; rituals of acculturation and cultural renewal; significant rituals to celebrate and transform core values; balance between innovation and tradition and between autonomy and control and widespread participation in cultural rituals.

Hargreaves (1992) pointed out that in collaborative culture there is an evident mutual acceptance, trust, openness, sharing support and recognition and teachers are highly competing, working and socializing together. He also added that collaborative cultures are difficult to create and sustain, and rarely found in schools because these types of culture are inconsistent with the traditional context of teacher's work.

Moreover, Osibanjo and Adeniji (2013) suggest that there was close relationship between recruitment process and organizational culture such as belief, value, and practice. This focuses on the impact of organizational culture on human resource practices. Furthermore, culture is unique for every organization according Cameron and Quinn (2010); it's about everything: performance, competitiveness, innovation, satisfaction, retention and resistance to organizational change.

Table 5 School Organizational Culture among State Universities and Colleges (Collaborative Culture)

Aspect of Culture	State Universities and Colleges						Overall Mean	Interpretation
Collaborative Culture	**Administrators**	**Interpretation**	**School Heads**	**Interpretation**	**Instructors**	**Interpretation**		
1. Support specific project / program.	4.09	Evident	4.13	Evident	4.30	Highly Evident	4.07	Evident
2. Establish academic requirements…	4.11	Evident	4.08	Evident	4.37	Highly Evident	4.12	Evident
3. Agree to values and collective vision for the school.	4.20	Evident	4.04	Evident	4.47	Highly Evident	4.25	Highly Evident
4. Willing to accept change as part of professional growth.	4.48	Highly Evident	4.42	Highly Evident	4.50	Highly Evident	4.38	Highly Evident
5. Create the form of collaboration by establishing structure and expectation for teachers.	4.26	Highly Evident	4.17	Evident	4.34	Highly Evident	4.25	Highly Evident
6. Discuss and converse with other teachers or superiors about educational issues	4.02	Evident	3.41	Evident	3.99	Evident	3.72	Evident
7. Maintain harmony in social situations.	4.00	Evident	4.04	Evident	4.41	Highly Evident	4.19	Evident
8. Show openness, trust and respect to people in the school.	4.20	Highly Evident	3.96	Evident	4.41	Highly Evident	4.25	Highly Evident
9. Take care of others before taking care of myself.	3.98	Evident	3.67	Evident	4.02	Evident	3.69	Evident
10. Work and socialize with other teachers and school personnel.	4.02	Evident	4.00	Evident	4.41	Highly Evident	4.19	Evident
Subtotal	**4.13**	Evident	**3.99**	Evident	**4.32**	Highly Evident	**4.15**	Evident
Overall Mean	**3.66**	**Evident**	**3.71**	**Evident**	**3.88**	**Evident**	**3.75**	**Evident**

Significant Difference in the Organizational Culture Being Practiced among SUCs when Grouped According to Administrators, School Heads and Instructors

As presented in Table 6, the organizational culture involved the cultures of individualism, balkanized and collaborative with an overall mean of 4.14 for administrators, 3.97 for school heads and 4.25 for instructors. In the collaborative culture however, the P-value was .003 while the overall result was .045 which was lesser than .05 level of significance therefore, the null hypothesis was rejected. There was significant difference in the collaborative culture which was the most evident organizational culture in State Universities and Colleges; the overall result was also significant.

The result of the study was in relation to the theory of culture presented by Hoy, et al (2013) which was characterized by the shared values of intimacy, trust, cooperation, teamwork and egalitarianism. This theory promotes distinctive culture which has long term employment opportunities. This creates in an employee a sense of security and commitment to the organization; participants become invested in the organization. The process of slower rates of promotion creates more opportunities to broaden experiences and more diverse career paths as employees perform different functions and

occupy different roles. This effectively produces company- specific skills and promotes career development. Thus, theories of organizations are structured and operated to promote the basic values of intimacy, trust, cooperation and egalitarianism (Hoy, et al 2013) which directed to the school organizational culture in particular and the school performance in general.

Culture affects willingness of staff members, students, parents and teachers; administrators provide ample time and opportunities into continuous improvement and refining their craft. Therefore, culture is the key to productivity (Peterson & Deal, 2010). Although the literature on organizational culture and creativity and innovation is not extensive, there have been some high-quality and influential pieces of research by a number of scholars (Olori and Mark, 2013).

According to Beytekin, et al in 2010, organizational culture is a vital element of effective management practices in universities. Lately, researchers were motivated to study on the organizational concept to provide managerial effectiveness in the universities. Strong-culture proponents suggest that the mere presence of a shared system of beliefs, values, and symbols were not sufficient to enhance organizational performance.

Table 6 Significant Difference in the Organizational Culture Being Practiced among SUCs when Grouped According to Three Groups of Respondents

Aspects of Culture	Categories	Mean	H	P-Value	Interpretation
Culture of Individualism	Administrators	**3.27**	**3.57**	**.168**	Not Significant
	School Heads	**3.40**			
	Instructors	**3.54**			
Balkanized Culture	Administrators	**3.57**	**2.74**	**.255**	Not Significant
	School Heads	**3.75**			
	Instructors	**3.77**			
Collaborative Culture	Administrators	**4.13**	**11.54**	**.003**	**Significant**
	School Heads	**3.99**			
	Instructors	**4.32**			
Overall	Administrators	**4.14**	**6.20**	**.045**	**Significant**
	School Heads	**3.97**			
	Instructors	**4.25**			

FINDINGS

The general profile of the respondents of SUCs was mainly composed of 40 years old and below with a frequency of 67 of the population. While respondents with 41 years old and above had a frequency of 124 of the population. There were more administrators, school heads and instructors who were 41 years old and above. In terms of sex, majority or 111 of the respondents were females 80 were males. There were more male administrators but more school heads and instructors were female. In the educational attainment, there were 14 with Bachelor's Degree, 123 with Master's Degree and 54 with Doctorate Degree. There were more administrators and school heads who had Doctorate Degrees while more instructors were Master's Degree holders and there were still school head and instructors who were Bachelor's Degree holders. In terms of the length of service, respondents were characterized by 46 administrators, 24 school heads and 121 instructors for a total of 191. All of the school heads' population belong to a range of 1-10 years of service while majority of the instructors had served within 1-10 years. There were more administrators who served 1-10 years. For the school address, majority of the respondents were taken from SUC A in a frequency of 96 followed by the respondents from SUC B at 58 and SUC C at 37.

The school organizational culture involved three aspects such as culture of individualism, balkanized and collaborative culture; results reveal that collaborative culture was the most evident among the three forms of organizational culture with an overall mean of 4.15 which posted "evident". "Highly evident" in the indicators 'agree to values and collective vision for the school', 'willing to accept change as part of professional growth', 'create the form of collaboration by establishing structure and expectation for teachers' and 'show openness, trust and respect to people in the school.' The remaining indicators posted "evident." Moreover, administrators and school heads posted "evident" as shown in the result while instructors posted "highly evident." The overall mean as represented by three cultures used in the study was "evident" to all the respondents.

CONCLUSIONS

Based on the findings of the study, the researcher has come up with the following conclusions:

1. The respondents of State Universities and Colleges were dominated by older age, almost female, majority with Masters' Degree and were mostly new experienced teachers who had stayed less than ten years in teaching and were taken from SUC A. SUC A had more administrators and instructors as compared to SUC B and SUC C.

2. Generally, SUCs school administrators, school heads and instructors from SUC A, SUC B and SUC C find culture of individualism as "slightly evident" and "evident" in balkanized and collaborative cultures. However, collaborative culture was the most evident school organizational culture as shown in the results. Despite distinctive character-

istics that each SUC had established overtime, the dominating pattern of expected culture that SUC had been encouraging the schools to develop prevailed.
There might be differences in the way they work whether by group or individually, but each one was aware that the SUC thrust was to create harmony rather than disunity and cooperation rather than division.

3. The perceptions of the school administrators, school heads and instructors on school organizational culture differ. The respondents may infer that their school culture was a system of shared orientations that hold them together and give them a distinctive identity.

4. There was significant difference in the collaborative culture when grouped according to administrators, school heads and instructors as well as in the overall result as shown in the study.

RECOMMENDATIONS

In the light of the findings and conclusions of the study, the following recommendations were formulated:

1. State Universities and Colleges should give full support to school administrators, school heads and instructors in facing challenges and giving motivation such as managing, teaching and support staff. Their workloads should be reduced in order to have enough time to attend to important matters related to their jobs, responsibility, and fill the needs of their instructors especially the male instructors who had served more than 10 years in service. Master's degree holders should be motivated to pursue their Doctorate degree. School administrators in State Universities and Colleges should be part in the planning process as well as in the implementation and the improvement of the school.

2. Organizational culture must be strengthened and trainings must be introduced. Open communication should be encouraged among school administrators and school heads as well as instructors. One step is to hold regular meetings of instructors to create bonding and collegial partnerships. The type of meetings may be varied to create sense of newness and variety, thus enhancing the organizational culture of the school.

3. Cyclical feedback from the instructors in the school where the school administrators and school heads are stationed should be encouraged. Pre and post observation conferences should be utilized as avenue for mutual feed-backing and improvement of school organizational culture. Reinforce shared culture through team motivation and rewards.

4. Revisit twice a year the school's vision, mission, goals and objectives with the stakeholders both for refinement and consultation purposes.

5. Further studies were recommended for future researchers in a wide range of locale and respondents to affirm the results and convey more accurate findings to develop organizational culture.

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FIVE YEAR STUDY OF THE ALTERNATIVE LEARNING SYSTEM OF DISTRICT 1 CLAVERIA, MISAMIS ORIENTAL

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ABSTRACT

When the Alternative Learning System (ALS) opens more educational opportunities for less fortunate Filipino citizens, it is inevitable that various issues and concerns appear. Hence, this study is focused on the five-year assessment of the ALS of District I Claveria, Misamis Oriental. The researcher used the mixed method by utilizing the external secondary data and interview in another phase of the study. Results showed that majority of the teachers and learners were young, single, and lived within 6 -10 kilometers (teachers), 1-5 kilometers (learners) respectively. Though uncorroborated, ALS Projects, Activities, and Programs were implemented. For five years, there was a gradual increase in Accreditation and Equivalency (A&E) takers and passers, National Certificate (NC) qualifiers, and employment. There were challenges such as summing up the curriculum, meager ratio of the module to learner, diversity and age difference of the learners. A well-defined integration of skills training to equate with the K to 12 program, sufficient provision of learning materials like modules, and speedy implementation of some DepEd Orders pertaining to ALS implementers' benefits and opportunities (DO 64, s.2011) were the proposed policy recommendations in managing ALS to align it with the DepEd Rationalization Program. Thus, to make the curriculum attractive to the learners, it should be reevaluated, restructured, and monitored. With this, a new package of the ALS can be correctly figured out by the learners making them a productive citizen in this country .

Keywords: Alternative Learning System, Curriculum, Implementers, Learners, Passers

INTRODUCTION

The Filipino families have valued on having their members earn an education (Bondoc, 2017 & Kumar, 2016). Education is thought to be a light at the end of the tunnel. Many believe that earning education may improve their way of living; thus, uplifting their economic standing in the community. Strauss (2013) quoted Mandela who said education is the most powerful weapon which one can use to change the world. Education extends its power not only for the development of skills and economic success but also contributes to nation-building and reconciliation (Mandela, 2003).

However, the Philippine Statistics Authority (PSA) in 2013 released their survey results about Out-of-School Children and Youth (OSCY) in the Philippines. The Autonomous Region of Muslim Mindanao (ARMM) comprised 14.4 percent, the highest across regions. Six regions namely South Cotabato, Cotabato, Sultan Kudarat, Sarangani and General Santos City (SOCCSKSARGEN), Davao, Central Luzon, Zamboanga Peninsula, Caraga, and Mindoro, Marinduque, Romblon, and Palawan (MIMAROPA) have a ratio of 11.2 to 12.3 percent of OSCY. From the results, a high percentage of children and youth, especially in Mindanao, stay out of school. The World Bank (2003) emphasized that youth do not wish to become social burdens; in many cases, some of them are just victims of particular circumstances.

Consequently, the Alternative Learning System through the Bureau of Alternative Learning System (BALS), which is under the Department of Education (DepEd) opens more educational opportunities for less fortunate Filipino citizens. The ALS provides opportunities to OSCY elementary and secondary drop-outs, industry-based workers, homemakers, maids, factory workers, drivers, members of cultural minorities, indigenous people, and disabled/physically challenged.

The government's initiative does create not only more literate people but also a productive workforce. By making education accessible, and raising the level of literacy in the remote and underserved communities are options for a better country (Albert et al. 2012). Kumar (2016) stated that standard of living of its citizens in a particular country is dependent on the level of education they receive and acquire.

Thus, this study was conducted in District 1 of Claveria, Misamis Oriental. The district is not spared from challenges and problems in effecting the ALS. The mobile teachers carry on to serve in spite of the inadequate funds to sustain the activities. The ALS graduates after passing the A&E can opt to proceed to tertiary education. These individuals without formal schooling will now join with those who have undergone the usual school-based system. As a result, this scenario challenges to several college instructors in providing a meaningful learning experience to such a diverse group. Tindowen et al. (2017) emphasized that today's challenges in education are the promotion of 21st-

century skills among students.

It is in this proposition that the researcher feels the need to study and extract the different significant standpoints of the Alternative Learning System in District 1 Claveria, Misamis Oriental.

STATEMENT OF THE PROBLEM

This study aimed to look profoundly on the different variables in the conduct of ALS in District 1of Claveria, Misamis Oriental. Below were the questions studied:

1. What is the profile of the ALS implementers, and learners considering age, status and distance to Community Learning Centers (CLC)?
2. What are the Programs, Activities, and Projects (PAPs) implemented in the district for the past five years?
3. How did the ALS learners perform in the implemented PAPs regarding A&E, National Certificate (NC) qualifiers and employment?
4. What are the challenges encountered by the ALS facilitators and learners in implementing ALS considering the materials, curriculum, and andragogy?
5. What policy recommendation can be proposed in managing ALS to align it with the rationalization program of the DepEd?

METHODOLOGY

The researcher used the mixed method in which quantitative-qualitative techniques are merged into one study. With this approach, the utilization of the external secondary data in one phase of the study serves as the quantitative technique while the conduct of the interview in another period of the research functions as the qualitative technique.

Since this study used an interview to collect additional data, three ALS involved individuals were interviewed. These were the mobile teacher, learner, and the ALS graduate. The male teacher was single. The learner graduated his elementary but parents did not send him to secondary. The ALS graduate stopped schooling for she got pregnant but realized she had to work; so, she pursued the ALS offering and successfully graduated.

During the data gathering, schedules were arranged for the interview. This method was done to supplement the collected data and evaluate the status of the ALS in Claveria as viewed by the teacher and the learners. Unstructured interviews were held to elicit their insights, ideas, and experiences about a specific subject of the study. Frequency counts and percentages were used for numerical data.

REVIEW OF LITERATURE AND STUDIES

The ALS curriculum covers five interrelated learning strands equivalent to subjects in the formal school system: communication skills, problem-solving and critical thinking, sustainable use of resources/ productivity, and development of self and a sense of community. The duration is ten months of schooling or 800 hours in the classroom.

The school-based is conducted on school campuses while the community-based is held in the community's halls or private places. Delivery of instruction is provided by government-paid instructors or by private non-government organizations.

In the study of Fernandez (2013), he found out that no significant relationship exists between teachers' competence, gender, and educational background while teachers' years of teaching experience in ALS, salary and performance rating are significantly related. Learners' gender and distance of residence from the community learning center had a significant relationship to their performance.

Also, Tindowen et al. (2017) conducted a study to determine the 21st-century skills of 150 ALS learners across five schools in Northern Philippines. Findings showed that ALS acquisition of 21st-century skills was affected by the learners' sex, age, and employment status. The study further revealed that acquisition of 21st-century skills was low.

When the EAMEO INNOTECH (2007) conducted research, the results showed that for the learners and parents of the different Muslim communities, the ALS programs though in place and supported were vague to them. In the roundtable discussion conducted, Muslim learners and parents indicated that alternative learning systems were not well known to them. Alternative learning classes are organized by non-government organizations but operated in only a limited number of municipalities in Mindanao. Learners only hear about the program by word of mouth. The learners also lamented the apparent lack of educational resources, such as textbooks and modules. They also lacked qualified instructional managers to promote active learning. Mercado (2015) who studied the ALS in Tanauan implied that for improvements of ALS some problems should be solved or if not be addressed immediately for the sake of the students.

FINDINGS

The profile of the ALS implementers and learners in Claveria District I concerning age, status, and distance from CLC

Table 1 presents the background variables of the implementers. Data show that 80% belongs to the age range of 20-29 years. This result implies that ALS implementers in District 1 generally pertain to the younger generation of teachers. Regarding the status, 80% is single.

Table 1. Profile of the ALS implementers

	Range	Mobile Teachers (n=5)			
		M	%	F	%
Age	20-29	1	20%	3	60%
	30-39				
	40-49	1	20%		
	50-59				
Status	Single	1	20%	3	60%
	Married	1	20%		
Distance from CLC	1-5 km	1	20%		
	6-10 km			3	60%
	11-15 km	1	20%		

When asked about why there were single mobile teachers, respondent said that per observation, unmarried teachers generally do not have as many complications regarding responding to the demands of the work compared to married ones. Valeza et al. (2017) said that single individuals are more likely to pursue education and teaching as a profession. They further stated that unattached mobile teachers are common due to personal immersion needed for the job.

As to the distance, 60% of the implementers lives within 6-10 kilometers of the CLC. The result denotes that the majority live far from the CLC. Quejada & Orale (2018) said that a teacher who lives where the school is located is the most ideal.

Table 2 reveals that of the ALS learners, 38% concentrated around the 20-24 age range; however, the result also shows that most of the males 43.2% are within this range while most of the females' age range is 30 years and above. This result indicates that age cannot stop women from pursuing education. Compared to males, females are more emboldened to continue and complete their studies to help their relatives can be the reason why (Valeza, NK et al. 2017).

Table 2. Profile of the ALS learners

Profile of ALS Learners	Range	Gender				Total N=211	%
		Male n=104	%	Female n=107	%		
Age	14 below	0		0		0	
	15-19	10	9.6	3	2.8	13	6
	20-24	45	43.2	35	32.7	80	38
	25-29	34	32.7	25	23.4	59	28
	30 above	15	14.5	44	41.1	59	28
Status	Single	94	90.4	68	63.5	162	76.78
	Married	10	9.6	38	35.5	48	22.75
	Widow/er	0		1	1	1	.47
Distance from CLC	1-5 km	74	71.1	51	47.7	125	59.24
	6-10 km	6	5.8	20	18.7	26	12.32
	11-15 km	24	23.1	36	33.6	60	28.44
	16-20 km						

A vast majority 76.78% of the respondents are single while 22.75% of the respondents are married. Furthermore, the table discloses that women constituted the most percentage of this married group. Upon questioning the ALS mobile teacher, he said that most of the female learners' reason for dropping out is poverty, and followed by early marriage. According to Mercado (2015), female students stopped because their parents asked them to give way to either their older or male siblings. PSA (2015) stated that in all regions the proportions of OSCY was higher among females than the males.

More than half 59.24% of the learners lives within the 1-5 kilometer distance from the CLC. The implication is that most ALS learners don't have the difficulty because the majority stay within the distance to the CLC. However, more than ¼ of the learners are very far from the CLC, as they have to travel 11-15 kilometers. The mobile teacher considers this as a factor which affects the attendance of learners. Railsback (2004) stated that though many have understood the importance of attendance, there are no effective strategies crafted to keep learners in schools. Gallardo (2010) as quoted by Tindowen et al. (2017) stated that school environment strongly affects the way learner learns. They said further that community and schools must collaborate in enriching not just learner's intellectual capacity but also their social skills.

The ALS Programs, Activities, and Projects (PAPs) implemented for the past five years

From 2009 to 2013, ALS achieved the A and E for both Elementary and Secondary levels. In 2012, the NC II in Welding and NC II in Pipe Fitting was implemented in 2013. ALS Lingap sa Kalikasan, which was a joint effort of ALS and different government agencies, also took place in 2012.

The NC II in welding was realized through with the cooperation of Technical Education and Skills Development Authority (TESDA), Local Government Unit (LGU), and Del Monte. Trainees were given a 20-day intensive training and were

assessed by TESDA after the said duration. Those who passed were given NC II diplomas. A similar scheme was adopted for the Pipe Fitting course.

Table 3. ALS Programs, Activities and Projects (PAPs) implemented for the past five years

2009	2010	2011	2012	2013
A&E Elem & Second-ary	A&E Elem & Second-ary	A&E Elem & Second-ary	A&E Elem & Second-ary	A&E Elem & Second-ary
			Welding (NC II)	Welding (NC II)
				Pipe fitting (NC II)
			Lingap sa Kalikasan	

The performance of ALS learners in A&E, NC qualifiers and employment for the last five years

There was a gradual increase in A&E takers from 35 in 2009 to 56 takers in 2013 as shown in table 4. Continuous growth in A&E passers from 11 in 2009 to 36 in 2013 is also noticed.

Table 4. Five-year A&E Performance of ALS learners

A&E	2009		2010		2011		2012		2013	
	M	F	M	F	M	F	M	F	M	F
Tak-ers	10	25	15	28	20	32	26	36	20	36
Pass-ers	3	8	5	9	7	15	12	19	15	21

However, upon asking why there were only very few takers on the early part of the five years included in the study, the researcher was told that only selected learners were given the A&E test. Del Rosario (2017) noted that education that does not lead to better lives is no education at all.

Shown in Table 5 is the data where welding was first offered. In 2012, only five males trained, and another 11 males in 2013 joined and qualified for NC II for both welding and pipe fitting.

Table 5. ALS NC qualifiers for the past five years

NC Qual ifiers	2009		2010		2011		2012		2013	
	M	F	M	F	M	F	M	F	M	F
							5	0	11	0

This result discloses information of no activity/ program that directly addresses the needs of female learners.

The researcher found no record of employment from 2009 to 2011 but was able to acquire employment data from 2012 and 2013. In 2012, 70 graduates gained employment in various fields. A total of 86 graduates in 2013 was able to find jobs as shown in Table 6. During the data gathering, the mobile teacher commented that before 2011, ALS graduates were combined with the other district. It was only when there was a municipal-wide ALS graduation in 2011 that government agencies learned about the existence of ALS in Claveria. This situation indicates that the ALS in Claveria is not promptly disseminated to the LGU, agencies or even to the community.

Table 6. ALS Employment for the past five years

Em-ploy ment	2009		2010		2011		2012		2013	
	M	F	M	F	M	F	M	F	M	F
							27	43	30	56

The Challenges and Difficulties encountered by the ALS facilitators

The meager ratio of the module to learner was very inconvenient especially in the facilitation of learning. Mobile teachers have no choice but to innovate in creating their learning materials. This result is similar to the finding of Quejada et al. (2018) study where teacher-participants learned to become more resourceful, make use of what is available and adapt to the situation. They further said that teachers have even slashed a budget from their salaries for classroom activities in their desire to help their students.

Table 7. Challenges and difficulties encountered

Challenges and Difficulties		
Curriculum	**Materials**	**Andragogy**
Summing up the entire secondary curriculum into ten months (800 hours) of the ALS curriculum poses a problem to facilitators in the delivery of the program.	The volume of the mod-ule is not enough.	The diversity of learners is extreme. Learners range from 15 years old and above (from youth to young adult to adult and old age). Facilitating learners older than the teacher is chal-lenging.

Policy recommendations are proposed in managing ALS to align it with the Rationalization Program of the DepEd

Table 8 presents the three proposed ALS policy recommendations. Among these include (a) well-defined integration of skills training, (b) sufficient provision of learning materials, (c) speedy implementation of some DepEd Orders.

Table 8. Policy recommendation to align ALS with the Rationalization Program of the DepEd

Policy Recommendations
1. Well-defined integration of skills training to equate with the K to 12 program
2. Sufficient provision of learning materials (modules, etc.)
3. Speedy implementation of some DepEd Order about ALS im-plementers benefits and opportunities (DO 64, s.2011)

The mobile teacher admitted to attending training and seminars concerning these issues. There is a constant need for more materials for the learners so that they could grasp ideas and concepts faster. The welfare of the ALS implementers is also of importance, as they were the ones who facilitate learning. The MT said that life would be more comfortable for them if there is a strict implementation of the orders that protect their welfare and provide opportunities. He particularly cited DepEd Order wherein there were some inconsistencies in interpretation and delays in the immediate enforcement of such orders and consequently affected the mobile teachers.

CONCLUSIONS

Based on the findings gathered, the following conclusions are made:

1. Most of the mobile teachers and learners in the study-locale were young, single but teachers lived far from the CLC.
2. The challenges remain in sustaining the ALS programs, activities, and projects as the people in the community poorly responded.
3. The performance of ALS learners in A&E, NC qualifiers and employment for the last five years were not impressive. Hence, considerable modifications must be done.
4. Although it is expanding its reach to the OSCY, based on the result, it did not entirely provide access to education due to various reasons such as the inadequacy of materials, and inefficient support from the LGU. There is indeed a call for the financial assistance for the resources and facilities to motivate or boost learners' completion rating.
5. The ALS curriculum needs revision so that training is not only for the males but also for the females. The curriculum to be attractive to the learners should be reevaluated, restructured, and monitored. With this, a new package of the ALS can be inviting to the learners making them a productive citizen in this country.

RECOMMENDATIONS

Based on the above findings and conclusions, the following recommendations are specified:

1. The study suggests that ALS of District 1 of Claveria, Misamis Oriental shall provide more skills training to both males and females to alleviate learners' better future. This skill's training must also be periodically assessed so that potential training partnerships with LGU, local industries, and other significant government agencies like the Department of Labor and Employment and TESDA will be probable.
2. Also, the researcher recommends further research on this subject with a more extended period to view gaps, challenges, strengths, and weaknesses of the curriculum. A broader scope is suggested regarding location, respondents, teachers, and curriculum. The use of other data gathering methods such as survey questionnaires, FGD, etc. is also recommended.

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EXTENT OF IMPLEMENTATION OF THE ECOLOGICAL SOLID WASTE MANAGEMENT (RA 9003) IN BANGAR, LA UNION: BASIS FOR STRATEGIC DEVELOPMENT PLAN

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ABSTRACT

This study aimed to determine the level of awareness in Ecological Solid Waste Management and the extent of implementation of the Republic Act 9003 in Bangar Public Market. The descriptive-correlational method was employed in the study through the use of questionnaires and supported by interviews and observations. Weighted and over all mean, ranking and Pearson product moment of correlation were used in the analysis of data. Findings were: 1)The market vendors and market goers in the municipality of Bangar are very aware about the Republic Act on Ecological Solid waste management, 2)The Republic Act on Ecological Solid Waste Management is highly implemented by the market vendors and market goers, 3)There is a significant relationship between the level of awareness and extent of implementation of the Solid Waste Management program of the market goers and market vendors, 4) A solid waste management planning or waste reduction program was formulated which can be adopted by the municipality of Bangar, La Union to minimize solid waste especially on the use of plastic bags. It is recommended that the LGU of Bangar will adopt the proposed solid waste planning program on waste reduction and conduct seminars-workshop on how solid waste are to be recycled and generate income out of recycled materials and tap linkages for the market of recycled products that pass the environmental compliance and quality standards.

Keywords: Solid waste management, market vendors, market goers, recycle, reduction

INTRODUCTION

This day and age, overall population rate is increasing, and so with our wastes. More goods are being produced and more natural resources are being used, and many are wasted when we throw things away. Here are some of the most astonishing recycling facts; some are very alarming, and all of them should make us realize that we need to be more aware of what we are throwing away. We need to preserve the planet and its natural resources for future generations.

Solid waste management whose importance is directly related to public health, resource management and utilization, and maintaining a clean environment, is necessary in ensuring human development. Solid waste management benefits the population in many ways.

Environmental and Waste Management Division is mandated to the design & implementation on effective Environmental Waste and Management System including Solid Waste Collection and Disposal, to conduct regular monitoring and inspection of different industrial and business establishment, design pollution and waste management awareness program and design, improve and develop existing land fill area of the City Government. Section 12 of RA 9003 requires each city or municipality to form a City or Municipal Waste Management Board that shall prepare, submit and implement a plan for the safe and sanitary management of solid waste generated in areas under its geographic and political coverage (RA 9003 and its Implementing Rules and Regulations).

In addition, Barangays are also mandated to the 100% collection of biodegradable and reusable wastes, establish Materials Recovery Facility whether as a sole barangay or cluster of barangays and to conduct information and education campaigns within their jurisdiction (RA 9003). RA 9003 calls for the institutionalization of a national program that will manage the control, transfer, transport, processing and disposal of solid waste in the country.

According to the National Solid Waste Management Commission, what the barangay needs to do is actually covered by what is called the "5 Es"- Engineering, Education, Enforcement, Environment organization and Equity. The 5 Es are components of Ecological Solid Waste Management. Engineering covers setting up the support systems, such as the 3 Rs (Reduce, Reuse, and Recycle). This also includes the necessary facilities such as bins, weighing scales, MRFs, bags and three-sectioned receptacles including the collection system. Education covers information dissemination, education and promotion of the program. This includes printed materials such as brochures, flyers, posters, newsletters as well as seminars. Enforcement covers the policy support and guidelines, monitoring, compliance, sanction, rewards and incentives. Environment organization covers the program's organization, administration and delegation of roles and responsibilities and equity which covers funds sourcing and generating revenues.

In the public market of Bangar, La Union, different kinds of piled garbage are being collected every scheduled date of garbage collection. Garbage collectors' dilemma on this is most of the collected garbage are non-biodegrable such as plastic bags, Styrofoam, bottles and others. Given this opportunity and concern for mother earth, the researcher wanted to assess how at present the solid waste management program is being implemented by the local government, the public participation and what can be done to improve public participation in the implementation of the solid waste management program in the public market of Bangar, La Union.

STATEMENT OF THE PROBLEM

This study aimed to determine the level of awareness in Ecological Solid Waste Management and the extent of implementation of the Republic Act 9003 in Bangar Public Market.

Specifically, it sought answers to the following questions:

1. What is the level of awareness of the market vendors and market goers on the Ecological Solid Waste Management program?
2. What is the extent of implementation of the Solid Waste Management Program of the Municipality of Bangar, La Union?
3. Is there a significant relationship between the market vendors and market goers' level of awareness and the extent of implementation of the Solid Waste Management Program?
4. What solid waste reduction program can be proposed to reduce waste in the municipality of Bangar?

METHODOLOGY

The study used a descriptive-correlational method of research to determine the significant relationship between the level of awareness of the market vendors and market goers and the extent of implementation of RA 9003 in Bangar Public Market. The study used a survey approach for securing opinions and trends through the use of questionnaires and interviews.

The research study was conducted at the Bangar Public Market, La Union last February 12, 2018. It involved 78 market vendors and 78 market goers as a quota for the number of samples. The market vendors were taken at random in the dry good and wet sections of the public market. Further that, purposive and incidental sampling were the techniques in selecting the respondents . A questionnaire checklist adopted from that of Lopez (2014) and from the many readings from the related studies specifically on solid waste management was used to gather the needed data. The validity of the used questionnaires was assumed since these were been used by prior researchers.

To categorize the data, the following ranges were used:

Level of Awareness		
Point Value	**Range**	**Descriptive Equivalent Rating**
5	4.20 - 5.00	Very Highly Aware
4	3.40 - 4.19	Very Aware
3	2.60 - 3.39	Moderately Aware
2	1.80 - 2.59	Slightly Aware
1	1.00 - 1.79	Not Aware

Extent of Implementation of RA 9003		
Point Value	**Range**	**Descriptive Equivalent Rating**
5	4.20-5.00	Very Highly Implemented
4	3.40-4.19	Highly Implemented
3	2.60-3.39	Moderately Implemented
2	1.80-2.59	Slightly Implemented
1	1.00-1.79	Poorly Implemented

The data gathered were tabulated, computed and analyzed. Weighted mean and ranking were used for treating sub-problem 1 and 2. For sub-problem 3, the Pearson Product Moment Correlation using SPSS software was used to determine the significant relationship between the level of awareness and extent of implementation of Republic Act 9003 of the market goers and market vendors.

REVIEW OF LITERATURE

Solid waste refers to wastes from households, municipal services, construction debris and the agricultural sector. Waste management is the proper transfer, collection and management of waste. This also includes non-hazardous, non-liquid wastes from institutions and industries, (RA no. 9003). According to the world bank (2001), its generation is greatly affected by country's development. Generally, the more economically prosperous a country is, the more waste is generated.

The Municipal Solid Waste in the country contain around 50 percent organic matters and 30 percent recyclable materials on an average, leading to a potential of recycling 80 percent of the total waste (Jereme, 2015).

Over the last thirty years, however, the focus of waste management has shifted to reducing the impact of waste on the environment and recovering resources from waste materials. It involves the collection, transport, processing and/or disposal of waste materials. Waste management deals with the whole cycle of generation of wastes, their storage, collection and transport, and their eventual treat-

ment and disposal (furto, et al, 2013)

Telecas (2009) as cited by Lopez (2014) found out in her investigation that the environmental awareness of the ISPSC laboratory high school students along land, water and air pollution was described as "Much Aware". On the environmental practices on land, water and air of the respondents, there was an overall mean of 3.47 described as "Sometimes Practiced".

Tiwari, V.A., et al (2014) concluded in their study that the collected data shows that the maximum proportion of refuse caused by food and garden wastes, proportion of the reuse caused by food and garden wastes, second highest was paper and the third highest was inert material. Percentage of Plastic carry bags was higher, where glass, ceramic and metals were nearly equal with each other. Provision of litter bins at public places shall be made and there will compulsory segregation at all the sources.

FINDINGS

The data gathered from the research instruments based on the objectives of the study as incorporated in the statement of the problem are hereby discussed.

Level of Awareness of the market vendors regarding Solid Waste Management

Table 1. Level of Awareness of the market vendors regarding RA 9003

Indicators	Mean	Descriptive Equivalent Rating	Rank
1. I am aware about the Republic Act 9003 or the Ecological Solid Waste Management Act of 2000.	3.78	VA	6
2. I am aware that the Local Government Unit is responsible in the implementation of the Republic Act 9003.	3.96	VA	5
3. I am aware that the municipality has a garbage truck that collects our waste.	4.45	VHA	1
4. I am aware of the segregation.	4.44	VHA	2
5. I am aware about the garbage collection.	4.36	VHA	3
6. We are complying with the act.	4.29	VHA	4
Over-all mean	**4.21**	**VHA**	

Legend:
VHA - Very Highly Aware
VA - Very Aware

As shown in table 1, almost all indicators are described as very highly aware except indicators 1 and 2 with a descriptive equivalent rating as "very aware". The level of awareness of the market vendors has an overall mean equal to 4.21 with a descriptive equivalent rating of "very highly aware". The finding implies that the market vendors of the municipality of Bangar are very highly aware of the Ecological Solid Waste Management Act of 2000 (RA 9003) of the government. Observation and interviews done by the researcher support the findings of the study since the market vendors are preparing for their garbage on the scheduled day when the municipal truck is coming to collect garbage. The indicator "I am aware that Local Government Unit is responsible in the implementation of the Republic Act 9003" has a mean of 3.96 described as very aware. This signifies that not all the market vendors in Bangar Public Market are aware that the LGU is the one implementing the solid waste management program. Possible reason for the unawareness of some market vendors could be lack of seminars or lack of information about solid waste management as a republic act which is being implemented entire the country and the LGU's shall be primarily responsible for the implementation and enforcement of the provisions of this Act within their respective jurisdiction. This is confirmed in the indicator which states that "I am aware about the republic 9003 or the ecological solid waste management act of 2000" rank as last. Market vendors are very highly aware about waste segregation as a practice implemented by the public administrators but not as law which every Filipino citizen should abide.

Level of Awareness of the market goers on the Solid Waste Management program

Table 2 depicts that market goers of the municipality of Bangar are very aware of the Ecological Solid Waste Management act of 2000 as indicated by the overall mean of 3.90 described as "very aware". All indicators showed that market goers are informed about the solid waste management program of Bangar, La Union.

As revealed by table 2, market goers are very aware of the segregation of solid waste, that there is a garbage truck scheduled to collect the segregated waste and the local government of Bangar is the one responsible in the implementation of the solid waste management program. It is to be noted that not all market goers are residence of Bangar, La Union. Many are coming from the nearby municipalities such as Tagudin, Santa Cruz, and Balaoan. This could be a reason why there are market goers who are unaware about the Solid Waste Management program of the municipality or simply they do not care because they are not from the place.

Table 2. Level of Awareness of the market goers regarding

Indicators	Mean	Descriptive Equivalent Rating	Rank
1. I am aware about the Republic Act 9003 or the Ecological Solid Waste Management Act of 2000.	3.74	VA	6
2. I am aware that the Local Government Unit is responsible in the implementation of the Republic Act 9003.	3.95	VA	2

Indicators	Mean	Descriptive Equivalent Rating	Rank
3. I am aware that the municipality has a garbage truck that collects our waste.	3.81	VA	5
4. I am aware of the segregation.	4.06	VA	1
5. I am aware about the garbage collection.	3.94	VA	3
6. We are complying with the act.	3.90	VA	4
Over-all mean	3.90	VA	

Legend: VA – Very Aware

Extent of Implementation of the Solid Waste Management of the market goers

It can be gleaned from table 3 that the extent of implementation of RA 9003 of the market goers is highly implemented as evidenced by a 3.92 overall mean.

"I am disposing my waste properly" ranked number 1 is very highly implemented with a mean of 4.47. The indicator "I am attending seminars about proper waste disposal" ranked last with a mean of 2.95 described as "moderately implemented". Based from the observations and interviews of the researchers, the local government unit of Bangar seldom conducts seminars on the implementation of solid waste management because this is already disseminated per barangay through community meetings conducted by the barangay officials. The findings imply that in the municipality of Bangar, solid waste management is highly implemented.

Observation and interviews done by the researcher support the present findings since the school integrated in their curriculum the proper segration, collection and disposal of biodegradable and non-biodegradable wastes into marked containers. This was highly implemented in the school levels and some barangays. However, some households do not segregate wastes properly but segregate waste according to what can be sold out.

Table 3. Extent of Implementation of RA 9003 of the market goers.

Indicators	**Mean**	**Descriptive Equivalent Rating**	**Rank**
1. I am practicing the RA 9003 or the Ecological Solid Waste Management Act of 2000.	4.15	HI	4
2. I am complying with the municipality ordinance about waste.	4.37	VHI	2
3. I am segregating my waste.	4.04	HI	5
4. I am disposing my waste properly.	4.47	VHI	1
5. I am recycling my waste.	3.78	HI	7
6. I am reusing old stuffs.	3.56	HI	9
7. I am reducing my waste.	3.91	HI	6
8. I am complying with the schedule of garbage collection.	4.18	HI	3
9. I am attending seminars about proper waste disposal.	2.95	MI	10
10. I share my knowledge about the proper waste disposal.	3.73	HI	8
Over-all mean	3.92	HI	

Legend:
VHI - Very Highly Implemented
HI - Highly implemented
MI - Moderately Implemented

Extent of Implementation of Solid Waste Management Program of market vendors

As shown in table 4, the extent of implementation of the solid waste management of the market vendors is described as "highly implemented" with a mean of 3.80. This implies that market vendors of the municipality of Bangar are implementing the solid waste management act of 2000. The indicator "I am disposing my waste properly" with a mean of 4.45 describe as "very highly implemented" is rank number 1. The findings imply that market vendors are properly disposing their waste.

It can be gleaned from the table that "I am segregating my waste" described as "highly implemented" has a mean of 4.04. Crispino (2004) as cited by Lopez (2014) revealed that once one provides the proper receptacle for the various components of waste, one could be able to increase the retrievability of all useful materials minus contamination. The segregation of waste was evidently observed in the public market as conatainers marked with biodegradable and non-biodegradable were placed in every corner. The secret is to encourage the use of several receptacles at the households where the pre-segregated materials are generated. Retrieval and collection of garbage is made efficient and hygienic if all dry non-biodegradable and organic wastes are properly contained in separate containers. Further that there is a systematic and well-organized collection and disposal of garbage as reflected by the indicator "I am complying with the schedule of garbage collection with a mean of 3.73 described as "highly implemented"

As to waste recycling, it was highly implemented as evidenced by the mean of 3.78. As per observation and interview, the market vendors recycled plastic bags to flowers pots for sale. They also make handicrafts as curtains, mats, handbags, etc. out of waste materials. The LGU has also linkages that can teach townfolks to make wastes into resusable materials.

Amiloa (2017) mentioned that reusing products when possible is even better than recycling because the item does not need to be processed before it can be used again.

Table 4. Extent of Implementation of RA 9003 of the market vendors.

Indicators	**Mean**	**Descriptive Equivalent Rating**	**Rank**
1. I am practicing the RA 9003 or the Ecological Solid Waste Management Act of 2000.	3.92	HI	4

Indicators	Mean	Descriptive Equivalent Rating	Rank
2. I am complying with the municipality ordinance about waste.	4.03	HI	3
3. I am segregating my waste.	4.14	HI	2
4. I am disposing my waste properly.	4.45	VHI	1
5. I am recycling my waste.	3.74	HI	5
6. I am reusing old stuffs.	3.59	HI	8
7. I am reducing my waste.	3.60	HI	7
8. I am complying with the schedule of garbage collection.	3.73	HI	6
9. I am attending seminars about proper waste disposal.	2.71	MI	10
10. I share my knowledge about the proper waste disposal.	3.24	HI	9
Over-all mean	3.80	HI	

Legend:
VHI - Very Highly Implemented
HI - Highly Implemented
MI - Moderately Implemented

Correlation Between level of Awareness and extent of implementation of market vendors and market goers

As shown in table 5, level of awareness of both market vendors and market goers is significantly related to extent of implementation at 5% level of significance which leads to the disconfirmation of the null hypothesis. This means that the awareness of the respondents regarding Solid waste management helped in the implementation of Republic Act 9003 in the municipality of Bangar. This implies that the LGU of Bangar is educating the community as to the significance of disposing and segregating waste properly. If the market vendors and market goers are not very highly aware of the Republic Act 9003, its extent of implementation could be poorly implemented. Further, the higher the level of awareness of the respondents the better the implementation of the Solid Waste Management Program in Bangar. The very highly awareness of the respondents will contribute to the good implementation of the program. The public market and even the whole community of Bangar will have a healthy environment since there will be no more trash anywhere in the vicinity. Flies will be inexistent due to clean and sanitary environment.

Table 5. Correlation between level of awareness and extent of implementation of RA 9003 of the market goers and market vendors.

Respondents	r	Decision	Interpretation
A. Market Vendors	.78*	Reject Ho	Significant
B. Market Goers	.414*	Reject Ho	Significant

Legend:
* - correlation is significant at .05 level of significance
Ho - Null Hypothesis

BANGAR SOLID WASTE REDUCTION PROGRAM STRATEGIC DEVELOPMENT PLAN

Rationale

The study investigates the level of awareness on the ecological solid waste management and extent of implementation of the RA 9003 in municipality of Bangar, La Union. Based on the data gathered from the study, there is a need of a strategic development with the aim to help enhance the existing solid waste management program of the municipality showing varied strategies and activities for a sustained and effective implementation of a solid waste management.

Objectives:

To strengthen public information within the municipality on the reduction of solid waste.

To legislate policies on the banning of plastics bags.

To adopt Alternative Technologies in diverting solid waste.

The proposed strategic development plan for the municipality of Bangar, La Union is anchored on Rule XXI (Research and Public Information), Rule XII (Implementing a Recycling Program) and Rule XXII (Access to Records) of the Implementing Rules and Regulations (IRR) of the Republic Act 9003.

Indicators	Objectives	Strategies	Responsible Person/s	Expected Output	Budget Requirement
Education on Waste Reduction	To heighten the Level of Awareness of the community on the importance of reducing, recycling and re - using of waste.	-Conduct of trainings and demos in the processing of reducing, recycling and re-using of waste per barangay. - Hold workshops on the processing of recyclable materials like candy wrappers turning to a flower decor and the like.	MENRO/ MSWM Officers and Barangay officials that handles SWM MENRO/ MSWM Officers, Barangay officials that handles SWM and trainers and experts	-Increased awareness and knowledge on waste reduction -Informed citizens on how to recycle waste materials -Personal and economic growth as they can sell their outputs -Reduced volume of plastics waste.	LGU Budgetary Allocation

Indicators	Objectives	Strategies	Responsible Person/s	Expected Output	Budget Requirement
Legislation of PLASTIC BAG BANS	To train the market goers and market vendors to use biodegradable bags/eco-bags or paper bags when purchasing their products	-Dissemination on the banning of plastic bags when purchasing as a municipal ordinance. -Information and education campaign on the use of biodegradable bags/eco-bags or paper bags through distribution of pamphlets, using social medias and barangay assemblies.	MENRO/ MSWM Officers, Barangay officials that handles SWM, citizens MENRO/ MSWM Officers, Barangay officials that handles SWM, citizens	-Informed citizens on the PLASTIC BAG BANS municipal ordinance. -Reduced volume of plastics waste.	LGU Budgetary Allocation
Use of Alternative Technology	To provide methodology in diverting solid waste into a by products such as plastics turned into bricks or styrofoams into monoblocks.	-Education about alternative technology -Conduct of trainings and demos on the process of diverting waste into a byproduct. -Benchmarking to LGUs/ NGOs with well established Alternative Technology.	MENRO/ MSWM Officers and staff that handles Alternative Technology	-Reduced volume of solid waste in the waste disposal facility. -Promotion of the use of Alternative Technology in all LGUs of Region 1 -cleaner and greener municipality	LGU Budgetary Allocation

CONCLUSIONS

Based on the result of the study, the researchers conclude that: 1)The market vendors and market goers in the municipality of Bangar are well informed and educated about the Republic Act on Ecological Solid Waste Management, 2)The Republic Act on Ecological Solid Waste Management is successfully implemented and maintained by the market vendors and market goers, 3)There is significant relationship between the level of awareness and extent of implementation of the solid waste management program of the market goers and market vendors, 4)A solid waste management planning or waste reduction program was formulated which can be adopted by the municipality of Bangar, La Union to enhance and strengthen the existing solid waste management program especially on the use of plastic bags.

RECOMMENDATIONS

In the light of the above conclusions, it is recommended that the Local Government of Bangar will adopt the proposed solid waste planning program on waste reduction and conduct seminars-workshop on how solid waste are to be recycled and generate income out of recycled materials and tap linkages for the market of recycled products that pass the environmental compliance and quality standards.

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IMPLEMENTATION OF THE INDIGENOUS PEOPLES' RIGHTS ACT (R.A.8371) IN TAGUDIN, ILOCOS SUR

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ABSTRACT

This study was conducted to determine the Implementation of Indigenous People's Rights Act of 1997 in Tagudin, Ilocos Sur. The following are the salient findings of the study: The local government unit officials have a "High" level of Administrative Capability. All the components namely Personnel Capability, Financial Capability and Leadership Capability obtained High level. As a whole, the implementation of the IPRA in Tagudin, Ilocos Sur along government Initiative is "High." Based on the findings, the following conclusions were drawn. 1) The local government officials have a high capability in implementing government initiative along IPRA.2) The government initiatives along the IPRA are highly implemented. With the foregoing findings and conclusions, the researcher recommends the following: 1)The local government unit officials should; Help the Bagos preserve their cultural practices and encourage other community residents to respect the Bagos through cultural studies and cultural revival.2)The local government unit officials should clearly explain to the Bagos the need and importance for them to be educated to be aware of their rights and privileges and to uplift their social and economic status.3)The Bagos should avail of every opportunity initiated by the government as to be socially, politically and economically integrated.

Keywords: IPRA, Rights, Indigenous, Bagos and Administrative Capability

INTRODUCTION

Throughout Philippine history, the political attitude towards indigenous people and their rights has undergone many changes. During the colonial period, from 1521, indigenous peoples who were not assimilated into Christianity were then called and identified as the "non-Christian" or savage tribes, and thus "are the less enlightened minorities of our population."

Since the declaration of Philippine independence in 1898, it was only in the 1973 Constitution where indigenous people found their place in the country's national framework. The provision in the 1987 Philippine Constitution was intended to authorize and recognize the need for special treatment of those Filipinos comprising the cultural minorities in the country. The clear intent, in the context of the Constitution viewed in its entirety, is to create an exception to uniformity of treatment under law mandated under the standard of "equal protection of the laws." The policy of the Government was "to integrate into the mainstream of Philippine society certain ethnic groups who seek full integration and recognition into the larger community, and at the same time protect the rights of those who wish to preserve their original life ways beside that larger community." This integration and recognition was clearly spelled-out in the Indigenous People's Right Act of 1997 (IPRA). To this end, the State shall protect the rights of indigenous cultural communities to their ancestral lands to ensure their economic, social and cultural well-being. The recognition of IP rights is, however, subject to national development policies and programs. Basically, the IPRA of 1997 includes the thirteen (13) very critical aspects that enumerate the following: a) general provisions) definition of terms)rights to ancestral domains)right to self-governance and empowerment, e) social justice and human rights, f) cultural integrity, g) National Commission on Indigenous Peoples (NCIP), h) delineation and recognition of ancestral domains, i) jurisdiction and procedures for enforcement of rights, j) ancestral domains fund, k) penalties, l) merger of Office of Northern Cultural Communities (ONCC) and the Office for Southern Cultural Communities (OSCC), and m) final provisions.

Bago is one of the indigenous tribes in the country predominantly residing in the hinterland municipalities of Region I. Unwritten sources theorized that the Bagos were the First aborigines of the Malays who first settled along upland areas in the North.

Today, Bago families are predominantly settled in the sixteen(16) municipalities of Ilocos Sur , ten municipalities of La Union and two(2) municipalities in the province of Pangasinan.

The can benefit in the Bagos by consistently they can actualize their cultural practices and yet integrate themselves into the social mainstream of the community, Improve their economic plight and assist them in their quest for education. The local government unit officials could assist the Bagos for the improvement of their total well-being in the social, economic and political aspects of life. The school administrators and teachers best assist in the education of the Bagos,their improvement of their economic plight and their integration into the mainstream of their respective communities and

how this can improve their economic plight. The community residents, could better understand the Bagos and their cultural practices, and how they can help in the integration of the Bagos into the social mainstream of their respective communities.

This study determined the implementation of IPRA in Tagudin ,Ilocos Sur,the assistance that the local government unit provides to improve their plight.

STATEMENT OF THE PROBLEM

This study was conducted to determine the implementation of the Indigenous People's Rights Act of 1997 (IPRA) in Tagudin, Ilocos Sur.

1. What is the level of administrative capability of the LGU officials along the following.
   a) leadership capability,
   b) personnel capability, and
   c) financial capability?
2. What is the level of implementation of the IPRA in Tagudin, Ilocos Sur in terms of the following?
   a.) ancestral domain,
   b.) ancestral lands,
   c.) right to stay in territories,
   d.) right in case of displacement,
   e.) right to regulate entry of migrants,
   f.) right to safe and clean water,
   g.) right to claim parts of reservations,
   h.) right to resolve conflict,
   i.) right to participate in decision-making,
   j.) freedom from discrimination and right to equal opportunity and Treatment,
   k.) right to religious, cultural sites, and ceremonies,
   l.) right to indigenous knowledge systems and practices and to develop own science and technologies, and
   m.) access to biological and genetic resources

RESEARCH METHODOLOGY

This section presents the research design, population and sample, data gathering procedures, instruments used and statistical treatment of data.

The procedures was followed by the researcher in the conduct of this study which is presented in this section.

Research Design. This study employed the descriptive method of research to determine the level of implementation of the Indigenous People's Rights Act 1997 (IPRA).

Population and Sample. The respondents of this study were the local government unit officials who implements through the government initiatives, projects, and mechanisms to realize the IPRA for the Indigenous people, and Bagos , that are identified and was retrieved from the listing of the National Commission of Indigenous People Region I office tallied with the listing of the LGU on Bago residents. The Slovin's formula was used to compute the number of Bago residents.There were179 Bago residents and 56 LGU officials who participated in this study.

Data-Gathering Instrument. The questionnaire was the main data gathering instrument.

The researcher used questionnaire and interview as the main tools for data gathering. The items in the questionnaire were sourced by the researcher from books, journals, magazines, theses, dissertations and interviews from the prospective respondents.

To determine the validity and reliability of the tool, the first draft of the questionnaire was presented to the researcher's adviser, then to His experts to determine whether these are comprehensible and can be easily answered by the target respondents. The researcher subjected it to dry run among the Bagos of Suyo, Ilocos Sur. Some of the Validators were officials of National Commission on Indigenous People Region l office,Mr.Felinor Sajonia then the Regional Director of NCIP Region I and Mayor Samuel B. Subagan Jr. of Suyo, Ilocos Sur,also a Bago member, who are deemed experts on the study.

Data-Gathering Procedure. The researcher used the five (5) point scale in the measurement of the items in the questionnaire for the easy understanding of the target respondents as they accomplished the said questionnaire. Thus, the following scale counts were employed:

To determine the government initiatives for the indigenous people of Tagudin, Ilocos Sur:

Statistical Limit	Symbol	Descriptive Rating
4.21 – 5.00	Very Highly Capable	VHC
3.41 – 4.20	Highly Capable	HC
2.61 – 3.40	Moderately Capable	MC
1.81 – 2.60	Slightly Capable	SC
1.00 – 1.80	Very Slightly Capable	VSC

To determine the level of implementation of the Indigenous People's Rights Act (IPRA):

Statistical Limit	Symbol	Descriptive Rating
4.21 – 5.00	VHI	Very Highly Implemented
3.41 – 4.20	HI	Highly Implemented
2.61 – 3.40	MI	Moderately Implemented
1.81 – 2.60	SI	Slightly Implemented
1.00 – 1.80	VSI	Very Slightly Implemented

Statistical Treatment of Data. The following

statistical tools were used to analyze the data that were gathered in the study.

1. The mean to present the descriptive statistics of this study.

THEORETICAL FRAMEWORK

This study on the implementation of the Indigenous People's Right's Act of 1997 in Tagudin, Ilocos Sur is premised primarily on the provision of the Philippines constitution as follows: Article 4, Section 22 states that the "state recognizes and promotes the rights of indigenous cultural communities within the framework of national development."

In the same vein, Article 10, Section 17 also states that the state recognizes, respects and protects the rights of indigenous cultural communities to preserve and develop their cultures,traditions and institutions, and shall consider these rights on the formulation of national plans and policies.

Similarly Article IV Section 17 also provides that the state recognizes, respects and protects the right of indigenous cultural communities to preserve and develop their cultures. traditions and institutions. It shall consider these rights on the formulation of national plans and policies. Furthermore, Section 18, Paragraph 2 further states that the state shall encourage and support researchers and studies in the arts and culture. (Nolledo, 1994).

Basic consideration on policy formulation on the government sector in the context of development planning process is the integration of programs and projects that are acceptable to the existing culture, practices, values, beliefs and standard norms of the majority of the people in a given time. Such program policies are responsive to their basic needs and aspirations. This accepted conventional principle is envisioned in Republic Act 837 otherwise known as "The Indigenous Peoples Right Act of 1997" which provides that the "state recognizes its obligation to respond to the strong expression of the indigenous people (ICCs/IPs) for cultural integrity by assuring maximum participation on the direction of education. health as well as other services of ICCs/IPs in order to render such services more responsive to the needs and desires of these communities.

Rights to Self-Governance and Empowerment

The State shall recognize, respect and protect the rights of ICCs/IPs to preserve and develop their cultures, traditions and institutions. It shall consider these rights on the formulation of national laws and policies.

Fraiser's (2007) study investigated on the Manobo's response, highlighting their adaptive shifts in their social organization to withstand outside forces – the appearance of organizations seeking secure land rights, and the possible causal mechanisms that may have triggered these changes. A major finding is that the Manobo's coordinated efforts to withstand pressures from the dominant society originated in the religious domain. He concluded that the emergence and effectiveness of Manobo organizations has often been hindered by government favoritism toward loggers and settlers, the long standing enemies of natural forests.

Implementation of Education of the Bagos

Juan (2008) noted the various manifested effects of the cultural practices on the education of minority groups. These are among others the: 1. Formal education in the: a) public secondary school; 2) alternative learning system training programs on: a) literacy-reading, writing and numeracy; b) basis education for adults and out-of-school youth; c) preschool education of young children; d) "catching up" programs for school dropouts; e) health education/better health practices; f) agriculture education; g) trade and union education; h) nutrition/better and nutrition food intake; and, i) waste management and disposal; and, 30 developing skills in; a) communication; b) problem-solving; c) critical thinking; and, d) learning to learn.

Social Integration of the Bagos

Cortez (2003) underscored the various community projects and activities where most cultural minority groups are involved; They are shy;2.They refrain from joining cultural activities;3.They manifest difficulty in teaching with others;4.They hardly understand the meaning of community developmentgs;5.They do not have the patience to: a)attend community meetings; b)contribute their opinion on specific community project ;c)participate in discussions/brainstorming ;d)wait for results;6.They have the eerier feeling of being ostracized.

Problems on the Social Integration of the Bagos

Hidalgo (2004) noted the problems that the local government unit officials encounter as they do their best to assist the cultural minority residents to integrate themselves in the social mainstream in their respective communities: 1. Most Bagos are shy; 2. They prefer not to interact with others; 3. They are not interested in joining community activities; 4. They fear that their cultural practices will be overshadowed by new lifestyle; 5. Some of them are uncooperative; 6. They are not open to new learning or trends; 7. They abhor activities relative to other religions; 8. They fear that community ac-

tivities will incur expenses; 9. They have their own religious festivities; and, 10. They have social maladjustment features.

The complex problem of the vulnerability of Filipino OSY has attracted attention from many other organizations. In a study performed by the World Bank (WB), focus groups and questionnaires created a profile for an average Filipino OSY, which helps to understand their vulnerability, according to Abrenich (2002).

The World Bank (WB) study indicated that the majority of the OSY live in environment with few livelihood options where asset attainment is difficult. Economic conditions, social conditions of the family, and personal qualities all contribute to the high prevalence of OSY in the Philippines. As expected the study showed that Out-of-School Youth are typically born to large impoverished families whose household heads also lack basic education skills. The families' lack of financial resources was ultimately responsible for forcing youth out of school, Abrenich further stated.

Often children are required to work to support parents and younger siblings. This is particularly true for the 15-24 age groups who often have to quit school to help their parents sought employment. About 1/5 of the WB focus groups' participants came from single-parent families, or the family's sole wage earner was either ill or ailing. Often in these cases, the youth take responsibility of finding a source of income to provide for the family. Most OSY generally have parents who work in unskilled jobs resulting from a low level of education. Typically in two-parent households, the father's job was often low-paying and self or seasonally employed, Abrenich further noted.

RESULTS/FINDINGS

Table 1. Item Mean Ratings Showing the Level of Administrative Capability of the Local Government Unit Officials along Leadership Capability

Items	BAGO RESIDENTS		LGU OFFICIALS		As a whole	
	$\overline{X}$	DR	$\overline{X}$	DR	$\overline{X}$	DR
1. Sets the mission and vision of the LGU as regards the 1997 IPRA.	3.79	HC	4.15	HC	3.97	HC
2. Plans, organizes and directs all projects and activities for the indigenous residents.	3.72	HC	3.80	HC	3.76	HC
3. Ensures that all employees/ persons involved in projects/ activities for the indigenous residents do/accomplish their tasks.	3.67	HC	4.00	HC	3.84	HC
4. Encourages active participation of all stakeholders and other community residents in all projects/activities for the indigenous.	3.67	HC	3.90	HC	3.79	HC
5. Practices fairness and sobriety in leading and instructing participants in the implementation of the all projects/ activities for the indigenous residents.	3.68	HC	3.90	HC	3.79	HC
6. Establishes linkages and harmonious relations with other agencies.	3.57	HC	3.90	HC	3.74	HC
7. Makes wise decisions and resolve problems based on correct and relevant information.	3.60	HC	3.95	HC	3.78	HC
8. Has knowledge and understanding of governing the community.	3.65	HC	4.15	HC	3.90	HC
9. Has credibility in the Municipality.	3.76	HC	4.25	HC	4.01	HC
10.Encourages participation of constituents in prioritizing barangay projects.	3.73	HC	4.05	HC	3.89	HC
11. Practices transparency in various financial transactions.	3.76	HC	4.05	HC	3.91	HC
12. Has understanding of his own role.	3.70	HC	4.25	HC	3.98	HC
13. Has ability to source out funds.	3.62	HC	4.15	HC	3.89	HC
14. Has good leadership attitudes	3.68	HC	4.10	HC	3.89	HC
15. Has sufficient management abilities.	3.66	HC	4.00	HC	3.83	HC
Overall	3.68	H	4.04	H	3.86	H

The table shows that local government unit officials have a "High" level of leadership capability (X= 3.86). The item "Has credibility in the Municipality" obtained the highest mean rating of 4.01 which is described as "Highly Capable." On the other hand, the item "Establishes linkages and harmonious relations with other agencies" obtained the lowest mean rating of 3.74 which is also described as "Highly Capable." It shows that in all items, the Local Government were Highly Capable, which implies that the Local Government unit officials are all educated, trained and aware of their responsibility even to the marginalized sector in their society.

Table 5 reflects the summary of the level of administrative capability of the local government unit officials.

Table 2 Item Mean Ratings Showing the Level of Administrative Capability of the Local Government Unit Officials along Personnel Capability

Items	BAGO RESI-		LGU OFFI-		As a whole	
	$\overline{X}$	DR	$\overline{X}$	DR	$\overline{X}$	DR
Personnel						
1. Strict compliance and implementation of 1997 IPRA	3.88	HC	4.15	HC	4.02	HC
2. Prioritizing implementation of frontline services to indigenous residents	3.75	HC	3.80	HC	3.78	HC
3. Actualize step-by-step procedures at all times	3.67	HC	3.80	HC	3.74	HC
4. Officer/employee responsible for each step is identified and held accountable	3.71	HC	4.00	HC	3.86	HC
5. Ordinances enacted ensure the benefits of the indigenous residents	3.68	HC	3.80	HC	3.74	HC
6. Capacity to enact ordinances to address the current issues and concerns of the indigenous residents	3.67	HC	4.00	HC	3.84	HC
7. Capacity to enact ordinances that are both for urgent concerns and long – term benefits for the indigenous residents.	3.65	HC	3.90	HC	3.78	HC
8. Capacity to make resolutions for the indigenous residents that are beneficial for them on urgent issues and for long – term application.	3.90	HC	4.05	HC	3.98	HC
Overall	3.74	H	3.94	H	3.84	H

The high level of personnel capability could be attributed to the willingness of the local government unit to implement the Act in Tagudin, and that they recognize that once Tagudin was ,once a part of Montañosa. The average mean of 3.84 indicates that they are highly capable in the actualization step-by-step procedures at all times because of the trainings, seminars, and experience of the LGU officials.

Table 3 Item Mean Ratings Showing the Level of Administrative Capability of the Local Government Unit Officials along Financial Capability

Items	BAGO RESIDENTS		LGU OFFICIALS		As a whole	
	$\overline{X}$	DR	$\overline{X}$	DR	$\overline{X}$	DR
1.Ensures the availability of adequate funds to support all projects and activities for the indigenous residents	3.75	HC	4.00	HC	3.88	HC
2. Ability to search for financial suppo from other sources	3.59	HC	3.75	HC	3. 67	HC
3. Sustains the fair allocation of funds	3.59	HC	3.80	HC	3.70	HC
4. Skillful and competent in budget management	3.62	HC	3.90	HC	3.76	HC
5. Observes transparency, as well as check and balance in disbursement of funds	3.58	HC	3.95	HC	3.77	HC
6. Balance sheets, spread sheets and auditing report are always updated and ready for scrutiny	3.64	HC	3.90	HC	3.77	HC
Overall	3.68	H	3.88	H	3.78	H

The table reveals that local government unit officials have a "High" level of financial capability ($\overline{x}$ = 3.78). The item "Ensures the availability of adequate funds to support all projects and activities for the indigenous residents" obtained the highest mean rating of 3.88 which is described as "Highly capable." On the other hand, the item "Ability to search for financial support from other sources" got the lowest mean rating of 3.67 which is also described as "Highly capable." The high level of capability on finances is because of the competent budget management and availability of adequate funds to support all projects and activities for the indigenous residents. It further implies that the government is in full support of the integration of the indigenous people in the social mainstream.

Table 4 Mean Ratings Showing the Level of Implementation of the IPRA in Tagudin, Ilocos Sur

Government Initiatives	BAGOS		LGU		As a whole	
	$\overline{X}$	DR	$\overline{X}$	DR	$\overline{X}$	DR
A. Ancestral Domain	3.57	HI	4.12	HI	3.85	HI
B. Ancestral Lands	3.79	HI	4.12	HI	3.96	HI
C. Right to Stay in Territories	3.73	HI	4.16	HI	3.95	HI
D. Right in Case of Displacement	3.67	HI	4.13	HI	3.90	HI
E. Right to Regulate Entry of Migrants	3.72	HI	3.85	HI	3.79	HI
F. Right to Safe and Clean Water	3.92	HI	4.00	HI	3.96	HI
G. Right to Claim Parts of Reservations	3.69	HI	4.00	HI	3.85	HI
H. Right to Resolve Conflict	3.70	HI	4.15	HI	3.93	HI
I. Right to Participate in Decision-Making	3.82	HI	4.05	HI	3.94	HI
J. Freedom form Discrimination and Right to Equal Opportunity and Treatment	3.87	HI	4.29	VHI	4.08	HI
K. Right to Religious, Cultural Sites and Ceremonies	3.79	HI	4.18	HI	3.99	HI
L. Right to Indigenous Knowledge Systems and Practices and to Develop Own Science and Technologies	3.88	HI	4.25	VH	4.07	HI
M. Access to Biological and Genetic Resources	3.90	HI	4.30	VHI	4.10	HI
As a Whole	3.77	HI	4.12	HI	3.95	HI

As shown in the table, as a whole, there is a "High" (x = 3.95) level of implementation of the IPRA in Tagudin, Ilocos Sur.

The indicator "Access to Biological and Genetic Resources" obtained the highest mean rating of 4.10 which is described as "High." On the other hand, the indicator "Right to Regulate Entry of Migrants" obtained the lowest mean rating of 3.79 which is also described as "High."

It means that they are given the rights to appreciate and use their flora and fauna and they are selective of people to enter in their territories as to maintain geographic and cultural heritage.

CONCLUSIONS

Based on the results of this study, the following conclusions were drawn:

1. The local government officials have a high capability in implementing government initiatives along IPRA.
2. The government initiatives along the IPRA are highly implemented.

RECOMMENDATIONS

Based on the conclusions the following are recommended.

1. Dissemination program of the law should be conducted. It can bedone through seminars and production and distributions of information, education and communication IEC materials.
2. The local government unit officials should have a properly researched and documented profile of the indigenous people (Bagos), in their respective communities so they can be properly identified, assisted and consulted in the actualization of the community development activities.
3. The local government unit officials should help the Bagos preserve their cultural practices and Encourage other community residents to respect the Bagos through cultural studies and cultural revival.

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THE USE OF FILM, VIDEO CLIPS AND EDUCATIONAL TELEVISION PROGRAMS IN RELATION TO PUPILS' LEARNING BEHAVIOR AND ACADEMIC PERFORMANCE

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ABSTRACT

The Department of Education (DepEd) aims to give quality education to the learners. With this, DepEd is doing its best by adapting new curriculum, giving more training to teachers and providing as much as possible their physical needs such as facilities of every pupils. In this connection, the researchers' wants to find out the other ways to achieve quality education; especially in teaching daily the learners with the skills and knowledge they should identify for them to face their future competitively. This study wants to determine the relationship between films, video clips, and educational television programs and pupils' learning behavior and academic performance by engaging descriptive survey using purposive sampling and the quantitative data with the aid of the modified questionnaire as the gathering tool. There were 250 pupil-respondents and 25 teacher-respondents from the selected elementary schools in Candijay, Bohol, Philippines. The results showed that pupil-respondents found it very effective when films, video clips and educational television programs are used in teaching in the classroom. Furthermore, it also revealed that there is a significant relationship between pupil-respondents' learning behavior and academic performance in the classroom. The study relied on the analysis of data, thus, recommendations were formulated to address the identified issues and concerns. The researchers strongly encourages the Department of education to increase the budget allocation on purchasing and providing each classroom a projector or television for teachers to use films, video clips, and educational television programs in teaching since the result of the study find it very effective.

Keywords: Academic, Behavior, Educational, Film, Learning, Performance, Pupils, Television, Video Clips

INTRODUCTION

The use of films, video clips and educational television programs are powerful instructional tools. When they are used appropriately and moderately, they can make the teaching-learning process more concrete, lively, colourful and interactive. It contributes to a more lasting learning because of its visual, audio and motion effects. These effects make learning fun. However, misuse and abuse of their use in the classroom and even at home has far reaching damaging effects in the development of children's imaginative and thinking powers and sensitivity to human life.

Dale (1969) says that the film, the video and the TV are indeed very powerful. They can transmit a wide range of audio – visual materials, including still pictures, film, objects, specimens and drama; bring models of excellence to the viewer; bring the world of reality to the home and to the classroom through a "live" broadcast or as mediated through film or videotape; make us see and hear for ourselves world events as they happen; be the most believable news source; make some programs understandable and appealing to a wide variety of age and educational levels; and can be both instructive and enjoyable.

It is now a universal truth that TV and other means of electronic media is a powerful source of not only providing information but also educate and entertain the masses. In the study of Ullah, Ali, Nisar, Farid, Ali and Alam (2014) on the impact of electronic media on academic performance of students it showed that two third of the sample size opined that electronic media help in cognitive development of students. Furthermore, majority of the respondents 105 (59.0%) believed that electronic media help in solving academic problems of the students.

With the implementation of the K to 12 Curriculum, teachers and students should adapt with the new changes. Teachers should not relay only to chalk-talk method and use of manila papers because students today are always "plugged –in" to television and media, which is why when teachers use technology in the classroom it piques student interest Using multimedia aided instruction such as video clip, educational television program and film is a simple way to integrate technology in the classroom. These audio-visual materials should be applied because in the study conducted to the pupils revealed that majority of them believed that electronic media help in solving their academic problems.

As one of the Elementary teachers in the Candijay District, the study on the use of film, video clips and Educational Television Program in the

classroom in relation to pupil's behaviour and academic performance could be one of the most significant investigations in searching for most powerful tool in improving pupils' performance and behaviour. As observed and experienced, multi - aided instruction is of great help to teachers and pupils. It plays a monumental role in promotion of education and entertainment.

STATEMENT OF THE PROBLEM

The main purpose of this study is to determine the influence of using films, video clips and educational television programs to pupil's learning behavior and academic performance of Candijay District Elementary School during the Academic Year 2018-2019.

Specifically, this study sought to answer the following questions:

1. What is the profile of the pupil-respondents in terms of:
   1.1. Sex;
   1.2. Age;
   1.3. Grade Level; and
   1.4. Academic Performance?
2. How often the teachers integrate films, video clips and educational television programs in teaching?
3. What is the perception of the respondents on the effectiveness in the use of films, video clips and educational television programs in the classroom?
4. What is the pupil's behavior as perceived by the respondents when films, video clips and educational television programs are used in the classroom?
5. What are the teachers' perceptions towards the pupils' behavior when films, video clips and educational television programs are used in the classroom?
6. Is there a significant relationship between the pupils' academic performance and the pupils' learning behavior in the classroom as perceived by the respondents?

METHODOLOGY

Research Design

This research utilized descriptive survey research design employing the questionnaire as the main instrument in the gathering of the important data. This study also use purposive sampling considering it is a selection based availability and on the characteristics of the chosen population.

Environment and Respondents

The study was conducted at the selected Elementary Grade Schools with projector or television that uses films, video clips and educational television programs in teaching in the district of Candijay during the academic year 2018-2019. The locale of this study was the selected elementary pupils of Candijay District in Bohol, namely: Canawa, Candijay Central, Can-olin, Luan, Lungsodaan, Mahangin, Panas, Pangpang, San Isidro, Tambongan, Tawid, Tubod and Tugas Elementary Schools. Only Grade 4, 5 & 6 pupils were chosen to answer the questionnaire because they are responsible enough to understand and answer the given questions. The number of pupil-respondents and teacher-respondents are not the same because not all of the schools in Candijay District have television or projector. Each grade level has 10 pupil-respondents however Central School has 20 pupil-respondents per grade level because they have 2 sections. Teacher-respondents were the teachers' adviser in the grade levels.

Table A is shown below for the distribution of respondents.

Table A. Distribution of Respondents

	Candijay Elementary Schools	Teachers			Pupils	Total
		Gr. 4	Gr. 5	Gr. 6		
1	Canawa	0	1	0	10	11
2	Candijay Central	2	2	2	60	66
3	Can-olin	0	1	1	20	22
4	Luan	0	1	0	10	11
5	Lungsodaan	0	1	0	10	11
6	Mahangin	1	0	1	20	22
7	Panas	1	0	0	10	11
8	Pangpang	1	1	1	30	33
9	San Isidro	0	1	1	20	22
10	Tambongan	0	0	1	10	11
11	Tawid	0	1	1	20	22
12	Tubod	0	1	1	20	22
13	Tugas	1	0	0	10	11
	Total	**6**	**10**	**9**	**250**	**275**

Instruments

The researchers used questionnaire as an aid in gathering information. The questionnaire was devised to gather data on relevant aspects of the study to be answered by the respondents. The questionnaire was constructed simply to facilitate intelligent understanding of the elementary pupils.

Part I on the questionnaire consisted of the pupils' profile.

Part II composed of teachers' frequency of using films, video clips and educational television programs in the classroom.

Part III is about how effective is the use of films, video clips and educational television programs in the classroom.

Part IV is about the pupils' behavior when films, video clips and educational television programs in the classroom.

Part V is the teachers' perception on pupils' behavior when films, video clips and educational television programs in the classroom.

Data Gathering Procedures

With the permission of the 13 elementary schools of the study area, the researcher conducted the study in an actual face to face contact. The data collected were then collated and subjected into statistical treatment.

Statistical Treatment

To determine the profile of the Pupils, the percentage was used. To obtain the average value of responses to items in the questionnaire, the formula for weighted mean is used and to find the relationship between the perception of the teachers and the pupils on the effectiveness of using films, video clips and educational television programs in the classroom in relation to pupil's academic performance and learning behavior in the classroom, Pearson Correlation has been used.

REVIEW OF LITERATURE

The rapidly changing technological developments have affected education as it does every other fields of human endeavour. The number of technology applications used in education increases every day. One of these tools is multimedia.

According to Mayer (2001), multimedia is the multiple introduction of a material with picture or text. Multimedia such as films, video clips and educational television programs typically refers to the presentation of material in two forms: auditory/ verbal and visual/pictorial. The strategies have included PowerPoint (Mayer & Johnson, 2008) and computer-assisted video learning (Gay, 1986) in a variety of content areas, in addition to auditory and video media. Turkish Language Society (TLS) also defined multimedia as "the platform where a material is combined with text, graphs, audio and simulation" (www.tdk.gov.tr). Multimedia sources created by using audio, video, visual, graph, text, animation to explain a subject is expressed as the use of different data types to explain an idea, an event or a subject (Alkan, Tekedere & Genc, 2001).

In addition, Deryakulu (1998) defines multimedia as the use of more than one platform bodily to increase the effectiveness of instruction. It is introduced as a tool combining different platforms such as written, audial, numeric graphs and animation. However, it is generally used to refer to computer-based multimedia today. In the multimedia definition of Brook (1997), the use of platforms like movies, slides, music and light for purposes such as education or advertisement are emphasized. In summary, it could be stated that multimedia is composed of computer platforms where written media is presented with audial, visual and animation media, and high definition and graphs are set (Maddux, Johnson, & Willis, 2001).

FINDINGS

1. Profile of the Pupils

Table 1 Pupils' Profile
N=250

Variables	Frequency	Percentage (%)	Rank
1.1 Sex			
Male	74	29.60	2
Female	176	70.40	1
Total	**250**	**100%**	
1.2 Age			
7-8 yrs. old	2	0.80	3
9-10 yrs. old	141	56.40	1
11-12 yrs. old	106	42.40	2
13-14 yrs. above	1	0.40	4
Total	**250**	**100%**	
1.3 Grade Level			
4	60	24.00	3
5	100	40.00	1
6	90	36.00	2
Total	**250**	**100%**	

Table 1 shows the profile of the pupil respondents. As to sex, it reveals that majority of the respondents were females with 70.40% of the population equivalent to one hundred seventy-six (176) respondents and only seventy-four (74) out of 250 were males with a percentage of 29.60%. It indicates that the population of the respondents were dominated by females.

As to **age**, it illustrates that age with a range of nine to ten (9-10) years old got the highest rank with a percentage of 56.40% and thirteen to fourteen years old and above (13-14 & above) has the lowest rank with a percentage of 0.40%. This can be inferred that pupil-respondents were exactly suited for their grade level that's why they have the right level of understanding.

In terms of **grade level**, it was the grade 5 students who got the most number of respondents with one hundred (100) responses out of two hundred fifty (250) with a percentage of 40%. However, grade 4 level got the least percentage of respondents with only 24% or sixty (60) responses. It implies that majority of the grade level that uses films, video clips and educational television programs in teaching are grade 5.

As to the **academic performance** of the pupils, in table 1.4, the result tells that one hundred sixty-eight (168) pupils with the percentage of 67.2% obtained the outstanding rating with the grading scale of 90-100. And no pupil-respondent gained below 75 general average. It indicates that using films, video clips & television programs in relation to pupils' academic performance is really effective.

Table 1.4 Pupils' Academic Performance
N=250

Descriptor	Grading Scale	F	%	Rank
Outstanding	90-100	168	67.2	1
Very Satisfactory	85-89	51	20.4	2
Satisfactory	80-84	27	10.8	3
Fairly Satisfactory	75-79	4	1.6	4
Did Not Meet Expectations	**Below 75**	0	0	5
Total		**250**	**100%**	

The result is line with the study of Ullah, Ali, Nisar, Farid, Ali and Alam (2014) on the impact of electronic media on academic performance of students that help in cognitive development of students. They found out that majority of the respondents 105 (59.0%) believed that electronic media help in solving academic problems of the students.

Table 2 Teachers' Frequency of Using Films, Video Clips & Educational Television Programs in the classroom
N=25

Variables	Weighted Mean	Descriptive Interpretation	Rank
1. Film Showing	3.60	A	2
2. Video Clips	3.68	A	1
3. Educational Television Program	3.40	A	3
Average Weighted Mean	**3.56**	**Always**	

Legend:

Rating Scale	Descriptive Interpretation	(DI)
3.25 – 4.00	Always	(A)
2.50 – 3.24	Often	(O)
1.75 – 2.49	Occasional	(Oc)
1.00 – 1.74	Never	(N)

Table 2 manifests the teachers' frequency of using the films, video clips and educational television programs in the classroom. It shows that these three were always used in teaching with an average weighted mean of 3.56 and using video clips ranked first with a weighted mean of 3.68. According to market research by Grunwald Associates (Braginan, 2005), video continues to have "significant staying power" in classrooms, although with new technology "video is finding its way into schools through different paths".

A study made by Woolfitt (2015) revealed the rapid increase in the amount of video that is available, increases in quality, speed and flexibility in delivering video has resulted in an incessant prevalence of video in many aspects of society, including higher education. Video use is an effective educational tool for all students, but its positive effect on special populations of students is gaining greater attention all the time.

Table 3 Pupils' Perception on the Effectiveness in the Use of Films, Video Clips & Educational Television Programs in the classroom
N=250

Statements	Weighted Mean	Descriptive Interpretation	Rank
1. It helps me to improve my academic performance in the class.	3.78	VE	5.5
2. It makes the lesson more colourful and attractive.	3.80	VE	3.5
3. It motivates me to listen and be attentive in the class.	3.81	VE	2
4. It makes me understand more the lesson.	3.85	VE	1
5. It makes the classroom environment conducive to learning.	3.69	VE	8
6. It makes me participate in the discussion because I can relate to it.	3.74	VE	7
7. It helps me to remember more the topic being discussed.	3.78	VE	5.5
8. It helps me by connecting what I learned in class to a real life scenario.	3.80	VE	3.5
Average Weighted Mean	**3.78**	**Very Effective**	

Legend:

Rating scale	Descriptive Interpretation	(DI)
3.25 – 4.00	Very Effective	(VE)
2.50 – 3.24	Effective	(E)
1.75 – 2.49	Less Effective	(LE)
1.00 – 1.74	Not Effective	(NE)

The perception of the pupils in Table 3 which is about the effectiveness in the use of films, video clips & educational television programs in the classroom as a strategy in teaching evidently divulges that pupils perceived it as Very Effective (VE) having the average weighted mean of 3.78. Among the eight items, pupils answered that using film, video clips and educational television make them more understand the lesson with the weighted mean of 3.85.

Research has shown that seeing is remembering, too. People generally remember about twice as much when they see and hear something, than when they only see or hear it. Thus, television's combination of sound and imagery renders it a powerful aid to learning. Additionally, preliminary results from a three-year study of a new media-literacy program funded by the U.S. Department of Education indicate that media literacy can play an important role in improving student performance in core-curriculum subjects (Gregorian, 2006).

Table 4 Pupils' Behavior when Films, Video Clips and Educational Television Programs are used in the classroom
N=250

Statement	Weighted Mean	Descriptive Interpretation	Rank
1. It makes me to behave in the class and focus on the topic.	3.69	SA	6
2. It makes me less talkative in the class.	3.32	SA	10
3. It makes me more interactive in the class discussion.	3.70	SA	4.5
4. It motivates me to minimize roaming around the class.	3.50	SA	9
5. It makes me more concentrated on the lesson and avoid unnecessary doings.	3.68	SA	7
6. It develops my confidence to participate on activities in relation to the topic presented.	3.77	SA	2
7. It makes me never escape classes.	3.78	SA	1
8. It makes me feel sleepy.	1.34	SDA	8
9. It makes me bored.	1.30	SDA	4.5
10. It makes me feel a waste of time.	1.26	SDA	3
Average Composite Mean	**3.65**	**Strongly Agree**	

Legend:

Rating Scale	Descriptive Interpretation	(DI)
3.25 – 4.00	Strongly Agree	(SA)
2.50 – 3.24	Agree	(A)
1.75 – 2.49	Disagree	(DA)
1.00 – 1.74	Strongly Disagree	(SDA)

In Table 4, it exhibits that pupils strongly agree on the given one to ten statements with an average mean of 3.65 and it reflects that pupils never escape classes when films, video clips and education television programs were used in teaching with a weighted mean of 3.78.

This assertion is supported by the studies of Holcomb (2009). It showed that many one-to-one programs have reported a decrease in absentee rates while Goodwin (2011) found that discipline problems decreased as well because students are engaged in the learning process instead of finding ways to get in to trouble.

Presented In table 5 is the teachers' perception on pupils' behavior when films, video clips and educational television programs are used in classroom. It shows that all of them strongly agree with 3.78 composite mean. For teachers, item no. 1 which states that "Films, video clips and educational television programs use makes the pupils excited on the lessons" got the highest weighted mean of 3.92 which is describes as strongly agree.

In the same vein, it is in line with the series of studies conducted by the Corporation of Public Broadcasting that measured both patterns of use and teacher attitudes and expectations for outcomes, among frequent users (teachers who report using TV or video for two or more hours per week), two-thirds find that students learn more when TV or video is used, and close to 70% find that student motivation increases. More than half of frequent users also find that students use new vocabulary as a result of video use.

Table 5 Teachers' Perception on Pupils' Behavior when Films, Video Clips and Educational Television Programs are used in the classroom
N=25

Items	Weighted Mean	DV	Rank
1. Film, video clips and educational television program use makes the pupils excited on the lessons.	3.92	SA	1
2. Pupils participate meaningfully in class when film, video clips and educational television program are used.	3.88	SA	2.5
3. Pupils become attentive in class and focus on the lesson.	3.80	SA	6.5
4. Pupils show greater involvement and engagement in lessons.	3.80	SA	6.5
5. Pupils ask questions that bother their mind.	3.76	SA	9.5
6. Pupils demonstrate understanding.	3.76	SA	9.5
7. Pupils learn better through the use of video clips or documentaries.	3.88	SA	2.5
8. Pupils learn better through the use of film or movie.	3.72	SA	11.5
9. Pupils learn better through the use of educational television program.	3.56	SA	14
10. Pupils show interest in the lessons.	3.80	SA	6.5
11. Pupils can learn from different perspectives.	3.72	SA	11.5
12. Lessons can be improved with the introduction of film, video clips and educational television program.	3.84	SA	4
13. Pupils accept that teacher should use film, video clips and television programs in class.	3.80	SA	6.5
14. Pupils never escape classes.	3.68	SA	13
COMPOSITE MEAN	**3.78**	**Strongly Agree**	

Legend:

Rating Scale	Descriptive Interpretation	(DI)
3.25 – 4.00	Strongly Agree	(SA)
2.50 – 3.24	Agree	(A)
1.75 – 2.49	Disagree	(DA)
1.00 – 1.74	Strongly Disagree	(SDA)

Table 6 shows significant relationship between the pupil-respondents' academic performance and behavior in the classroom since the computed correlation value of 0.257 with p-value of <0.001 which is lesser than 0.05 level of significance hence, the null hypothesis is rejected.

Table 6 Relationship Between Pupil-respondents' Academic Performance and Classroom Behavior
N = 250

Academic Performance and Classroom Behavior	r	p – value at α=0.05	Interpretation	Decision
	0.257	<0.001	Significant	Reject Ho

The result is coherent in the study of Ilhan & Oruc (2016). The study aims to outline the effect of multimedia on the academic success of social studies students. At the end of the study, it has been concluded that multimedia technique increased the academic success of students in social studies lesson compared to the traditional classroom. It has been found in research that the use of multimedia in the learning process does not only increases success level of the students but create positive changes in the attitudes of the students towards lessons. In other words, multimedia technique is a much better instruction way than traditional way.

CONCLUSIONS

With the findings being established, the researchers arrived at the following conclusions:

1. Generally, in terms of pupil-respondents profile in their academic performance falls under the scale of "Outstanding" with a grading scale of 90-100 which clearly indicates that the pupils are performing better in the class. Therefore, there is really a need for teachers to use films, video clips & educational television programs in the classroom when teaching.

2. Moreover, on the teachers' frequency on using films, video clips & television programs in the classroom reveals that they are always used in teaching. The table revealed that "using video clips" is the most used one.
3. When it comes to pupils' perception on the effectiveness in the use of films, video clips & educational television programs in teaching, pupils see it as very effective to them.
4. In terms of pupils' behaviour when films, video clips & educational television programs are used in classroom in teaching, it makes the pupils never escape in their class.
5. In addition, teachers perceive that pupils are excited on the lessons when films, video clips & educational televisions program are used in the classroom in teaching.

RECOMMENDATIONS

Based on the implicated conclusions, the researchers advances the following recommendations for sustainable teaching-learning processes.

1. The Department of Education should sustain and improve in the provision of multimedia packages for teachers to use films, video clips & educational television programs when teaching.
2. The School Managers should be encouraged to feel the importance of using film, video clips & educational television program through classroom observations.
3. Each classroom teacher should be encouraged to find ways to purchase a projector or television in their respective class if ever they are not provided on DepEd's Computerization Program (DCP).
4. Teachers are also encouraged to develop their competence in terms of using films, video clips & educational television programs to improve their way of using multimedia.
5. Parents should continuously support their children particularly in the academic aspect through helping and assisting whatever be the needed in the classroom.
6. School shall provide ways to raise school funds not only for school physical aspect improvement but for the purchase of multimedia resources.

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MATHEMATICS INSTRUCTION IN NON-MATHEMATICS PROGRAM OF ILOCOS SUR POLYTECHNIC STATE COLLEGE, TAGUDIN CAMPUS: INPUT TO AN INTERVENTION PROGRAM

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ABSTRACT

This study aimed to determine the status of Mathematics Instruction in the First Year College in Non-Mathematics Degree Programs of Ilocos Sur Polytechnic State College, Tagudin Campus, of which finding served as an input in the formulation of an intervention program for the mathematics instructors. This study is descriptive-quantitative research, as described in the specific problems and as evidenced by the collected data and the statistical treatment used in the data analysis. This study employed a total enumeration of 10 mathematics instructors and 204 first-year college students in the Non-Mathematics degree programs. Results reveal high attainment of objectives in teaching mathematics, high competency as to teaching skills, the organization of material and presentation, management of the learning atmosphere, and teaching attitudes. The instructional strategies and techniques are used to a high extent. The adequacy of instructional material is fair. The correlation of attainment of objectives and teaching competency to the level of problems found substantial. The problems are generally at a minor level but may tend to become serious which may affect the level of mathematics instruction. Subsequently, the formulation of the intervention program, subjected to validation and found as highly valid. Results of the study conclude that instructors are capable of leveling up mathematics instruction. The intervention program is viable and necessary to enhance the level of mathematics instruction in the Non-Mathematics Degree Programs in Tagudin Campus. This study may support the means of bringing out the best instruction mathematics education may offer.

Keywords: Mathematics Instruction; Status of Mathematics Instruction; Level of Mathematics Instruction; Non-Mathematics Degree Program; Intervention Program

INTRODUCTION

One of the production task to attain the goal of the Philippines Education for All 2015 National Plan of Action focused on the teacher's promotion of high-quality teaching (Philippine Education for All Review Report, 2015). High-quality teaching in the classroom connotes quality instruction. Mathematics instruction is an increasing academic concern since growing numbers of students are below grade level in their mathematics skills (Sundling, 2012). Relative to this, Meador (2017) pointed up that administrators and instructors work hard to overcome these challenges. In addition, SEI -DOST & MATHTED (2011) asserts that mathematics teachers and instructors face many challenges driving mathematics teaching especially difficult. Foremost, among these challenges is the amount and depth of mathematics content, an instructor ought to master. However, in spite of the instructors' capability, students have difficulties in learning mathematics. These problems are the challenges of instructors in creating innovative ways to lessen the issues. The Ilocos Sur Polytechnic State College (ISPSC), Tagudin Campus has not been excused from such issues and problems on Mathematics Instruction. The Researcher, a mathematics instructor of ISPSC, has considered as alarming, the number of first-year College students enrolled in Mathematics class from the different non-mathematics degree programs on the campus, struggling in pursuit of mathematics learning. These students are just meeting the requirements, definitely had no interest, and the rest failed in the subject. The report of grades and the results of their quizzes and examinations manifest these observations. Though there are students flourish in their first-year mathematics, a much greater number of them find mathematics as a difficult subject.

In response to these problems, it is the researcher's concern as a mathematics instructor, to determine the real status of the mathematics instruction in the non-mathematics degree programs of Ilocos Sur Polytechnic State College (ISPSC), Tagudin Campus, Tagudin, Ilocos Sur. The result of the investigation serves as an input in the formulation of an intervention program for mathematics instructors that seems less available than interventions programs geared toward students learning mathematics. Driesel (2013) characterizes intervention as highly personalized processes that require individualized instruction based on one's specific needs. Though an intervention varies in every school, this study helps mathematics instructors to innovate effective teaching strategies. The result of the investigation provides information for the School Administrators in the formulation and implementation of an effective intervention program for a specific group of instructors in other disciplines. In general, this study supports the means of

bringing out the best instruction mathematics education may offer to both instructors and students.

STATEMENT OF THE PROBLEM

This study aimed to determine the status of Mathematics Instruction in the First Year College in Non-Mathematics Programs of Ilocos Sur Polytechnic State College, Tagudin Campus of which finding served as a benchmark in the formulation of the intervention program for Mathematics instructors. Specifically, the study sought to answer the following questions:

1. What is the level of Mathematics instruction in Non-Mathematics Program as perceived by both mathematics instructors and the students along:
   1.1 attainment of objectives,
   1.2 teaching competencies of Mathematics instructors as to
      a. teaching skills,
      b. organization of material and presentation,
      c. management of the learning atmosphere, and
      d. teaching attitudes
   1.3 the extent to which Mathematics instructors are utilizing instructional strategies and techniques, and
   1.4 adequacy of instructional material?
2. What is the level of problems encountered by the Mathematics instructor in teaching Mathematics as to students in Non-Mathematics Programs?
3. To what extent do the level of mathematics instruction and the level of problems related?
4. What program can be proposed to enhance the level of Mathematics instruction in the First Year College in Non-Mathematics Program of Ilocos Sur Polytechnic State College?
5. What is the level of validity of the proposed intervention program in enhancing the level of Mathematics instruction in Non-Mathematics Program?

METHODOLOGY

This study is descriptive research, conducted in ISPSC, Tagudin Campus, Tagudin, Ilocos Sur, aimed to elicit the status of Mathematics instruction in non-mathematics programs, and quantitative as evidenced by the collected data and the statistical treatment used in the data analysis. Also, this study is developmental sought to develop an intervention program for the mathematics instructor. Employed total enumeration that includes 10 Mathematics instructors and 204 first-year college students enrolled in Mathematics class during the school year 2016-2017 from the non-mathematics programs under study.

The construction of the survey instrument used in the collection of data was based in Putil (2014). Through various readings from published and unpublished materials, there were revisions made to suit the objective of the present study. As to the instrument's validity, the five experts evaluated the items if these are representative of the scope and suit to the purpose of the study. The questionnaire has two major parts: Part I enumerates the variables on the level of Mathematics Instruction and Part II, the problems encountered by the mathematics instructor as to students. It was administered for reliability test to 5 mathematics instructors and 30 -year college students under the non-mathematics degree programs in the main campus of ISPSC, Santa Maria, Ilocos Sur, obtaining a reliability coefficient of 0.930.

Before the administration of the survey, the researcher secured the necessary permission from the proper authorities in the campus. The investigation entails no more than minimal risk, keeping the participants safe during and after the conduct of the study. The researcher assured the confidentiality of the information and data obtained from the respondents. Anticipating that most first-year respondents were under 18 years old, the researcher sent a home notification letter to parents of the minor respondents, informing them about the study and the participation of their children in the research. She personally went to the students to talk and explain about the study, and the benefits they may obtain from it, but giving them the chance to ask questions for them to understand their involvement in the study. The student-respondents decided not to sign the assent to preserve and secure their anonymity, but they expressed their willingness to participate in the study. Subsequently, the administration of the survey questionnaire.

Following the result of the status of mathematics instruction in the non-mathematics program, was the Researcher's conceptualization and development of the intervention program. As to the validation of the intervention program, five experts evaluated the content and face validity. In the content validation, the experts determine if the content has an objective, resources, strategies, and timeframe acceptable, and appropriate for an adequate program and if it has the potential to be functional, implementable, sustainable and timely for its development. The face validity includes the appearance and legibility of the program.

The data were statistically processed using a statistical software tool. The Researcher obtained both the validity of the questionnaire and the intervention program using mean. Likewise, the re-

searcher used the mean for the level of mathematics instruction and level of problems encountered by the instructors as to students, and the extent of their relationship using Pearson Product Moment Correlation.

The developed intervention programs were designed to address the areas of concern found in the study that needs enhancement as to mathematics instruction. The program includes activities and strategies that the mathematics instructors may perform underpinning their roles in learning and teaching. These activities will be done in collaboration with other human resources to meet the objectives of the program. The intervention program is one way for the mathematics instructors to refresh their knowledge of their own subject, elaborate their capabilities-knowledge, attitudes, and other competencies. Some of the activities and strategies that instructors may conduct, directly respond to the need of the student-respondents – offer tutorial services, remedial classes, consultation services, practice giving clear responses and feedbacks, and use of new technology. When mathematics instruction improves, and the instructors become effective to help the student learn, then students benefit from the intervention program.

REVIEW OF LITERATURE

Mathematics is a powerful tool for understanding the world that is becoming increasingly complex. The rapid growth of mathematics and its extensive application in diverse fields, the emergence of a highly competitive environment, and the advanced technological global economy have increased the demands on mathematics education (Putil, 2015). If Instructors lack the significant amount of knowledge and skill in teaching mathematics, it mean a failure to meet international standards of mathematics instruction. According to Niwas (2018), competent teachers feel to teach better and collect more information for meaningful learning in the right direction.

Teaching mathematics can only be described as truly effective when it positively impacts student learning. Roxas (2015) considers the following that makes a difference in student learning outcome: quality of instructors who teach, the way they respond to students, their expectations and attitude towards students, the way they manage the classroom, their teaching methods, and general teaching behavior. In addition, Bhargava, Anupama & Pathy (2014) asserts that instructors' proficiency leans on the attitude she possesses for the profession. A positive attitude helps the teacher to develop a conductive learner-friendly environment in the classroom and casts a fruitful effect on the learning of the students. Asante (2012) found that teachers attitudes and beliefs, teaching styles and parental attitudes were identified as explanation factors that account for student‘s attitudes towards mathematics. Besides, the study of Mensah, Okyere, and Kuranchie (2013) unveiled a significant relationship between teacher attitude and student attitude toward Mathematics. It was realized that teachers' positive attitude radiated confidence in students hence made them develop a positive attitude towards the learning of Mathematics. Ganal and Guiab (2014) reaffirm that poor achievement in Mathematics is caused by problems and difficulties that include personal problems (students' ability and attitudes), psychological (emotional) problems, and instructional problems (teachers' strategies in teaching and attitude). Mateo, as cited by Ganal & Guiab (2014), concluded that teaching strategies are not correlated with mathematics achievement but further stated that one good teaching strategies resulted in a more positive attitude. Beyond those qualities, instructors must make a commitment to education and professional development. Subject matter knowledge fades, teaching strategies change, and new research is always modifying the way students learn, and instructors teach. By furthering their education and taking part in professional development sessions, instructors can continue to improve the quality of the education they provide.

On the other hand, equipment and facilities such as mathematics textbooks, and other instructional materials need to be adequate in teaching and learning process, function as essential in intelligent discussions, problem-solving situations and provide students with means of exercises. Samuel (2009), underscores the importance of Instructional materials as alternative channels of communication, which an instructor can use to convey more vividly instructional information to learners. These facilities represent a range of materials which extend the range of vicarious experience of learners in a teaching-learning situation.

FINDINGS

The following are the results of this investigation:

1. Level of Mathematics Instruction in non-mathematics degree program

The Level of Mathematics Instruction was measured along the following four variables.

1.1. Attainment of Objectives in Teaching Mathematics

The table 1 reveals the level of Mathematics Instruction along attainment of objectives with four indicators as perceived by instructors and students.

Table 1. Level of Mathematics Instruction along attainment of objectives

Indicators	Weighted Mean		Mean	DR
	Instructors	Students		
Demonstrate an understanding of the concept from the Mathematics in the first year college	4.30	3.52	3.91	HA
Demonstrate mastery in the application of the general rules and techniques to solve problems related to life situations	4.20	3.52	3.86	HA
Demonstrate Proficiency in the use of different mathematical representation (diagrams, charts, tables, graphs, formulae, and models)	4.30	3.71	4.01	HA
Demonstrate the ability to explain the result in the context of the problem and improve the method when necessary.	3.80	3.38	3.59	HA
Overall Mean	4.15	3.53	3.84	HA

Legend: DR- Descriptive rating *HA* -Highly Attained

The result of the survey shows that all the indicators were highly attained with the indicator "Demonstrate Proficiency in the use of different mathematical representation" having the highest mean value of 4.01 and the indicator "Demonstrate the ability to explain the result in the context of the problem and improve the method when necessary" had the lowest mean value of 3.59. The result shows an overall mean value of 3.84 described as highly attained. This implies that the objectives of Mathematics instruction in Non-Mathematics Program of ISPSC, Tagudin Campus are well achieved which could be attributed by the passion of the Mathematics instructors in teaching the concepts of mathematics, the general rules, and techniques, the use of mathematical representations and their ability to explain result relating it to the situation in the problem.

This result confirms the findings of Putil (2014) that the objectives of mathematics instruction were highly attained in the intermediate grades in Suyo District.

1.2. Teaching Competencies of the Mathematics Instructor

Table 2 reflects the summary of the level of Mathematics Instruction along Competencies of mathematics Instructors in Non-mathematics Programs: Teaching Skills, Organization of Material and Presentation, Management of Learning Atmosphere and Teaching Attitudes.

As revealed on the table, the Mathematics instructors are highly competent in terms of the four teaching competencies as confirmed by the mean value of 4.11 for the Teaching Attitudes, followed by the mean of 4.04 for the Management of Learning atmosphere, 4.01 for Organization of material and presentation and the least mean value of 3.99 for the Teaching skills. The overall level of Mathematics Instruction along Teaching Competency of Mathematics instructors had a mean value 4.04 described as highly competent.

Table 2 Summary of Competencies of Mathematics Instructors

Indicators	Weighted Mean		Mean	DR
	Instructors	Students		
Teaching Skills	4.40	3.58	3.99	HC
Organization of Material and presentation	4.42	3.60	4.01	HC
Management of Learning Atmosphere	4.30	3.77	4.04	HC
Teaching Attitudes	4.40	3.81	4.11	HC
Overall Mean	4.38	3.69	4.04	HC

Legend: DR- Descriptive Rating *HC -Highly Competent*

The findings imply that Mathematics instructors teach students with professional confidence, consider students' comments and suggestions. Moreover, the instructors manage the learning atmosphere by helping their students to learn by doing and encourage them to participate in the teaching-learning activities. The instructors' learning materials are properly arranged to create students' cognition and learning ability. They clearly point out the learning objectives for each topic to the students. However, there are still things to do to improve mathematics instruction along with competencies, primarily on teaching skills competency. There are a lot of competencies to explore and develop to become very highly competent while improving their present competencies.

The findings support that of Roxas (2015) found that Mathematics professors were rated as "Very Satisfactory" in their teaching competencies. Punongbayan and Bauyon (2015) found that professors perceived their instructional performance as very good. Moreover, Andronache, Bocos, Bocoş, & Macri (2014) concluded that future teachers' attitude towards the teaching profession is generally positive. As Banks (2014) inferred, maintaining appropriate teacher-student interactions are essential skill sets for all teachers and the use of effective antecedent strategies to create positive learning environments are key aspects of a comprehensive classroom management program.

1.3. The Extent to which Mathematics Instructors are Utilizing Instructional Strategies and Techniques

Table 3 presents the Level of mathematics instruction along the extent to which mathematics instructor is utilizing Instructional strategies and techniques. The table contains 10 instructional strategies and techniques.

As shown in table 3, the Mathematics Instructors use "simplifying the problem" technique to a great extent with a 4.25 mean value while the "use of technology" only to some extent as reflected with a mean of 3.33 is the lowest. The rest of the

indicators are used to a moderate extent. Overall, the extent to which mathematics instructor is utilizing instructional strategies and techniques is moderate as proven by a mean of 3.84.

The result indicates that simplifying the problem is imperative in the analysis, allowing the students to understand the problem. The "use of technology to some extent" entails the limited facility for technology on the campus. Also, the instructors have no persistent effort to achieve a technology-furnished classroom and utilize technology in their classes. The instructors may use their own gadgets or laptops in the class but not efficient enough to cater to all their classes. However, the instructors use motivational manipulative, modelling, real-life relevance, scaffolding, variety of activities, tables, graph and diagrams, and skill development techniques, to augment the use of technology.

Table 3: Extent to which mathematics instructor is utilizing instructional strategies and Techniques

Indicators	Weighted Mean Instructors	Students	Mean	DR
Use of manipulatives (use of concrete examples or real objects help to visualize representations).	4.20	3.82	4.01	ME
Use of technology(use of appropriate and effective use of technology such as online study tools, interactive learning equipment, etc.)	3.70	2.95	3.33	S_oE
Modeling (demonstrate how to perform the activities,she is teaching).	4.00	3.60	3.80	ME
Real-world relevance (show importance of mathematics to real-life situations).	3.70	3.17	3.44	ME
Scaffolding (systematic approach to support the learner).	4.40	3.61	4.01	ME
Uses a variety of activities during class time.	4.30	3.65	3.98	ME
Use of tables, graphs, and diagrams.	4.20	3.71	3.96	ME
Use of concept development	4.30	3.65	3.98	ME
Use of skill development	4.40	3.77	4.09	ME
Simplifying the problem	4.80	3.70	4.25	GE
Overall Mean	4.20	3.55	3.84	ME

Legend: DR-descriptive Rating GE -To Great Extent ME - To Moderate Extent SoE - To Some Extent

Feldman (as cited by Kautz, 2016) suggested the use of a variety of techniques during one class period to keep students on task and to keep them from becoming bored. Instructors can motivate students by giving real-life examples showing where students might use the mathematics concepts being taught (Kelly, 2017).

1.4 Adequacy of Instructional Materials

Table 4 reveals the level of Mathematics instruction along adequacy of instructional materials. There are 10 listed instructional materials as indicators.

Table 4. Adequacy of instructional materials

Indicators	Weighted Mean Instructors	Students	Mean	DR
Textbook	3.20	2.75	2.98	MA
Workbook	2.40	2.03	2.22	FA
Modules	1.80	1.78	1.79	NA
Teaching Articles/Manuals	1.80	1.69	1.75	NA
Handbook	1.70	1.63	1.67	NA
Magazines/Reading Materials for mathematics	1.80	1.65	1.73	NA
E-book	2.50	1.76	2.13	FA
Television sets/Desktop/Laptop	1.70	1.17	1.14	NA
Bulletin Board	3.50	3.08	3.29	MA
Educational CD's, DVD's	1.30	1.21	1.26	NA
Overall Mean	2.17	1.88	2.00	FA

Legend: DR-Descriptive Rating MA - Moderately Adequate FA - Fairly Adequate NA - Not Adequate

From the table, it shows that the textbook with a mean value of 2.98 and the bulletin board with a mean of 3.29 are moderately adequate. Whereas, the workbook and e-book are fairly adequate as specified by the mean values of 2.22 and 2.13 respectively. All the rest of the instructional materials are not adequate. In general, the adequacy of the instructional material in mathematics instruction in the non-mathematics program is fair.

These findings imply that instructional material used by the mathematics instructors are not enough, which may affect the ability of the instructors to explain the lesson well. The instructors cannot provide all the explanations without the instructional materials to aid them. Similarly, students lost their interest when they cannot understand the lesson and have no books to help them. There is no real interest among mathematics instructors to produce their own modules since these instructors are too occupied with their academic loads and other tasks in school. This further implies the need for adequate instructional materials.

The findings made in the study of Ogbu (2015) were that inadequate instructional materials and facilities often influence the teaching and learning of Electrical/Electronic technology courses in 32 negative ways. Quisumbing, Johansen, Caluza, Funcion, Gotardo, et al. (2018), learned that the IT faculty need to develop instructional materials. It is remarkable for the teacher to develop instructional material, to guide the student in their academic performance.

2. Problems encountered by the Mathematics Instructor as to students

Table 5 specifies the different problems and the level of these problems encountered by the mathematics instructors as to students.

Table 5. Problems encountered by the mathematics instructor as to students

Problems	Weighted Mean Instructors	Students	Mean	DR
Students lack interest	2.40	2.69	2.17	MoP
Inability to express themselves in stating mathematics concepts	2.50	2.90	2.70	MiP
Poor comprehension in undertaking problems presented.	2.10	2.92	2.51	MiP
Poor study habit	2.70	2.66	2.68	MiP
Inability to give a generalization	2.80	3.00	2.90	MiP
Poor attendance/ Absenteeism	2.70	2.90	2.80	MiP
Poor problem-solving ability	2.30	2.90	2.60	MiP
Poor in basic computational skill to solve a problem	3.00	2.89	2.95	MiP
Overall Mean	2.56	2.88	2.70	MiP

Legend: DR- descriptive rating MiP - Minor Problem MoP - Moderate Problem

As averred on the table , the problem on "Students lack interest" occurred to be the only item as a moderate problem (2.17). All other problems on the list found to be minor problems. The mean of 2.70 describes the overall level of the problems as minor problem.

The findings infer that these first-year students are not motivated in their mathematics class to enhance the competence in mathematics. The found minor problems implies that students understood d the steps in solving problems, they study their lesson, could give generalization, their absences is not remarkable and they can compute to solve a problem. However, the findings further imply the there is a problem through generally at a minor level but may tend to become serious which, may affect the level of mathematics instruction in the different non-mathematics degree programs.

Mutai (2010) found that" Lack of interest" in mathematics was mentioned by only 24% of the respondent in his study. The present findings are close to the findings of Ramos, et al (2015), the problems encountered by the teachers in teaching Mathematics were rated as "Fairly Serious" on student's Poor Retentive Memory, Poor Analytical Thinking, Poor Study Habits, and Lack of Comprehension.

3. The Relationship between the level of Mathematics instruction variables and level of of problems encountered by Mathematics Instructors as to Students.

Table 6 shows the result on the correlation of the variables between the level of mathematics instruction and the level of problems.

Table 6. Correlation between the level of Mathematics Instruction and the level of Problems encountered by Mathematics Instructors as to students

Level of Mathematics Instruction	Level of Problems
Attainment of objectives.	0.143*
Teaching Competency	0.264**
2.1. Teaching competency along teaching skills.	0.269**
2.2. Teaching competency along material organization and presentation.	0.219**
2.3. Teaching competency along management of the learning atmosphere.	0.218**
2.4. Teaching competency along teaching attitudes.	0.218**
The extent of utilizing instructional strategies and techniques.	0.265**
Adequacy of instructional materials	0.111

**Correlation is Significant at 0.05 level (2-tailed) ** Correlation is Significant at 0.01 level (2-tailed)*

Table 6 shows a significant relationship between the attainment of objectives and the level of problems at . However, the result indicates a weak positive linear relationship between these two variables. All other variables in the level of Mathematics Instruction, have a substantial relationship to the level of problems as indicated by the obtained values at , signifying a stronger positive linear relationship between the variables involved. If the Level of problems becoming" Not at All a Problem" then there is a corresponding change in the level of Mathematics Instruction along with those variables but no change on the adequacy of instructional material. These findings could be attached to the instructor's enthusiasm, attitudes, and competencies in the attainment of objectives in Mathematics instruction towards excellence.

4. Validation of the Intervention Program on Mathematics Instruction

Table 7 indicates the validity of the intervention program for mathematics instructors

Table 7. Validity Rating of the Intervention Program for Mathematics Instructors

Criteria	Mean	DR
Face Validity		
a. Appearance	4.00	HV
b. Legibility	4.00	HV
Sub-Rating	4.00	HV
Content Validity		
Functionality	4.00	HV
Acceptability	4.00	HV
Appropriateness	4.40	VHV
Timeliness	4.20	HV
Implementability	3.80	HV
Sustainability	3.80	HV
Sub-Rating	4.03	HV
Overall Rating	4.02	HV

Legend: DR-Descriptive rating VHV- Very Highly Valid HV – Highly Valid

As manifested on the table, the evaluators rated the intervention program a highly valid with an overall mean rating of 4.02. The face validation was rated 4.00 for both the appearance and legibility, described as highly valid. As to the content validation, the intervention program was rated 4.00 for both the functionality and acceptability, 4.40 for

the appropriateness, 4.20 for the timeliness, and 3.80 for both the implementability and sustainability, obtaining a sub-mean-rating of 4.03 described as highly valid. The findings imply that the intervention program is high valid which could be ascribed to its objectives and activities/strategies that are feasible and doable in achieving excellence in Mathematics instruction in Non-mathematics program in ISPSC, Tagudin Campus.

CONCLUSIONS

This study aimed to determine the status of mathematics Instruction in the First-Year College in Non-Mathematics Programs of Ilocos Sur Polytechnic State College, Tagudin Campus for the School Year 2016-2017 as an input to an intervention program. Based on the findings, the following conclusions were drawn:

1. Instructors have well-defined objectives, facilitating the attainment of the desired goal of effective mathematics teaching.
2. Mathematics Instructors are highly competent as to teaching skills, the organization of material and presentation, the management of the learning atmosphere, and teaching attitudes. Instructors are undoubtedly capable of leveling up mathematics instruction. Able to address some students' difficulties in their mathematics learning.
3. Simplifying the problem technique is imperative in solving problems in Mathematics. Mathematics instructors use various instructional materials to almost all activities in first-year mathematics class.
4. The extent in utilizing instructional strategies and techniques reveal the know-how and expertise of the mathematics instructors, but there is limited use of technology.
5. Instructional materials are not adequate to cater to instructors and students. Thus, there is an urgent need for more instructional materials.
6. Level of problems encountered by the mathematics instructors as to students is generally minor, but if left ignored, may tend to become serious which may affect the level of mathematics instruction.
7. The adequacy of instructional materials is not related to the level of problems encountered by the instructors as to students. The level of problems has a direct influence on the level of Mathematics instruction along teaching competency and the extent to which instructors are utilizing instructional strategies and techniques.
8. The intervention program is viable and necessary to enhance the status of mathematics instruction. It is highly valid.

RECOMMENDATIONS

Based on the conclusions of the study, the following recommendations are offered: The recommendations boils down to the formulation and implementation of an intervention program.

1. Instructors have to sustain or further enhance mathematics instruction along with their competency. Make changes that benefit the most students.
2. Mathematics instructors need to engage themselves in the utilization of other strategies and techniques considering the most effective to their students. Retooling, training, seminar-workshops are important. Consider the intervention program.
3. Instructors have to supplement instruction, make a request for the purchase of functional instructional materials and have to develop their own. Attendance to seminars on book writing and instructional material development is recommended
4. Find strategies to address the lack of interest of the student in mathematics taking appropriate measures to solve the problems. Involve the parents and the community if possible.
5. Present the valid intervention program to the proper authority for approval and its utilization in the ISPSC Tagudin Campus.
6. Evaluate the intervention program after a year of implementation if it has served its purpose.
7. Replicate the study with the inclusion of other factors to further investigate the status of mathematics instruction in non-mathematics degree programs.

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CONSUMERS' PREFERENCE TOWARDS THE USE OF ECO-FRIENDLY REUSABLE BAGS: BASIS FOR THE CRAFTING OF PROMOTIONAL STRATEGIES

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ABSTRACT

The adverse impact of plastic bags on the environment has received significant worldwide attention. This paper investigates the consumers' preference in using eco-friendly bags as basis for the formulation of marketing strategies. Preference towards the new varieties of shopping bags were determined through qualitative methods. Finally, a questionnaire survey was conducted on 173 consumer respondents from the Nueva Vizcaya State University. Results indicate that durability is a prime consideration on usage. The level of awareness did not vary by demographic characteristics like age, income or occupation, suggesting that this is a common phenomenon across different segments of the society. A correlation was found between an awareness of the issues and the willingness to bring about behavioral changes. The research is significant and relevant to the context of sustainability. The research findings are significant for the marketers and policy makers especially in the context of promotion and adoption of sustainable practices. It will help in promoting the use of eco-friendly bags and instilling the habit of using eco-friendly bags amongst shoppers. However, the following recommendations are advanced: correlation between consumers' preferences and attitudes towards the use of eco-friendly reusable bags; and strengthening the campaign and advocacies on the benefits and advantages of eco-friendly bags.

Keywords: Consumer preferences, Durability, Eco-friendly reusable bags, Green marketing, Promotional Strategy

INTRODUCTION

Plastic bags are one of the most extensively used shopping bags all over the world. Each year, an estimated 500 billion to one trillion bags are consumed worldwide (Plastic Bag Facts, 2010). Today most consumers use it regularly and wastefully as they obtain it free of cost from the retail outlets (Ruban, 2012). While the production cost is low, the public and the environmental cost of producing and using disposable plastic bags is enormous. Local, city, and even national governments have taken steps to ban retail use of disposable plastic bags or to require businesses to charge for giving them out (Galbraith 2012; Wang 2013). For example, by2011, 28 U.S. cities, including New York and San Fran-cisco, had enacted some form of ban, fee, or other regulation on the use of "thin-film" disposable shopping bags. In September 2014, California became the first state to ban single -use plastic bags (Chappell 2014).

Eco-friendly reusable bags, also known as bags for life are types of shopping bags that take the place of plastic or paper bags at the cash register. These are light in weight, biodegradable and non-disposable, but made with strong natural or synthetic materials. Companies like to use them as a way to promote products and events. The more frequent that a bag is used the more chances that others get to see it and appreciate its value. This provides many advantages not only for the companies but for consumers as well. Storeowners have found that people will purchase eco-friendly bags more often if these bags are presented in a way that makes them more stylish, durable and practical. Thus, these bags are available in different designs and styles and display various important messages (Samudaya, 2012).

There are limited studies conducted on the areas of reusable shopping bags despite their advantages and benefits. Many consumers too are still unaware of what environment related problems the bag can solve, and contributions it can make for sustainable environmental development. It is for these reasons that the researcher prompted to conduct a study that will look into the preferences of selected consumer groups.

STATEMENT OF THE PROBLEM/ OBJECTIVES

Primarily, this study aimed to determine and analyze the preferences of selected consumer groups towards the use of eco-friendly reusable bags in order to come up with strategies that would improve consumer behavior and increase the usage of eco-friendly bags.

Specifically, the study sought answers to the following questions:

1. What is the profile of the consumer respondents?
2. What are the consumers' preferences in using the eco-friendly reusable bags?
3. What is the relationship of profile and the pref-

erences of consumers in using eco-friendly bags?
4. What strategies can be developed to improve the consumer attitude and increase their usage of eco-friendly bags?

REVIEW OF RELATED LITERATURE

Consumer preference

Lombardo (2013) defined consumer preference as a set of assumptions that focus on consumer selections with consequences or results in different alternatives such as happiness, satisfaction, or utility. The entire consumer preference process results in a best optimal choice. Consumer preferences allow a consumer to prioritize different bundles of goods according to levels of utility or usefulness, or the total satisfaction or dissatisfaction of consuming a good or service. It is very critical to understand that consumer preferences are not dependent upon consumer income or prices. Therefore, a consumer's capacity to buy goods does not reflect a consumer's likes or dislikes.

According to Raines (2012), there are elements of definition of consumer preference. First, a consumer preference explains how a consumer ranks a collection of goods or services or prefers one collection to another. This definition assumes that consumers rank goods or services by the amount of satisfaction, or utility, afforded.

Second is consistent choices, which means that a consumer preference assumes that the consumer can choose consistently between or among goods and services. The consumer must prefer one set of goods or services over others or treat all as equally beneficial. Consistency is an issue when the consumer must consider more than two alternatives. If a consumer ranks dress shoes ahead of tennis shoes and tennis shoes ahead of sandals, the consumer must prefer dress shoes to sandals.

Third is monotonicity. Consumer preference theory assumes that "more is better." This form of preference, monotonicity, has varying levels of strength. Basic monotonicity means that a consumer, if deciding between two laptops with the same amount of memory, will choose the one with the larger screen. The consumer will have a stronger preference for a laptop with both more memory and the larger screen.

Eco-friendly bags

O'neal (2011) cited that eco-friendly reusable bags have become a dominant feature in the promotional products industry especially because there is an increased awareness in the need for the sustainability of the environment. Most businesses have made the choice to use these bags during their promotional campaigns because the bags are environment friendly but also because they can be made in a stylish way and this makes them look good. There is always a definite boost in the image of a company that uses such products for their promotional campaign. But what are the different kinds of eco-friendly reusable bags that are available?

The first type of eco-friendly reusable bag is the reusable or recyclable one that is made out of material that can be used over and over again without causing harm to the environment. The materials that are used to manufacture eco-friendly reusable bags usually come from waste that people do not need anymore. These materials can be put into good use by turning them into reusable bags that are eco-friendly. These bags are made by using materials that are acquired after they have been taken through a process that makes them into a fabric that is reusable without creating any harm to the environment. The products actually look good and have great benefit to the environment (O'neal, 2011).

The different types of environment friendly bags are evident in the classifications of materials that are used to manufacture the bags. Vinyl is the most commonly used material as far as reusable bags are concerned although there are also canvas, hemp, nylon, cotton and recycled plastic. There are also jute material, organic bags and paper carry bags. All these materials can be used for promotional purposes and they can be made into different colors and designed in ways that suit any company depending on how the company wants them to look (Paster, 2009).

Another major difference with regards to eco bags is the way that they are manufactured and especially how their styles are designed. Many of these bags come in the tote style and are made with short handles. The bag is usually square in shape and very much familiar to plastic or paper bags. Sometimes, these bags can be made with handles that are long and are capable of accommodating lots of luggage with some having a bottom that is leveled out and can be used to carry luggage without difficulty (O'neal, 2011).

Shopping bags in this study can be categorized as plastic, paper, made of cloth (tote bags), which are biodegradable and/or non-biodegradable. The dictionary defines shopping bag as a strong, usually paper or plastic bag with handles, used to carry purchases or belongings.

Altaf (2010) mentioned that there are many individuals who have not realized how important eco-friendly reusable bags are. There is a never-

ending effort all around the world where people are diverting their efforts and activities towards all those things which are not harmful to the society. In fact organizations are taking the serious step forward and giving out the eco-friendly reusable bags with their name and logo to every consumers as much as they can.

Environment friendly bags are also available in an assortment of patterns, structures and colors that can allow a company to show their customers' appreciation through gifting. The current study however is concentrated on the following bags only.

1. **Jute bag**. Jute is a plant fiber that can be spun into coarse, strong threads. It is often referred to as hessian in products, such as a hessian bag. Jute bags are made of one of the strongest natural fibers, relatively cheap to buy, durable, and jute crops require little water. Unless chemically treated, Jute may be grown with the use of pesticides. Most jute products are imported.

2. **Canvas/Cotton bags**. Cotton is a soft fabric, durable and strong. Unless the cotton is grown organically, high levels of pesticides are used. Fully processed cotton requires extensive additional treatment, and cotton is a water intensive crop. Canvas totes are available in conventional cotton, organic cotton, or even hemp.

3. **PET or non-woven polypropylene bags**. These are portable shopping bags made from a very thin but durable fabric. The bag is about the same size as a disposable plastic bag used for shipping and stows neatly in an integrated pouch that fits in the palm of your hand and clips to your purse or "fits in your pocket".

4. **Polypropylene Bag** is designed in the shape of a brown paper shopping bag.

5. **Abaca bags**. Natural, exceptionally durable and biodegradable, the abaca mini bags are attractive and eco-friendly alternative to paper or petroleum-based plastic bags and nylon organza pouches. Abaca can be made into abaca natural fiber gift bags, biodegradable compostable gift bags, earth friendly gift packaging, eco-friendly wedding favor bags, fairly traded gift bags and gift boxes, handmade and sustainable natural products, and sinamay bags.

6. **Bamboo bags**.

7. **Cotton bags and recycled cotton bags** which can be denim or maong bags.

8. **Bazura Eco-Friendly Recyclable Bags Large Tote / Grocery Bag**. These bags are made in the Philippines by a women's cooperative, utilizing used juice containers. Recycled Juice Wrapper Purse from the Philippines - a perfect beach bag and can be Bazura used as shopping bags.

METHODOLOGY

This study followed the quantitative design using the survey technique to gather information on the profile of consumer respondents and their preferences toward the use of eco-friendly bags. The respondents of the study consisted of the consumers specifically the faculty, staff and administrators of the Nueva Vizcaya State University during the Summer Class of the School Year 2016-2017.

The sample size in this study was calculated using the Slovin's formula with a .05 probability. The respondents totaled to 173 consumers. This study used a researcher-made survey questionnaire. The panel members examined the validity of the instrument before it was floated to test the reliability of the questionnaire items. The questionnaires were then retrieve and the responses were coded and tallied using the Excel software program. Later, they were processed using the SPSS and subsequently analyzed and interpreted. In treating the gathered data, the following tools were used:

1. Computations of frequencies and percentages were used to describe the profile of the respondents;
2. Computation of means, standard deviations and use of the ranking system were utilized to describe the preferences of consumer respondents. In determining the rank of each item, the lowest mean was ranked #1 followed by the second lowest, third lowest and others with the highest mean as ranked # 8.
3. Chi-square test was used to evaluate the relationship between the respondents' profile and their preferences in using eco-friendly bags.

FINDINGS

Table 1. Chi-square test results between age and preferences in using eco-bags

Age	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
21-34 years old	30	28	5	0	0	0	0	0	63
35-54 years old	0	0	20	23	13	0	0	0	56
55 years old and above	0	0	0	0	7	18	15	14	54
Total	30	28	25	23	20	18	15	14	173
***X*(14)=294.06, p=0.00**									

It can be gleaned in Table 1 that there is significant relationship between age of the respondents and the preferences of using eco-friendly bags, X (14) =294.06, p=0.00.

Table 2. Chi-square test results between sex and preferences in using eco-bags

Sex	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
Male	30	28	14	0	0	0	0	0	72
Female	0	0	11	23	20	18	15	14	101
Total	30	28	25	23	20	18	15	14	173
X(7)=147.648, p=0.00									

In terms of association between sex and preferences in using eco-bags, it can be seen in Table 2 that there is also significant relationship, X (7) =147.648, p=0.00.

Table 3. Chi-square test results between civil status and preferences in using eco-bags

Civil Status	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
Single	18	0	0	0	0	0	0	0	18
Married	12	28	25	23	20	18	15	1	142
Separated	0	0	0	0	0	0	0	13	13
Total	30	28	25	23	20	18	15	14	173
X(14)=242.850, p=0.00									

It can be observed in Table 3 that there is significant relationship between civil status of the respondents and the preferences of using eco-friendly bags, X (14) =242.850, p=0.00.

Table 4. Chi-square test results between highest educational attainment and preferences in using eco-bags

Highest Educational Attainment	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
High School Graduate	19	0	0	0	0	0	0	0	19
College Graduate	11	28	25	4	0	0	0	0	68
With Masters	0	0	0	19	20	14	1	0	54
With Doctoral	0	0	0	0	0	4	14	14	32
Total	30	28	25	23	20	18	15	14	173
X(21)=410.718, p=0.00									

It can be seen in Table 4 that there is significant relationship between highest educational attainment of the respondents and the preferences of using eco-friendly bags, X (21) =410.718, p=0.00.

Table 5. Chi-square test results between occupation and preferences in using eco-bags

Occupation	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
Faculty	30	24	0	0	0	0	0	0	54
Administrative	0	4	25	23	18	0	0	0	70
Staff	0	0	0	0	2	18	15	14	49
Total	30	28	25	23	20	18	15	14	173
X(14)=315.739, p=0.00									

In terms of association between occupation and preferences in using eco-bags, it can be observed in Table 5 that there is also significant relationship, X (14)=315.739, p=0.00.

Table 6. Chi-square test results between monthly salary and preferences in using eco-bags

Monthly Salary	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
0-12000	30	28	1	0	0	0	0	0	59
12,001-28,000	0	0	24	23	10	0	0	0	57
28,001 and above	0	0	0	0	10	18	15	1	44
Others	0	0	0	0	0	0	0	13	13
Total	30	28	25	23	20	18	15	14	173
X(21)=448.555, p=0.00									

It can be inferred in Table 6 that there is significant relationship between monthly income of the respondents and the preferences of using eco-friendly bags, X (21) =448.555, p=0.00.

Table 7. Chi-square test results between frequency of purchase and preferences in using eco-bags

Monthly Salary	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
Daily	27	0	0	0	0	0	0	0	27
once a week	3	28	25	10	0	0	0	0	66
twice a week	0	0	0	13	20	18	14	0	65
thrice a week	0	0	0	0	0	0	1	14	15
Total	30	28	25	23	20	18	15	14	173
X(21)=451.764, p=0.00									

It can be gleaned in Table 7 that there is significant relationship between frequency of purchase of the respondents and the preferences of using eco-friendly bags, X (21) =451.764, p=0.00.

Table 8. Chi-square test results between place of purchase and preferences in using eco-bags

Place of Purchase	Preferences of eco-bags								Total
	Canvass	Abaca	Pet	Bamboo	Cotton	Jute	D. Poly	Bazura	
public market	30	28	25	23	20	2	0	0	128
talipapa (wet market)	0	0	0	0	0	12	6	0	18
grocery store	0	0	0	0	0	0	12	10	22
Others	0	0	0	0	0	0	0	5	5
Total	30	28	25	23	20	14	18	15	173
X(21)=288.762, p=0.00									

It can be observed in Table 8 that there is significant relationship between monthly income of the respondents and the preferences of using eco-friendly bags, X (21) =288.762, p=0.00.

Table 9.Consumers' Preferences in using the Eco-friendly Reusable Bags

Eco-friendly Bags	Mean	SD	Ranking of Preference
Jute	2.3121	1.38334	6
Canvas	1.7919	1.02444	1
Pet	1.9827	1.14868	3
D.Poly	2.4220	1.33425	7
Abacca	1.9364	1.03514	2
Bamboo	1.9884	1.34246	4
Cotton	2.1503	1.07858	5
Bazura	2.5665	1.27700	8

Legend: The lowest mean is ranked number 1, second lowest is ranked number 2, third lowest is ranked number 3, fourth lowest is ranked number 4,… and the highest mean is ranked number 8

Table 9 shows the Consumers' Preferences in using the Eco-friendly Reusable Bags. As evidenced by the ranking of preference, it is apparent that the first choice is the use of canvas with a mean preference of 1.7919. This finding implies that canvas is the most popular among consumers and there is a strong need for the different retailers. Groceries and supermarkets, therefore, should use these kinds of bags and then shift to other bags in the near future in order to offer consumers different kinds of bags to choose from.

The second most preferred bags are the bags made from abacca. The consumers prefer this as their number 2 or second most preferred eco-friendly reusable bags because these bags are natural, exceptionally durable and biodegradable. The mean preference of 1.9827 indicates that PET or non-woven polypropylene bag is the third preference of the consumers. These bags are otherwise known as chico bags. These are portable shopping bags made from a very thin but durable fabric.

Strategies that can be developed to increase the consumers' usage of eco-friendly reusable bags:

1. Educational institutions should implement in-house policies that will motivate their students and employees to use eco-friendly re-usable shopping bags. The policies should be used in making marketing strategies and tactics.
2. Educational institutions may collaborate with the LGUs in the municipality by developing policies and then cascading these policies to the different offices of the LGUs to adopt similar programs and activities as stated in number 1.
3. Companies that are already using eco-friendly reusable shopping bags should concentrate more on the characteristics and features of the bags. They can improve their taglines such as: "XYZ Canvas Bags Are Made Of Pre-Loved Blue Jeans" And "Smc Jute Bags Are Your Chiffon Maxi Dress – Nice, Pretty, Durable And Not Bulky".
4. Make the different eco-friendly shopping bags available anywhere, any time at a cheaper cost with attractive designs and taglines. There are so many design types and examples that the internet can provide. There are also many pro-environment foundations and organizations that

are into making these bags. The different stakeholders can do something and link with them.
5. Consumers' education is very important and necessary. Education may improve and increase their level of cognition, affective and behavior towards the use of eco-friendly bags.
6. Motivate the general consumers to design and make their own bags and let them use their old clothes, materials that the environment can provide them, i.e. recycle and reuse. The campaigns can be done by stakeholder groups like the Rotary Club, Amarant, Mason and other associations.

CONCLUSIONS

Based on the summary of findings, the following conclusions were formulated:

1. The consumer respondents included in the study vary according to age, sex, civil status, highest educational attainment, occupation in the institution, estimated monthly salary, daily purchases and location of purchases of eco-friendly bags. Results showed that there is a significant relationship between respondents' profile and the preferences of using eco-friendly bags.
2. The type of eco-friendly bags used influences consumer preferences on the use of eco-friendly bags; durability is a prime consideration on usage.
3. The consumer respondents concur and of the same opinion that the use of eco-friendly bags are environment-friendly, reusable, durable, light to carry, affordable and contribute to waste reduction.

RECOMMENDATIONS

In the light of the findings and conclusions of the study, the following recommendations are advanced:

1. Other profile variables not seen in this study and other groups of consumer respondents can be included in future studies.
2. Other methodologies to gather data on consumer preferences and attitudes can be explored in future studies apart from surveys such as interviews and focus group discussions.
3. Producers of eco-friendly bags can also be included in future studies to gather information on the reasons for why they are producing eco-friendly bags, their motivation, preferences and attitudes.
4. Strengthen the campaign and advocacies on the benefits and advantages of eco friendly bags.

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MANUAL SCHEDULING PRACTICES: BASIS FOR THE DEVELOPMENT OF AUTOMATED ACADEMIC SCHEDULING SYSTEM FOR A STATE UNIVERSITY BRANCH

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ABSTRACT

The purpose of this study was to analyze, design and develop an Automated Academic Scheduling System for a state University Branch. This study specifically sought to identify the status of the present Academic Scheduling system of a university in terms of Class Schedule, Room Assignment and Faculty Loading as well as the problems encountered. The study used the descriptive method of research using the questionnaire as a main tool of data collection. For the analysis and interpretation of the data gathered, the research used frequencies, percentages and rank. The results revealed that there were deficiencies in the existing Academic Scheduling System and that there was a need to improve such system. These results highly supported the proposal for an automated academic scheduling system to improve the scheduling process.

Keywords: Academic, Automated, Class Schedule, Loading, System, University

INTRODUCTION

The computer has made such an enormous impact on our society today. There is no place you turn where there is no computer around. Most if not all businesses today rely on computers and similar technology. Computerization has been so advanced in the past few years so that it has been the primary tool in the successful growth of every business. Not only does it make daily annoying tasks easy by the click of a button, it also makes traveling to the moon simpler than during the days of the first giant step on it. To have lived in this world for so many years without the use of computers just seem unthinkable or even unbelievable. (Stair et al, 2015).

Computers are now a necessity in businesses, homes, and schools. It is an ideal tool for learning, teaching, working, organizing, and even communicating. Without computers, our society, commerce, and economy will not be advancing at the speed that it is now experiencing.

Tasks that would be time consuming to accomplish manually are more practically faced with the aid of the computer. The need for a computerized system is very much essential to establishments, especially schools. It provides a great help when it comes to organizing and speeding up work processes in offices.

One recent remarkable and widely known product of technology advancement is the conversion of the manually-operated system into an automated system. Automation has produced a great impact in the lives of man, particularly in the field of industry, business, medicine, and education. It has eliminated too much man-power, expense and time in catering to a larger, bigger area of concern.

Bohol Island State University - Balilihan Campus as an educational institution offers services to its clientele more particularly students, community and stakeholders. The primary operations of the school are non-stop starting from pre-enrolment up to the post-graduation activities. These activities require money, labor force and time. It is a fact that arranging schedules for the students and faculty in every department is one of the many activities that each department head must prepare before classes start. For this, the school uses the manual system of preparing the Class schedule, Room Assignment and Teachers load. With the manual system, so much time and labor force is required to plot, arrange, and revise the schedule provided by the department heads.

Before the end of semester, the Department Head together with the instructors starts with the preparation of class and faculty schedules. The Department Head is responsible in preparing faculty loads of every instructor wherein each of them submits a list of subjects he/she prefers to handle for a particular semester. The Department Chairman evaluates the subject and submits it to the committee in charge for consolidation. This Committee is in-charge in making the schedules. When the schedules are finalized, the Individual Teaching Load Form, Room Assignment and Class Program are generated and distributed to the faculty. Although schedules are finalized, there are instances when adjustments and other changes still take place.

BISU - Balilihan students are thus affected by these post final changes in schedules of the faculty.

Such also result in delay of classes. Given this scenario, it is the intent of the researcher being a faculty member of BISU Balilihan to be able to contribute something that would address the problems encountered by the administration with regards to scheduling. Even if the population of BISU Balilihan Campus is not that big, still the researcher believes that the proposed system is helpful to the school as well as to the students and instructors. And this can also be used in other campuses of Bohol Island State University provided that there is an orientation conducted to the end-users on how to operate the system.

STATEMENT OF THE PROBLEMS

This study aimed to analyze, design and develop an Automated Academic Scheduling System for a State University Branch.

Specifically, the researcher sought to answer the following questions:

1. What is the status of the present Academic Scheduling system of a State University in terms of:
    a. Class Schedule;
    b. Room Assignment;
    c. Faculty Loading;
2. What problems are encountered in the present Academic Scheduling system of a State University?
3. What features of a good, automated Academic Scheduling System should be considered?
4. Based on the findings, what Automated Academic Scheduling System be designed and developed?

METHODOLOGY

Research Environment

This study was conducted at Bohol Island State University – Balilihan Campus located in Magsija, Balilihan, Bohol. BISU Balilihan Campus started its operation on June 2006.

Research Respondents

The respondents to this study were the BISU – Balilihan Dean, Fourteen (14) Instructors, and the committee in charge in making the Faculty schedule. Universal sampling method was used by the researcher.

Research Instruments

A researcher-made-questionnaire used to gather the necessary data from the respondents. This instrument consisted of three parts. The first part of the survey instrument collected the present status of the Academic Scheduler that is provided by the university. The second part of the questionnaire asked the respondents to identify problems they have encountered in the present Scheduling system. Third part allowed the respondents to suggest features of a better Academic scheduling system they wish to have in the future.

Research Procedure

The researcher constructed a questionnaire to gather the necessary data from the respondents. A statistician was consulted on the formulation of questionnaires, before it was administered to the respondents.

Gathering of Data. The researcher obtained first the approval of the Campus Director and the Dean of the College to conduct the study in the campus then the distribution of the constructed questionnaire was administered to the identified respondents of the study.

Treatment of Data. Simple frequency, percentages, and weighted means were employed by the researcher to determine the present status of the Academic scheduler, problems encountered and what feature/s could they want to be part of the new system.

REVIEW OF LITERATURE

Schools and universities adopt an automated system and software that help them in managing the school operations. Computerization is a means of simplifying production speed and accuracy for the work elements associated with the mass production.

Scheduling in school is the process of determining what courses to offer, how many sections are needed, determining the best term to offer each section, assigning a faculty member to instruct each section, and scheduling each section to a timeslot to avoid conflicts. The result of this task has an impact on every student and faculty member in the department. The process is typically broken down into three major phases: course planning, faculty assignment to planned course sections, and course scheduling into timeslots (Bellardo, 2015).

As the demand for education increases and diversifies, so does the difficulty of designing schedules for schools and academic institutions. In making a good class scheduler, factors like course clash, teacher, time of making schedule, section open, lab allocation, room and others are to be considered.

One of the more highly charged and controversial topics pertaining to public higher education has been the issue of faculty workload and productivity. Faculty workload is generally defined as “time spent on professionally appropriate activi-

ties" (Paulsen, 2016).

Over that last 30 years faculty workload definition has been changed a lot as now it is being defined in the context of total work time, individual productivity and technology used by teacher in class presentation etc. Faculty workload covers multi factors besides teaching credit hours e.g. committee involvement, research time, community service, office hours, student evaluation, course preparation etc. They group the faculty activities in domains of instruction, scholarship, and service.

With all of these responsibilities, there is really a need for a proper distribution of workloads. In an article entitled "The measurement of faculty workload", it is said that before a measurement procedure can be decided upon, it is necessary to define what is being measured. To measure faculty workload, we need to know which activities are to be included in and which are excluded (Byrd, 2015).

To achieve a conflict and problem free schedule among the faculty, a system should have inputs of information based on the availability and capability of the faculty. Avoiding conflict among schedules and work expertise will produce a harmonious relationship between the administrator, faculty and students as well. An automated academic scheduling should be set up efficient enough to load the right subjects to the right faculty according to their field of specialization. (Evale, 2015).

The proposed software will alleviate the burden and allows the teacher more time teaching and interacting with the student. This will allow the teacher to feel more job satisfaction as well giving the student the feeling of a more personalized education within the system.

There was a study on the performance of Genetic Algorithm on general scheduling problem under criticalconstraints like: (1) No professor appears more than once in one time slot, (2) No room appears more than once in one time slot, (3) Room allocation should be done after evaluating the size and kind of class, (4) No professor can appear in two simultaneous time slots, (5)One course cannot appear in two time slots in the same day, and (6) Multiple class subjects should be allocated to the same time slot (Chohan,2009).

Domingo et.al (2012) stressed that the best schedule are evaluated based on the criteria like the number of sections added, the number of rooms assigned and faculties assigned. Then the schedules which have the highest optimal level will be applied on the table and stored in the database. The generated schedule has constrains like newly added faculties which could not be assigned after generating the schedule.

This study intends to build an electronic database designed for storing information on the proposed Automated Academic Scheduling System. Through this study, arranging, plotting and distribution of schedule will hopefully be done with ease and accuracy resulting to improved services to the students and at the same time satisfaction on the part of the school administration.

It is in the light of these related literature that inspired the researcher to develop an Automated Academic Scheduling System for a State University Branch to keep pace with the above-mentioned innovations and of course to be able to cater to the needs of the students, instructors and the administration as well.

FINDINGS

Table 1 Assessment of the Current Academic Scheduling System

A. CLASS SCHEDULE	**Weighted Mean**	**Descriptive Value**
Provide easy access and retrieval of information.	3.71	Moderately Agree
Designed to meet students needs	3.29	Agree
Done in a timely manner.	2.93	Agree
Responds to the dean's requests in a timely manner.	2.93	Agree
Can generate information quickly	2.50	Disagree
The subjects are scheduled without conflict.	2.43	Disagree
Systematic and error-free.	1.93	Disagree
Weighted Mean	**2.82**	**Agree**
B. ROOM ASSIGNMENT		
Enough to accommodate all courses.	2.29	Disagree
Are properly utilized.	2.14	Disagree
Weighted Mean	**2.21**	**Disagree**
C. FACULTY LOADING		
Instructors are assigned in their specialized area of instruction.	2.86	Agree
Provides easy access to faculty information.	2.71	Agree
Responds to the dean's request in a timely manner.	2.71	Agree
Provides easy access and retrieval of information.	2.71	Agree
There is enough number of faculty to handle classes.	2.43	Disagree
Systematic and error- free.	2.07	Disagree
Weighted Mean	**2.58**	**Disagree**
Average Weighted Mean	**2.81**	**Agree**

Class Schedule. Item 4, the respondents answered **moderately agree**. It indicates that the class schedule provides easy access and retrieval of information. Items 1, 3 and 7, the respondents answered **Agree**. It denotes that the class schedule was done in a timely manner, that it was designed to meet the students' need and responds to the dean's request in a timely manner.

On the other hand, Items 2, 5 and 6, the re-

spondents answered **Disagree**. It implies that the subjects are not scheduled without conflict, it cannot generate information quickly and it is not systematic and error – free.

The Class Schedule has a **sub weighted mean of 2.82** with a descriptive value **Agree**, which means that the respondents were satisfied with the class schedule.

Room Assignment. The respondents reported that the rooms are not properly utilized (wm=2.14) and it cannot accommodate all courses offered (wm=2.29). The Room Assignment has a **sub weighted mean of 2.21** with a descriptive value **Disagree**.

Faculty Loading. An item 2, 3, 5 and 6, the respondents answered **Agree with a sub weighted mean of 2.58**, which denotes that the instructors are assigned in their specialized area of instruction, provide easy access to faculty information, responds to the dean's requests in a timely manner and provides easy access and retrieval of information.

PART II OF THE STUDY DEPICTS ABOUT THE PROBLEMS ENCOUNTERED OF THE PRESENT ACADEMIC SCHEDULING OF THE UNIVERSITY

Table 2. Problems Encountered Regarding the Present Academic Scheduling of the University

Problems Encountered	Percentage	Ranking
Faculty schedule could not finalized on time	92.86	1.5
Manual programming takes time to be finalized and delays the start of classes	92.86	1.5
Frequent consultations with instructors on loading wastes the drafting the schedule	71.43	2.5
Personnel to draft the faculty schedule handle other work assignment	71.43	2.5
Loading creates a problem since instructors are lacking	78.57	3
Teaching load of instructors depend on enrolment which delays the plotting of schedule	64.29	4
Qualifications of available instructors do not fit their loads especially when instructors are not enough	57.14	5
Limited personnel to handle the faculty scheduling	42.86	8.0
TOTAL	**66.97**	

The Table 2 portrays the problems encountered regarding the present Academic Scheduling system includes faculty schedule could not finalized on time, manual programming takes time to be finalized and delays the start of classes are in rank l, frequent consultations with instructors on loading wastes the drafting the schedule, personnel to draft the faculty schedule handle other work assignment rank 2, loading creates a problem since instructors are lacking rank 3, teaching load of instructors depend on enrolment which delays the plotting of schedule rank 4, While, qualifications of available instructors do not fit their loads especially when Instructors are not enough, limited personnel to handle the faculty scheduling, ranks 5th, 6th and 7th.

PART III OF THE STUDY IS ABOUT THE DIFFERENT FEATURES OF AN EFFECTIVE ACADEMIC SCHEDULING SYSTEM.

Table 3. Features of an Effective Academic Scheduling System

Possible Features	Percentage	Ranking
Provides easy access and retrieval of information	92.86	1.3
Improves searching capabilities in terms of vacant classrooms and teachers	92.86	1.3
Provides efficient management of rooms and faculty resources	92.86	1.3
Detects conflict in terms of classroom utilization and faculty loading	85.71	4.0
Provides a user-friendly interface	64.29	5.0
Provides user access level control security	57.14	6.0
Total	**80.95**	

Table 3 reveals that among the different features of an effective Automated Academic Scheduling System, the respondents suggested that the system provides easy access and retrieval of information, improves searching capabilities in terms of vacant classrooms and teachers, and provides efficient management of rooms and faculty resources are among the top 3. Others features are detects conflict in terms of classroom utilization and faculty loading, provides a user- friendly interface, and provides user access level control of security.

After the requirements and specification was determined, the researcher was able to create an Automated Academic Scheduling System for Bohol Island State University – Balilihan Campus.

Below are the screenshots of the different pages:

Fig. 1 Login Form

Fig. 2 Main Page

Fig. 3 Maintenance Master Files

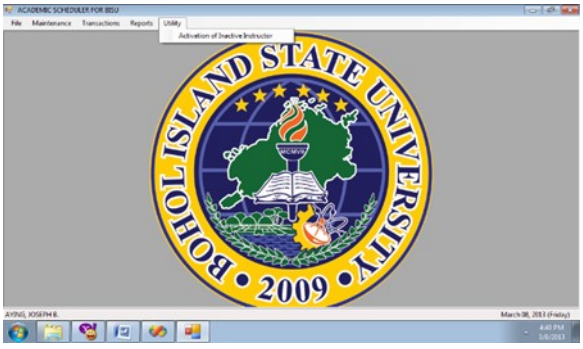

Fig. 4 Utility Menu

CONCLUSIONS

Based on the findings of the study, Academic scheduling problems (e.g. faculty loading or room assignments) upset the flow of transactions in schools. An automated academic scheduling system organizes this flow, resulting in a faster, easier and accurate retrieval/storage of information.

RECOMMENDATIONS

Based on the findings and conclusions, the researcher has come up with the following recommendations:

1. An Automated Academic Scheduling System be designed and developed.
2. In order to fully benefit from this study, it is recommended that the institution should support the Automated Academic Scheduling System.
3. The personnel-in-charge who act as direct user of the system should be equipped with the skills of performing and carrying out the implementation of the system.
4. It is important to provide back-ups and maintain security and integrity of data, information and files.

ACKNOWLEDGEMENT

The researcher is grateful to the respondents and to all have shared their expertise in the realization of this study.

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EVALUATION OF CAMPUS JOURNALISM ACT (RA 7079) IN SECONDARY SCHOOLS OF ZAMBOANGA SIBUGAY: BASIS FOR INTERVENTION PROGRAM

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ABSTRACT

The study evaluated the compliance of RA 7079 otherwise known as Campus Journalism Act of 1991. This survey was administered to 137 campus paper –writers and 19 campus paper advisers of Zamboanga Sibugay. Purposive sampling was employed and descriptive survey was the research design used. Researcher made questionnaire was administered to the respondents and was subject to Cronbach alpha with 94.33 the reliability value for the campus paper writers questionnaire and 96.33 for campus paper-advisers. The study found that most of the provisions of RA 7079 were fully implemented except for the three provisions such as the canvass of the printing, the collection of the school publication and the keeping of school paper fund were never implemented. Results also revealed that there were problems encountered by the by the campus paper advisers on the seven journalistic writings such as campus paper advisers have time constraints , the school has no budget for inviting resource speakers, campus paper –writers are late in the submission of articles. The study recommends that school principals should conduct a training following the proposed intervention program and continue to link with the government agencies for the allocation of school fund for the campus journalism's full implementation and success not only for the school but for developing students' talents .

Keywords: R.A 7079, campus journalism, campus paper advisers, campus paper- writers

INTRODUCTION

The enactment of R.A 7079 in 1992 gave birth to the journalism program in the secondary schools in the Philippines .This is well-known as Campus Journalism Act (Appendix A). This has been declared a state policy to uphold and protect the freedom of the press even at the campus level. It promotes the development of values, critical and creative thinking as well as developing moral character and personal discipline of the Filipino youth. It is therefore the duty of all officials of the Department of Education (DepEd), school, college and university heads, campus paper teachers-advisers and personnel involved in the campus journalism program in the elementary and secondary to support and promote the campus journalism program policies and objectives as embodied in the constitution. As a matter of fact, the DepEd disseminated the DepEd Order no. 94 s.1992 (Appendix B) which enclosed the Rules and Regulations for Implementation (Appendix C).

Campus Journalism is categorized as one of the co-curricular activities among student population where campus paper-writers are trained to write articles such as news, feature, sports, editorial, lay-outing, science reporting, health update report, and making decisions on news play, generally under the supervision of a teacher-adviser (Tanodra, 1993).

In the Division of Zamboanga Sibugay, the first Division Schools Press Conference was held in 2001 since it was separated from the province of Zamboanga del Sur. Despite the existence of this Act, only 17 schools out of the 77 secondary schools made the school publications yearly and participated in the Division press conferences. The annual conduct of the Division press conference has just recently been held at Diplahan National High School on November 27-29, 2015. It was observed that only few schools participated in the contest because of the non-submission of school publication as a strict requirement upon registration of the teacher-advisers and campus paper-writers. Submission of newsletter was strictly scrutinized by the organization to ensure that principals and advisers should really respond to the call of the Division to really implement the campus journalism activity in their respective schools.

Some detrimental aspects have been noted affecting the implementation of the campus journalism. Although teacher-advisers tried their best to create a worthy publication and excel in the schools press conferences, results have been frustrating. Teacher-advisers had full teaching assignments and workloads. Hence, oftentimes, school paper advising was given less attention. As a result, school publication was done hurriedly and haphazardly just to meet the deadline for printing and to serve as passport to join in the press conferences.

With this existing problem, the principal as an instructional leader together with the school paper advisers, play a vital role to implement campus

papering. The problem lies in that not all public secondary schools in Zamboanga Sibugay complied to RA 7079 and its corresponding DECS Order No. 92 s. 1992. It is a call to really support this program in the division for this is one of the criteria in the evaluation of the Results-Based Performance Management System (RPMS), to publish a yearly school press conferences.

STATEMENT OF THE PROBLEM

The study aimed to assess the compliance to provisions of Campus Journalism Act of 1991 in the public secondary schools of Zamboanga Sibugay for the past two years 2013-2015. Specifically, the study sought to answer the following questions:

1. What is the profile of the campus paper-advisers of campus journalism?
   1.a. Teacher's qualification
   1.b. Press conferences attended
   1.c. Number of years as campus paper-advisers
2. What is the level of compliance of the schools to the provisions in Campus Journalism Act of 1991 in terms of:
   2.1 Staffing
   2.2 Conducting the training
   2.3 Preparing the article
   2.4 Lay-outing
   2.5 Finalizing the paper
   2.6 Printing the school publication
   2.7 Participating in the schools press conferences
3. What is the performance of the schools in the Division Schools Press Conference in terms of the awards/recognition of the campus paper-advisers and the campus paper-writers in terms of the 8 journalistic writings?
4. What are the problems encountered in campus journalism by the school paper-advisers in campus journalism implementation?
5. Based on the findings, what intervention program can be developed for the effective implementation of Campus Journalism Act 1991?

RESEARCH METHODOLOGY

The researcher used a descriptive survey method of research with qualitative support. Using the researcher-made questionnaire the researcher assessed the provisions stipulated in Campus Journalism Act of 1991complied by the campus paper-writers and advisers of the Division of Zamboanga Sibugay during the school year 2013-2015. The questionnaire .was the main gathering tool used in the study that asked questions on the activities, practices and problems encountered by the campus paper-advisers.

The researcher-made questionnaire was subjected to two validation processes. Three campus journalism experts validated the researcher-made questionnaires. The help of master teachers, campus journalism facilitators and Division English Supervisor of Zamboanga Sibugay were valuable support to speed up the formulation of researcher-made questionnaires.

The second validation was done for reliability coefficient of the questionnaires which was done in the city division of Cagayan de Oro City where thirteen campus paper-advisers and twenty-five campus paper-writers of public secondary schools successfully responded. These schools were top performing schools in Cagayan de Oro City and perennial winners in the schools press conferences. Cronbach Alpha was used to test the reliability of the questionnaires. The result was 94.33% for school paper-advisers and 96.53% for campus paper-writers' questionnaires. This means that the questionnaire was highly reliable.

A casual interview was also conducted using the interview schedule with open-ended questions with the campus paper advisers. They were asked questions that focused on the activities, practices and problems encountered of the campus paper-advisers in giving technical guidance in managing and supervising the editorial staff.

RELATED LITERATURE

International Studies

The study of Finnochiaro (1981) emphasized the major premise of language proficiency as the factor of social acceptability of language use and it is supported by Giesecki (1982) who made a comparative study of English Composition Errors of Japanese university students with public school English textbooks. The study focused on the problem of textbook dependency in teaching English as a foreign language in Japan while Onyedike (1985) made a study to find out the qualifications of degree-holding journalists and non-degree holding journalists. The objective of this study was to help improve the journalism education in Nigeria.

Gamble and Gamble (1986) cited that before an event becomes newsworthy, it must meet the following criteria: 1) Prominence. It deals with persons, places, things, and situations, which are familiar to or of importance to the readers; 2) Proximity. This refers to the nearness of the event to the readers; 3) Oddity. This refers to any unusual or

deviation from the normal course of events like pregnant man, bearded woman, and others are newsworthy; and 4) Human Interest. It deals with events which are appealing to the emotion.

Fergusson, (1993) and Osborne (2008) stressed that journalism plays an important role on campuses that have been declared a place where members of the school community exchange ideas through columns, letters or to the editors and where the student-journalists can hone their skills in the field. It is essential not only to the students to learn but they help the community, Cullier (2013) president of the Society of Professional Journalists. Without journalism, people will fall apart, and do not know what is going on around the campus.

Local Studies

According to Tanodra (1984) the campus papers sphere of news coverage today has noticeably become broader and the basis of all news is fact. The task of the reporter is to make facts interesting to the particular readers. For this reason, reporters must present their news to their readers. This is supported by Cruz (2007) when he cited that news should be factual, truthful, accurate and interesting.

Bautista's study (1992) also affirmed that students' problems in writing can be helped only if the difficulties in grammar are identified. Querubin (1993) investigated on the status, practices, and problems of school paper management in Manila and provincial high schools. The study revealed that only few of the teacher-respondents had acquired formal training in journalism

The different studies mentioned are very significant to the study. They helped supporting the different problems and perhaps correlate to the result of the study.

FINDINGS AND INTERPRETATION

Table 1. Profile of the Campus Paper-Advisers in Campus Journalism

Profile-Teachers' Qualification	N	%
A. Journalism Graduate	0	0
BSE English	16	84.21
BSE Filipino	3	15.79
B. Press Conferences Attended		
DSPC	3	15.79
NSPC	10	52.63
RSPC	6	31.58
Total	**19**	**100.00**
C. Number of Years as campus-paper-adviser		
1-5	10	52.63
6-10	6	31.58
11-15	3	15.79
Total	**19**	**100.00**

Table 1 shows the percentage distribution of the teacher-adviser's profile. Data revealed that most of the respondents are BSE English graduates (84.21%).The results revealed that none of the advisers is major in journalism. It was evident that graduates in journalism usually ended up into radio broadcasting and television networks such as ABS-CBN, GMA, TV5 and the like. On the other hand, BSE English got the highest percentage since this major in English was usually offered in nearby universities and colleges.

Table 2a Level of compliance of the Campus Paper-Writers in the provisions of Campus Journalism Act of 1991 as assessed by campus paper-adviser

Provisions	Mode	Level of Implementation
Staffing	5	Fully Implemented
Conducting the training	5	Fully Implemented
Preparing the Article	5	Fully Implemented
Lay-outing	5	Fully Implemented
Finalizing the Paper	5	Fully Implemented
Preparing the School publication for Printing	5	Fully Implemented
Participating in the Division Press Conferences	5	Fully Implemented

Table 2a shows the seven provisions were fully implemented as assessed by the campus paper-writers. It was gleaned from the result that provision on staffing, as assessed by campus paper-writers was fully implemented. It was shown from the result that school paper-advisers did the staffing that conformed the standard in selecting the new editorial staff. It was evident that the school paper-advisers were majors in English language. As stipulated in Republic Act 7079 Rule VII, Section 1, staffing through competition needs the expertise of qualified teachers to evaluate the members of the editorial staff. Hence there is a need to designate a campus paper adviser, who has a background/ training or enough knowledge on campus journalism.

Table 2b Level of compliance of the Administrator in the provisions of Campus Journalism Act of 1991 as evaluated by the campus paper-writers

Provisions	Mode	Level of Implementation
On Implementing the CA 1991	5	Fully Implemented
On Selecting the Campus Paper-adviser	5	Fully Implemented
On Planning the School Paper	5	Fully Implemented
On Collecting the School paper fee	5	Fully Implemented
On Canvassing the Printing	5	Fully Implemented
On Keeping the School Paper Fund	5	Fully Implemented

Table 3a. Level of compliance of the Campus Paper-Advisers in the provisions of Campus Journalism Act of 1991 as assessed by campus paper-adviser

Provisions	Mode	Level of Implementation
Staffing	5	Fully Implemented
Conducting the training	5	Fully Implemented
Preparing the Article	5	Fully Implemented
Lay-outing	5	Fully Implemented
Finalizing the Paper	5	Fully Implemented
Preparing the School publication for Printing	5	Fully Implemented
Participating in the Division Press Conferences	5	Fully Implemented

Table 3a shows that the seven provisions of campus journalism for campus paper-advisers were Fully Implemented in their campuses as assessed by the campus paper-advisers. From Staffing, Conducting the training, Preparing the Article, Lay-outing, Finalizing the Paper for the School Publication and Participating in the Division Press Conference were fully implemented by the nineteen (19) schools respondents of Zamboanga Sibugay.

Table 3b. Level of compliance of the Administrator in the provisions of Campus Journalism Act of 1991 as evaluated by the campus paper-advisers

Provisions	Mode	Level of Implementation
On Implementing the CA 1991	5	Fully Implemented
On Selecting the Campus Paper-adviser	5	Fully Implemented
On Planning the School Paper	5	Fully Implemented
On Collecting the School paper fee	5	Never Implemented
On Canvassing the Printing	5	Never Implemented
On Keeping the School Paper Fund	5	Never Implemented

Table 3b, posited that there were three provisions that were never implemented in the respective schools. As depicted on the table, these three provisions were On Collecting the Campus Paper, On Canvassing the Printing and On Keeping the Campus Paper Fund.

It was revealed in the interview that those big schools such as Naga NHS, Tungawan NHS, Surabay NHS, Titay NHS, Diplahan NHS, Siay NHS which belong to Independent Units (IU'S) have disbursing officers who collected the school publication fee while those small schools, the school treasurers are the ones who usually collected the school publication.

Research Question #3: What is the performance of the schools of the schools in the Division Schools Press Conference in terms of the awards/ recognition of the campus paper-advisers and the Campus paper-writers in terms of the 8 journalistic writings?

Table 4a. Performance of the 17 Schools in the Division Schools Press Conference (DSPC) SY: 2013-2014 Journalistic Writing Skills

Schools	Journalistic writings	Total Points	Rank
Titay NHS	8	43	1
Surabay NHS	8	46	2
Imelda NHS	8	47	3

Table 4b. Performance of the 17 Schools in the Division Schools Press Conference (DSPC) SY: 2014-2015 Journalistic Writing Skills

Schools	Journalistic writings	Total Points	Rank
Diplahan NHS	8	33	1
Tungawan NHS	8	39	2
Malangas NHS	8	49	3

Table 4a and 4b show the performance of the seventeen (17) schools in the Division schools Press Conference (DSPC) for the past two years SY-2013-2014 and 2014-2015 respectively. The performance was based on the results of the eight journalistic writing contests done in the Division Schools Press Conference.

For school year 2013-2014, the data revealed that among the 17 big schools, Titay National High School garnered 43 points and won as rank 1. Although this school had big number of students' population, campus paper-advisers had one-on-one coaching with their campus paper-writers. Looking at the results, the highest rank school signified the big student population and contributed much to the performance level of the students. It can be noted, that in these big schools, the advisers could freely choose potential budding journalists and high caliber school paper-advisers compared to small schools.

Research Question #4: What are the problems encountered in campus journalism by the school paper-advisers in campus journalism implementation? (N=19)

Table 5. Problems encountered by the Campus Paper-Advisers in the Implementation of Campus Journalism

STAFFING		
1. Campus paper-adviser has time constraint thus giving less attention	12	1
2. Campus paper-adviser has no sufficient background in selecting the staff	3	**2**
3. Campus paper-adviser is oftentimes changed or relieved	2	**3**
4. Campus paper-adviser is oftentimes changed or relieved	0	**4**
5. Campus paper-adviser is neophyte in campus papering	2	**4**
TOTAL	**19**	
CONDUCTING THE TRAINING		
1. The school has no budget for inviting resource speaker.	10	**1**
2. The campus paper-adviser conducts training during free time.	4	**2**
3. The principal does the lecture in school.	1	**4**
4. Campus paper-advisers are burdened with their teaching load.	3	**3**

5. Don't have contingency to conduct the training.	1	**4**
TOTAL	**19**	
ON PREPARING THE ARTICLE		
1. Campus paper-writers are late in the submission of articles	13	**1**
2. Campus paper-writers are busy with their co-curricular activities.	2.5	**2**
3. Campus paper-advisers do most of the campus paper job	2.5	**2**
4. Limited articles.	1	**3**
5. Time constraints in editing the articles.	0	**4**
TOTAL	**19**	
ON LAY-OUTING		
1. The campus paper-advisers are not expert in lay -outing.	10	**1**
2. The printing press will do the lay-outing**.**	5	**2**
3. The campus paper-adviser is not computer literate.	4	**3**
4. Neophyte campus paper-adviser has attended the training.	0	**4**
5. Page designing on the part of the teacher-adviser is tough and complicated subject.	0	**4**
TOTAL	**19**	
ON FINALIZING THE PAPER		
1. Campus paper-advisers are having hard time checking, proofreading the article because of erroneous grammar.	7	**1**
2. Campus paper-writers have difficulty in writing the headline.	5	**2**
3. Campus paper-adviser is busy for graduation.	4	**3**
4. The campus paper-adviser has dual assignments	2	**4**
5. Campus paper-writers are late in submitting the articles.	1	**4**
TOTAL	**19**	
ON PRINTING THE SCHOOL PUBLICATION		
1. The school printed using the news print.	14	**1**
2. The budget of the printing was used during RSPC because of numerous winners	4	**2**
3. The principal controls the school paper fund.	1	**3**
4. There are constraints of money in transporting the articles to the printing press.	0	**4**
5. Non-implementation of campus journalism.	0	**4**
TOTAL	**19**	
ON PARTICIPATING IN THE DSPC		
1. The students have not fully paid the school publication.	12	**1**
2. The LGU allocated fund for traveling expenses of campus-journalists.	3	**2**
3. Campus paper-adviser secured money just to attend the School Press Conference	1	**4**
4. Campus paper-adviser borrowed money from the PTA.	2	**3**
5. Less Collection from the school treasurer.	1	**4**
TOTAL	**19**	

The table shows the problems encountered during the implementation of the rules and regulation of RA 7079. Results have revealed teacher related problems. Of the five items, teacher advisers had full time teaching load thus giving less attention to campus journalism work. The findings indicated further that the teacher advisers could not give more quality time to campus paper advising due to their full time teaching. In some cases, campus paper-advisers were changed or relieved very often. As a result what the adviser learned in a year could no longer be taught to the staffers by another new assigned campus paper-adviser.

Among other aims of Campus Journalism Act 1991 is to train the students the skills and mechanism of campus journalism. However, with such teaching load assignment nothing more is left or training the staffers. Instead of training or teaching the staffers, the campus paper-adviser rather found it convenient to do the work of the campus papering herself.

Research Question #5: Based on the findings, what intervention program can be developed for effective implementation of Campus Journalism Act 1991?

ACTIVITY TRAINING AS INTERVENTION PROGRAM ENHANCEMENT SEMINAR-WORKSHOP ON CAMPUS JOURNALISM FOR CAMPUS PAPER ADVISERS
September 24-26, 2019
(Actual 3-day Training)

DAY 1

Time	Activity	Person In-Charge/ Speaker	Output
AM 7:00-8:00	Registration	Zambo Sibugay School Paper Advisers	
8:00-8:45	Opening Program	Person In Charge: SLC I	
8:45-9:00	H E A L T H B R E A K		
9:00-12:00	Orientation on the Problems of Campus Journalism re: Implementation of the Mandate which are the following: •Collection of School Paper Fee •Keeping of School Paper Funds •Canvassing of Printing of the School Publication	Person In Charge: Maribel T. Cuadra, MT II	Campus paper-advisers are oriented to implement the provisions of RA 7079 which are not implemented in the study.
12:00-1:00	L U N C H		
PM 1:00-5:00	Open Forum and Discussion On the Three Provisions Commitment Statement	Dr. Crisanto E. Avila	

DAY 2

Time	Activity	Person In charge/ Speaker	Output
AM 7:00-8:00	Management of Learning	SLC II	Composition/ Selection of Staff/ Campus Paper writers Articles presented
8:00- 9:45	Staffing Workshop & Critiquing	Person In-charge/Speaker Ronnie R. Sunggay, Ed.D	
9:45- 10:00	H E A L T H B R E A K		
10:00-12:00	Conducting the Training/ Workshop/ Critiquing	Dr. Marivi L. Castro	
12:00-1:00	L U N C H B R E A K		
PM 1:00-5:00	Lay Outing	Dr. Crisanto L. Avila	Laid – Out Materials

DAY 3

Time	Activity	Person In-charge/ Speaker	Output
AM 7:00-8:00	Management of Learning	SLC 11I	Finalized Articles Presentation of Outputs Awarding of best articles and best writers.
8:00-9:45	Finalizing the Paper/ Workshop/ Critiquing	Person In Charge: Marivi L. Castro, Ed.D.	
9:45-10:00	H E A L T H B R E A K		
10:00-12:00	Presentation of Outputs/ Critiquing	Dr. Crisanto E. Avila Dr. Ronnie R. Sunggay Dr. Marivi l. Castro	
12:00-1:00	L U N C H		
PM 1:00-5:00	Closing Program Awarding of Winners Emcee: Mrs. Maribel T. Cuadra	Dr.Crisanto E. Avila Dr. Ronnie R. Sunggay Dr. Marivi L. Castro	Signed Commitment Statement

Prepared by:

MARIBEL T. CUADRA, MT-II

Approved:

SALVADOR D. ARQUILITA, MMEM
Principal III

Diplahan NHS Action Plan for SY-2019-2020

Provisions	Objectives	Strategies/ Activities	Persons Involved	Resources	Budget/ Time Frame	Expected Outcomes
Training on RA 7079 **PROVISIONS** **1. On Staffing**	1. To enhance the knowledge on campus journalism. 2. To select the best writer for each category. 3. To organize the editorial staff in English.	Inform each adviser about the program and encourage the students to join the selection for the new journalists	Adviser / campus Paper Writers	Pad Paper, newspaper, pencil, ball pen, bond paper	School Fund/ Solicitation/ from LGU's JUNE	Campus journalists are equipped with the skills on how to write a good article. The editorial staff in English is already finalized
2. Conducting the Training	2.1. To orient and train the campus paper advisers and staffers.	Hire experts in campus journalism technique to conduct intensive trainings to gain and assure more winners in the DSPC.	Staffers and campus paper advisers.	Honorarium for the resource speaker, and snacks for the campus paper-writers during the workshops.	School Fund	Intensive training results to numerous winnings.
3. On Preparing the Article	3.1. To give articles to the campus paper-writers ahead of time to avoid delay in checking and lessen the work of the school paper advisers	Give extra points to writers who will submit on time the articles assigned to them	Staffers and campus paper advisers	Surf the internet to have more additional inputs on the style, format, technique in campus papering task.	August / October	Be inspired and motivated to write for they are given merits on their academic performance
4. On Lay-Outing	4.1. To develop students' skills in lay-outing through desktop publishing	Advisers' participation is a must.	Campus paper advisers and writers	Travelling expenses incurred during the Regional training on Lay-outing	August	Quality papers or pages underwent series of checking the revisions and frequent visitation at the printing press
5. On Finalizing the Paper	5.1. To gather, edit, proofread the submit-ted articles. 5.2 To orient the policy on the on the Collecting of School Paper Fee, On Keeping the Campus Paper Fund and On Canvassing the Printing of the campus publication.	Consistency of the grammar, content and style.	Editorial staff, advisers and administrator.	Partial payment for the printing press.	Last week of September	Typographical errors should be polished well.
6. On Participating the DSPC	6.1 To attend the Division Press Conference and submit the school publication as entry in the competition.	Solicit money from LGU and other stakeholders to have 100% participation.	Editorial staff/ Campus Paper-Advisers	Registration of winners and travelling expenses of the campus paper writers in participating the Press Con.	Donation from LGU, Solicitation, Parents/ School Fund 3rd Week of November	Reaped Awards and plus factor for the campus paper advisers as additional points in the RPMS.
7. On Collecting the School Paper Fee	7.1. To explain to the parents how importance is the campus publication.	Collect publication fee from the students.	School Treasurer Parents/ Editorial Staff and A	Payment for the registration for participants in the Press Con	Collection from students	Make assurance that the editorial staff should have the payment for the travelling expenses in the Press Con

Provisions	Objectives	Strategies/ Activities	Persons Involved	Resources	Budget/ Time Frame	Expected Outcomes
8. On Keeping the Campus Paper Fund	8.1. To inform the parents that the collection should be deposited in the bank for safe keeping.	School Treasurer should have patience to collect the 90.00	School Treasurer / Editorial Staff and School Administrators		January	To safeguard the collection of the campus publication.
9. On Canvassing the Printing of the Campus Publication	9.1 To choose the cheapest cost of printing press for it underwent bidding.	Editorial staff and school principal will be the one to find the printing press.	Editorial Staff/ Adviser/ School Principal		3rd week of March	Produce and distribute a credible campus publication at least once a year to the students and stakeholders.

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RESULTS

The study revealed the following findings:

1. Table 1indicates that 16 campus paper-advisers are majors in English and three are Filipino majors but none of them is a major in Journalism. Furthermore, ten out of 19 campus paper advisers have attended to the National Schools Press Conference and 52.63% of the campus paper-advisers have 5 years of experience in campus papering activity.
2. The level of compliance of the schools to RA 7079 was that four of the RA 7079 provisions were fully implemented and three provisions were never implemented. These provisions which are fully implemented are: a.) Staffing; b.)Conducting the Training; c.)Preparing the Article; d.)Lay-Outing; e.)Finalizing the Paper f.)Preparing the School Publication for Printing and g.) Participating in the Division Press Conference however, other provisions such as a.) Collecting the School Paper Fee, Canvassing the Printing, and Keeping the School Paper Fund were never implemented by the schools' administrator.
3. Big schools such as Naga NHS, Tungawan NHS, Diplahan NHS, Surabay NHS, Titay NHS and Siay NHS manifested to have good performance and have numerous awards in the Division Press Conference for they can freely choose high caliber budding journalists and have one-on-one coaching. The provisions in campus journalism by campus paper-advisers were fully implemented by the campus paper-advisers. But there were those not implemented. They were also much aware of the existing guidelines of the campus journalism for they were confronted and reminded to fully implement the campus journalism Act. One remarkable achievement of Titay NHS was they garnered awards as number one in feature writing, sports writing, and editorial cartooning. Second, to get award in the DSPC was Surabay NHS and third was Imeldaa NHS.
4. The problems encountered by the campus paper advisers are the following: a.) Staffing that campus paper adviser has time constraints thus giving less attention; b.) Conducting the training , the school has no budget for inviting the resource speaker; c.) On Preparing the article, campus paper writers are late in the submission of articles; d.)On Lay outing, campus paper advisers are not expert in lay outing; e.) On Finalizing the Paper, the campus paper advisers are having hard time checking, proofreading the article because of erroneous grammar; f.) On printing the School Publication, the budget of the printing was used during RSPC; g.) On Participating the Division Press Conference, the students have not fully paid the school publication fee.

CONCLUSIONS

The following conclusions are drawn based on the findings of the study.

1. The study shows that among the 19 campus paper advisers, most are majors in English and has no journalism degree a few are majors in Filipino.
2. Most of the campus paper advisers have attended the division, regional conferences while few attended the national press conference with the full support of the administrators.
3. Most of the campus paper-advisers have ample experience in campus papering activity.
4. Seven provisions of campus journalism (RA 7079) were fully implemented according to campus paper writers' evaluation while the campus paper advisers' evaluation revealed that there were three provisions of RA 7079 never implemented.
5. The various problems that occurred during the implementation of RA 7079 are the following: the campus paper adviser has time constraints thus giving less attention to the advising; the school has no budget for inviting the resource speaker; campus paper writers are usually late in the submission of articles; the campus paper

advisers are not expert in lay outing; the campus paper advisers are having hard time checking, proofreading the article because of erroneous grammar; the budget of the printing was used during Regional Schools Press Conference (RSPC); the students have not fully paid the school publication fee.

RECOMMENDATIONS

Based on the conclusions, the following recommendations are offered.

1. It is recommended that the administrators or principals shall permit the teachers to undergo the training on RA 7079 following the proposed intervention program.
2. The school head should consider that campus papering task is laborious and tedious therefore it is hereby recommended that campus paper-advisers for campus journalism should be given lesser teaching loads so that they can give much time to check the submitted articles and provide adequate time in training and teaching the staffers on the mechanism and techniques of journalistic writing.
3. Campus paper-advisers should be given incentives such as plus factor in Results- Based Performance Management System (RPMS) and Performance Based Bonus (PBB).
4. The school heads should encourage and support that all campus paper-advisers should work diligently and be trained in order that the schools will have a greater chance of winning in the Regional and National Schools Press Conferences.
5. Experts in journalism such as those from big time newspapers have to be invited, to speak during trainings. This will hone the journalistic writing skills of campus writers and advisers.
6. It is recommended that campus paper writers will also be trained or given enhancement trainings concerning English grammar writing and all the intricacies of the language.
7. School principals and campus paper advisers should continue to network and link to Local Government Unit (LGU) for the allocation School Education Fund (SEF) to help assist the campus paper-advisers and writers in the registration fee of the schools press conference.
8. The school heads should consider the result of this study to strengthen and implement the Campus Journalism program in their respective stations.

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RESEARCH CAPABILITY AND COMPETENCY OF THE PUBLIC SECONDARY SCHOOL TEACHERS IN TAGUDIN, ILOCOS SUR

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ABSTRACT

This study was conducted to investigate the research capability and competency level of the secondary public schools in Tagudin, Ilocos Sur. The research capability level of the respondents in writing a research paper in terms of technical aspect; major and other parts of research paper; significant difference in the research capability level of the teachers; and capability and constraints along the identified competency in writing a research were determined. The study made used of the descriptive method. There were 85 teachers chosen using stratified random sampling. Data were analyzed using weighted mean and ANOVA coupled with interviews. Results show that almost all of the teachers in the different public secondary schools are competent in writing a research paper in terms of technical aspect except for Pudoc West Integrated School (PWIS) with a sub - mean of 3.29 described as "moderately competent" where communication skills scored very low. In terms of the major and other parts of writing a research, the overall mean is 3.63 described as "competent" and Tagudin National High School garnered the highest mean of 4.10 described as "competent". Garitan Integrated School(GIS) and PWIS are moderately competent with a mean of 3.43 and 3.17 respectively. There was no significant difference in the research capability and competency level of the teachers. The capability and constraints in research experiences were considered to choose the school in proposing a research capability building program hence, adopting the school for research extension activities of the Ilocos Sur Polytechnic State College.

Keywords: Research capability,capability, constraints, public school, extension

INTRODUCTION

Research is a systematic inquiry to describe, explain, predict and control the observed phenomenon. The importance of research in every institution nowadays is very significant. It is being used as a powerful method to solve problems, to predict productivity, to determine factors affecting services and many other things which can be done through research. In the education sector, research is one of its core functions aside from instruction, production, and extension. The purpose of research is to inform. Its result should be disseminated to the clientele. There will be suggestions and recommendations that will be presented for adoption and implementations. Thus, research must always be of high quality in order to produce knowledge that is true and applicable.

In conducting a research, each institution has its own format and guidelines. The DepEd undersecretary brought out DepEd Order Nos:, 4, s.2016 and 43 and 13, s. 2015 which are the Adoption of the Basic Education Research Agenda and Basic Education Bureaus and Offices Policy on Research or Studies. In here, DepEd adopts the enclosed Basic Education Research agenda which provides guidelines to DepEd and its stakeholders in the conduct of education research and in the utilization of research results to inform the Department's planning, policy, and program development aligned with its vision, mission, and core values. Even though research guidelines and policies are being drawn, there are still few teachers who are conducting researches in the Department of Education in Tagudin, Ilocos Sur. This is because of the difficulties being encountered in conducting a research. Bocar (2009) stated that "in conducting research, researchers must be cautious. They must be conscientious and need to work in the library for a certain number of hours each week." Aside from the time constraints of the teachers in doing a research, and although they have already learned about research in their research methodology subject in the graduate studies, they need to know more some things that take more difficult than what is planned, and there are some stages in research work that are more difficult than what the researchers expect. Further that most of the time, doing research is very tedious and tiring and there are unexpected difficulties and problems. Hence, this study is conducted to investigate the competency of the public secondary school teachers in the municipality of Tagudin, Ilocos Sur. The result of the study will be the basis of the Ilocos Sur Polytechnic State College to conduct research capability extension programs to the different public secondary schools of Tagudin, Ilocos Sur.

OBJECTIVES

This research study was conducted to investigate the research capability and competency of the public secondary school teachers in Tagudin, Ilocos Sur. Specifically, the study sought to answer the following questions:

1) What is the research capability and competency level of the public secondary school teachers in writing a research paper in terms of the following:
   1.1. technical aspect,
   1.2. major and other parts of research paper?
2) Is there a significant difference in the research competency level of the teachers in the different public secondary schools in Tagudin?
3) What are the capabilities and constraints along the identified competency in writing a research?
4) What research capability building program could be proposed to enhance the research capability of the teachers?

METHODOLOGY

The study utilized the descriptive research design to elicit the research capability level of the respondents. The capability and constraints in research experiences were considered to propose a research capability building program. The respondents of this study were the 85 public secondary school teachers teaching different subjects for the academic year 2018 – 2019. The stratified random sampling technique was used to proportion the number of respondents to be taken from the five (5) public secondary schools in Tagudin, Ilocos Sur. A questionnaire checklist adopted from the study of Formelozo (2013) was the main gathering tool to investigate the research competency of the respondents supported by interviews and observations.

All data were tabulated, computed and analyzed. The composite mean was used to analyze the level of research competency of the teachers and to determine the significant difference in the research capability level of the different public secondary high school, the analysis of variance (ANOVA) was used.

Competence of the respondents in writing research are analyze using the following categorization:

Range	Descriptive Equivalent Rating
4.50 – 5.00	Highly Competent (HC)
3.50 – 4.49	Competent (C)
2.50 – 3.49	Moderately Competent (MC)
1.50 – 2.49	Less Competent (LC)
1.00 – 1.49	Not Competent (NC)

REVIEW OF LITERATURE

Research is the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles or theories resulting in prediction and possibly ultimate control of events (Ragma, 2016). A systematic controlled, empirical, and critical investigation of hypothetical propositions about the presumed relations among natural phenomenon (Kerlinger, 1973).

Salom (2013) reported in his study that the faculty of DMMSU (Mid - La Union Campus) have gained adequate knowledge and have developed skills in putting the rules and principles of the research process into practice; that there is much room to improve the faculty members' writing skills to present, to analyze, and to interpret effectively their research findings; that the level of competence of the faculty in using statistical measures can be strengthened; that the variables of academic rank, highest educational attainment, and teaching load affected the level of research capability of the faculty.

Wilfredo, et.al (2016) concluded that the public secondary and elementary school teachers in the division of Antipolo are moderately capable in writing a research proposal and publishable research paper or article. There is no other profile which affects the research capabilities of public secondary school teachers in writing a research proposal and publishable research paper or article except their position in the school. The research capabilities of public elementary school teachers with respect to writing a research proposal and a publishable research paper or article are affected by sex, civil status and research seminars/trainings attended and not age, position and by highest educational attainment.

As with any type of research, problems exist with action research as well. Shirley Grundy (1994) as cited by Segal (2009) explains that it is necessary to understand that the improvement of the quality of education is a responsibility for the school community as a whole. The importance of school community will come up again in the findings that school environment is key to sustained research. It is not sufficient to think of such improvement as a collection of the work of individual teachers doing their own research. She also argues that this kind of research offers a set of principles upon which the work of improving the learning environment of a school can progress. She considers some examples of whole school action research initiatives that include possibilities and problems associated with school level action research. She finds that there can be problems associated with state-initiated action research projects. Like any research it is important to consider the possible outcomes from a variety of different perspectives and to think critically about the impact on those involved.

FINDINGS

RESEARCH CAPABILITY LEVEL OF THE RESPONDENTS IN WRITING A RESEARCH PAPER

Table 1. Level of competency in writing a research paper in terms of technical aspect

Public Secondary Schools	Ambalayat Integrated School (AIS)		Libtong Integrated School (LIS)		Pudoc West Integrated School (PWIS)	
Indicators	mean	DER	mean	DER	mean	DER
1. Research paper format	3.71	C	3.85	C	3.38	MC
2. Grammar and sentence construction	3.36	MC	3.77	C	3.46	MC
3. Research organization	3.57	C	3.77	C	3.23	MC
4. Communication skills (in writing and the conduct of research data gathering interviews, etc.)	3.50	C	3.92	C	3.08	MC
Over – All Mean	**3.54**	**C**	**3.83**	**C**	**3.29**	**MC**

Public Secondary Schools	Garitan Integrated School (GIS)		Tagudin National High School (TNHS)	
Indicators	mean	DER	mean	DER
1. Research paper format	3.53	C	4.04	C
2. Grammar and sentence construction	3.67	C	4.26	C
3. Research organization	3.27	MC	4.09	C
4. Communication skills (in writing and the conduct of research data gathering interviews, etc.)	3.80	C	4.00	C
Over – All Mean	**3.57**	**C**	**4.10**	**C**

Mean = 3.67 Competent

Legend: DER - Descriptive Equivalent Rating
MC – Moderately Competent C - Competent

Table 1 shows the level of competency in writing a research study of the public secondary teachers in the municipality of Tagudin, Ilocos Sur. Almost all the public secondary school teachers are competent in writing a research. As shown in the table, indicator "*grammar and sentence construction*" has the highest mean of 4.26 described as "*competent*" by the Tagudin National High School teachers and indicator "communication skills" shows the lowest mean of 3.08 described as "moderately competent" by the teachers of Pudoc West Integrated School. The data gathered was triangulated with personal interviews and it was found out that teachers from Tagudin National High School have more trainings in research writing and conducted more action researchers as compared to the other integrated school teachers. This also implies that the trainings and seminars should be given to the researchers especially those in the integrated schools on grammar and sentence construction to improve their skills.

Pudoc West Integrated School (PWIS) rank as the last with a sub - mean of 3.29 described as "moderately competent". This implies that the school needs more capability program than the other secondary public school in the municipality. Interviews from the respondents revealed that many of the teachers have not yet attended research capability seminars. Further that very few have done action research. Hence, the Ilocos Sur Polytechnic State College specially the graduate school may consider the school as their "adopt a school program" to conduct capability programs in conducting research study.

Table 2. Level of competency in writing a research paper in terms of major and other parts of research paper

Indicators	AIS		LIS		PWIS	
INTRODUCTION	mean	DER	mean	DER	mean	DER
1. Writing an introduction	3.79	C	4.00	C	3.31	MC
2. Creating research problem	3.57	C	3.92	C	3.15	MC
3. Formulating theoretical/ conceptual paradigm	3.64	C	3.85	C	2.92	MC
4. Formulating hypothesis	3.57	C	3.92	C	3.15	MC
5. Sources of literature review	3.50	C	3.62	C	3.31	MC
6.Conceptualizing research literature	3.36	MC	3.77	C	3.23	MC
Sub Mean	**3.57**	**C**	**3.85**	**C**	**3.18**	**MC**
METHODS						
1. Develop research design	3.64	C	3.54	C	3.31	MC
2. Data Collection	3.57	C	3.85	C	3.23	MC
3. Sampling Method	3.43	MC	3.77	C	3.08	MC
4. Constructing questionnaires	3.50	C	3.85	C	3.08	MC
5. Data analysis/Statistical Tools	3.57	C	4.00	C	3.15	MC
Sub Mean	**3.54**	**C**	**3.80**	**C**	**3.17**	**MC**
RESULT and DISCUSSION						
1. Presentation of data gathered	3.64	C	3.92	C	3.38	MC
2.Interpretation of data	3.64	C	4.00	C	3.38	MC
3. Cross referencing	3.29	MC	3.85	C	3.23	MC
Sub Mean	**3.52**	**C**	**3.92**	**C**	**3.33**	**MC**
CONCLUSION						
1. Synthesizing results	3.86	C	3.92	C	2.92	MC
2. Expressing additional value or importance to the existing facts	3.36	MC	3.77	C	3.00	MC
3. Formulating recommendations to address the research problem and concerns found in the study.	3.64	C	3.77	C	3.08	MC
Sub Mean	**3.62**	**C**	**3.82**	**C**	**3.00**	**MC**
COMPOSITE MEAN	**3.56**	**C**	**3.87**	**C**	**3.17**	**MC**

Indicators	GIS		TNHS			
INTRODUCTION	mean	DER	Mean	DER	Mean	Rank
1. Writing an introduction	3.60	C	4.04	C	3.75	1
2. Creating research problem	3.47	MC	4.00	C	3.62	3
3. Formulating theoretical/ conceptual paradigm	3.40	MC	4.00	C	3.56	6
4. Formulating hypothesis	3.53	C	4.00	C	3.63	2
5. Sources of literature review	3.53	C	4.04	C	3.60	4
6.Conceptualizing research literature	3.53	C	4.00	C	3.58	5
Sub Mean	**3.51**	**C**	**4.01**	**C**	**3.62**	**2.5**
METHODS						
1. Develop research design	3.33	MC	4.17	C	3.60	3
2. Data Collection	3.67	C	4.26	C	3.72	1
3. Sampling Method	3.60	C	4.17	C	3.61	2
4. Constructing questionnaires	3.40	MC	4.09	C	3.58	4.5
5. Data analysis/Statistical Tools	3.20	MC	3.96	C	3.58	4.5
Sub Mean	**3.44**	**MC**	**4.13**	**C**	**3.62**	**2.5**

Indicators	GIS		TNHS		Mean	Rank
	mean	DER	Mean	DER		
RESULT and DISCUSSION						
1. Presentation of data gathered	3.53	C	4.26	C	3.75	1
2.Interpretation of data	3.27	MC	4.17	C	3.69	2
3. Cross referencing	3.40	MC	4.13	C	3.58	3
Sub Mean	**3.40**	**MC**	**4.19**	**C**	**3.67**	**1**
CONCLUSION						
1. Synthesizing results	3.40	MC	3.96	C	3.61	1
2. Expressing additional value or importance to the existing facts	3.33	MC	4.13	C	3.52	3
3. Formulating recommendations to address the research problem and concerns found in the study.	3.40	MC	4.13	C	3.60	2
Sub Mean	**3.38**	**MC**	**4.07**	**C**	**3.58**	**4**
COMPOSITE MEAN	**3.43**	**MC**	**4.10**	**C**	**3.63**	**C**

Table 2 shows the research capability level of the public secondary teachers in writing a research as to the major and other parts. As presented in the table, there are four major parts in writing a research. The major part "result and discussion" rank as number 1 with a sub mean equal to 3.67. This means that most of the respondents are having difficulty in presenting, interpreting and discussing the result of the data gathered. Further that in table 1, the indicator "communication skills" showed the lowest mean. The major part which has the lowest mean and rank number 4 is "conclusion". Doing the conclusion is another problem for the respondents. In order to conclude, knowledge of data analysis and how to interpret are very important. Conclusions are most likely based from the hypotheses and rejecting or confirming the hypotheses should be the result of data analysis. This implies that researches should understand data analysis even if statisticians are of help.

SIGNIFICANT DIFFERENCE ON THE LEVEL OF RESEARCH COMPETENCY OF THE TEACHERS IN THE DIFFERENT PUBLIC SECONDARY SCHOOLS IN TAGUDIN

Table 3. Significant difference in the level of research competency of the Public Secondary Schools in Tagudin

Source of Variation	SS	df	MS	F	p-value	Fcrit
Between groups	6.68	4	1.67	2.33	0.064337	2.497129
Within groups	52.41	73	0.72			
Total	59.09	77				

Table 3 reveals that there is no significant difference on the level of research competency of the teachers in the different public secondary schools with a p-value equal to .06 at .05 level of significance. This means that the teachers of the different public schools are of equal capabilities and competencies in conducting research study. This implies that research capability building program could be extended in any of the public schools. Further that, all the public secondary school teachers in the municipality should be given chance to attend seminars in any level to enhance their capability in conducting research.

CAPABILITIES AND CONSTRAINTS IN WRITING A RESEARCH PAPER

Table 4.1 Capabilities and constraints in writing a research paper in terms of technical aspect

Public Secondary Schools	Ambalayat Integrated School (AIS)		Libtong Integrated School (LIS)		Pudoc West Integrated School (PWIS)		Garitan Integrated School (GIS)		Tagudin National High School (TNHS)	
Indicators	Capability	Constraints	Capability	Constraints	Capability	Constraints	Capability	Constraints	Capability	Constraints
1. Research paper format	3.71		3.85			3.38	3.53		4.04	
2. Grammar and sentence construction		3.36	3.77			3.46	3.67		4.26	
3. Research organization	3.57		3.77			3.23		3.27	4.09	
4. Communication skills (in writing and the conduct of research data gathering interviews, etc.)		3.50	3.92			3.08	3.80		4.00	

Table 4.1 presents the capabilities and constraints of the public secondary schools in writing a research paper in terms of technical aspect. The school which shows the greatest number of constraints is PWIS. This means that the teachers of PWIS have difficulty in all the technical aspects in writing a research. It is seconded by AIS which have difficulties in grammar and sentence construction and communication skills. The TNHS shows no constraints in writing a research paper in terms of technical aspect. This implies that many of the TNHS teachers are already capable in doing research papers while PWIS and AIS need more trainings in the technical aspect of doing research.

Table 4.2 Capabilities and constraints in writing a research paper in terms of major and other parts

Indicators	AIS		LIS	
INTRODUCTION	Capabilities	Constraints	Capabilities	Constraints
1. Writing an introduction	3.79		4.00	
2. Creating research problem	3.57		3.92	
3. Formulating theoretical/ conceptual paradigm	3.64		3.85	
4. Formulating hypothesis	3.57		3.92	
5. Sources of literature review		3.50	3.62	
6.Conceptualizing research literature		3.36	3.77	
METHODS				
1. Develop research design	3.64		3.54	
2. Data Collection	3.57		3.85	
3. Sampling Method		3.43	3.77	
4. Constructing questionnaires		3.50	3.85	
5. Data analysis/Statistical Tools	3.57		4.00	
RESULT and DISCUSSION				
1. Presentation of data gathered	3.64		3.92	
2.Interpretation of data	3.64		4.00	
3. Cross referencing		3.29	3.85	
CONCLUSION				
1. Synthesizing results	3.86		3.92	
2. Expressing additional value or importance to the existing facts		3.36	3.77	
3. Formulating recommendations to address the research problem and concerns found in the study.	3.64		3.77	

Indicators	PWIS		GIS		TNHS	
INTRODUCTION	Capa-bilities	Con-straints	Capa-bilities	Con-straints	Capa-bilities	Con-straints
1. Writing an introduction		3.31	3.60		4.04	
2. Creating research problem		3.15		3.47	4.00	
3. Formulating theoretical/ conceptual paradigm		2.92		3.40	4.00	
4. Formulating hypothesis		3.15	3.53		4.00	
5. Sources of literature review		3.31	3.53		4.04	
6.Conceptualizing research literature		3.23	3.53		4.00	
METHODS						
1. Develop research design		3.31		3.33	4.17	
2. Data Collection		3.23	3.67		4.26	
3. Sampling Method		3.08	3.60		4.17	
4. Constructing questionnaires		3.08		3.40	4.09	
5. Data analysis/Statistical Tools		3.15		3.20	3.96	
RESULT and DISCUSSION						
1. Presentation of data gathered		3.38	3.53		4.26	
2.Interpretation of data		3.38		3.27	4.17	
3. Cross referencing		3.23		3.40	4.13	
CONCLUSION						
1. Synthesizing results		2.92		3.40	3.96	
2. Expressing additional value or importance to the existing facts		3.00		3.33	4.13	
3. Formulating recommendations to address the research problem and concerns found in the study.		3.08		3.40	4.13	

It can be gleaned from table 4.2 that the school with the highest number of constraints in writing a research paper in terms of major and other parts is PWIS. All indicators are weaknesses by the teachers in doing research paper. This means that many teachers are not yet capable in writing a research paper. Further that the teachers of GIS are also hard up in doing research paper as indicated by their number of constraints. This implies that research capability building programs should be given to the teachers of these schools.

Further, the different constraints served as benchmark in proposing a research capability program to the schools with teachers who are not yet capable in conducting a research paper.

TRAINING DESIGN FOR THE RESEARCH CAPABILITY PROGRAM SEMINAR-WORKSHOP FOR THE PUBLIC SECONDARY SCHOOL TEACHERS IN TAGUDIN, ILOCOS SUR

Rationale

The Ilocos Sur Polytechnic State College with its four-fold mandates; Instruction, Production, Research and Extension, the college shall primarily provide research and extension services within its service area through its research-oriented manpower, support facilities and information and communication technology. On the mandate of extension function, the college must conduct extension activities that will help or improve the lives of the community and in conducting extension programs, extension activities should be the offshoot of research outputs. Hence, the research entitled "The Research Capability and Competency of the Public Secondary Schools in Tagudin, ILocos Sur" was the bench march of this training design for the research capability program seminar workshop for the public secondary school teachers in Tagudin, Ilocos. The researcher found out that the teachers need assistance in conducting their researches. The Ilocos Sur Polytechnic State College is then proposing a memorandum of agreement (MOA) to extend seminar-workshops to the public secondary school teachers.

Objectives

This extension service is in consonance with the ISPSC's primordial concern to conduct extension programs in order to achieve sustainability in the community it serves and eventually the quality of life, geared towards the following:

1. Assist the teachers and researchers of the public secondary school in their effort to learn and conduct research,
2. Produce high impact/quality researches in their field of specialization,
3. Mentor the teacher researchers to become competent researchers' mentors.

Methodology

A Memorandum of agreement (MOA) will be signed between Ilocos Sur Polytechnic State College and the department of education (DepEd), Tagudin District.

Proponent: Ilocos Sur Polytechnic State College – Graduate School

Beneficiaries: Pudoc-West Integrated School, Garitan Integrated School, Libtong Integrated School and Ambalayat Integrated School.

Speakers: The speakers will be from ISPSC pool of experts.

Participants and place: Groups of participants from the public secondary schools are welcome to attend the customize training program which are to be conducted in their respective campuses.

THE TRAINING MATRIX

Lecture-Workshop Title	Brief Description of the activity	Duration/ Schedule
Why conduct a research	This session points out why conduct researches. It aims to present the different benefits of conducting research to the researcher and to the academic institution	1-2 hours
The research process and ethics in research	In conducting research there are norms and conduct that distinguish between acceptable and unacceptable behavior. The topic inculcates to the participants the norms and conduct in doing research.	2-3 hours
Writing a research proposal	How to do the research proposal? Lectures and workshop on the outlines and rationale for writing a proposal and the necessary steps to write a well-argued proposal from a multi-disciplinary perspective.	4-5 hours
How to conduct quantitative research	This session lectures on the when to use quantitative research, its advantages and common approaches.	3-4 hours
Writing an Introduction	The introduction of writing is going to set out the rationale of the research. In this session, it discusses what is a research paper introduction, what to include in the introduction.	3-4hours

Lecture-Workshop Title	Brief Description of the activity	Duration/ Schedule
Sampling Methods for Quantitative Research	The focus of this session is on the appropriate sampling techniques which will be used in quantitative researches. This will enlighten the participants and boost their confidence which sampling methods will give the most valid and reliable result.	3-4 hours
Data Collection Instruments	In this session, the development and validation of various data collection instruments like the questionnaire, rating scales, interview guide, etc. will be discussed	3-4 hours
Analyzing Quantitative Data using statistical software's	Participants are tutored on how to use the SPSS software, Analysis toolpack using excel and the megastat in analyzing the data gathered.	4-5 hours
Summary, Conclusion and recommendation	The participants will be taught on the presentation of findings, drawing conclusion, formulating recommendations from the conclusions and drawing parallelism of findings, conclusions and recommendations.	3-5 hours

Evaluation

An evaluation questionnaire is to be given to each participant to determine the impact of the seminar-workshop on their capability to conduct research and how the training benefited the researcher and the school.

CONCLUSIONS

Based on the findings, the following conclusions are drawn: almost all of the teachers in the different public secondary schools are competent in writing a research papers in terms of technical aspect, major and other parts; there was no significant difference in the research capability and competency level of the teachers in the different public schools; there are capabilities and constrains to be considered in choosing the school for "adopt a school" extension program by the Ilocos Sur Polytechnic State College; and a research capability building program is being proposed to enhance the research capability of the respondents.

RECOMMENDATIONS

On the basis of the findings and conclusions drawn, it is recommended that a tie up among the public secondary school administrators and teachers in Tagudin, Ilocos Sur and the Ilocos Polytechnic State College administrators, Faculty and Students and outside linkages should be encouraged.

ACKNOWLEDGEMENT

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EXPLICIT INSTRUCTION METHOD: ITS EFFECT TO PUPILS' READING PERFORMANCE IN ENGLISH

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ABSTRACT

The main purpose of the study is to determine the effectiveness of explicit instruction method to reading performance of Grade 4 elementary pupils around Candijay, Anda, Mabini, Alicia and Guindulman (CAMAG) Bohol. The researchers used two -sets of modified adapted questionnaires from the study of Demant and Yates (2003) on Primary Teachers' Attitudes toward the Direct Instruction Construct at the University of South Australia for the research purpose and were used as the main tool in gathering data from the respondents. The said questionnaire was composed of two parts: Part I consist of the profile of the teachers including their sex, age, highest educational attainment, and length of teaching experience. Part II consists of twenty-one (21) items on effectiveness of explicit instruction. Moreover, there were a total of 150 student–respondents and 24 teacher-respondents as part of the survey from the selected CAMAG public elementary schools. After subjecting data to documentary and statistical analysis, the t-test for independent samples revealed that there is no significant relationship between the teachers' profile and the explicit instruction; and Spearman Rank Correlation Coefficient (rs). The study found out that teachers' explicit instruction method is said to be inconsiderable to pupils' level of performance in reading, however, it is still useful to their basic skills. Therefore, other factors or an instructional method are considered to influence the level of reading performance of the pupils. There is a need of teacher's evaluation and monitoring on pupil's performance to device an instructional method best suited at their level.

Keywords: Effect, English, Explicit Instruction, Instructional Method, Performance, Pupils, Reading

INTRODUCTION

Reading is one of the most important skills an individual must need to master. Most of the teachers believe that by reading books and more books, a good reader is born (Ballou, 2012 as cited by Pressley, 2006). The main purpose for reading is comprehension. Students who reach high school level are expected to have developed their reading comprehension skills. High school students are asked to comprehend information. Secondary students who demonstrate reading difficulties often have deficits in the area of reading comprehension (Brown, 2018). Comprehension is not a matter of recalling an entire text, but readers should understand the main point of a passage (Kintsch, 2013).

Explicit instruction is a model for teaching that utilizes thorough and carefully planned lessons in which the instructor clearly outlines learning goals and implements structure lessons with the aim of student mastery of distinct, systematic learning objectives. The philosophy of explicit instruction is that teaching should be clear and free of misunderstandings in order to quickly accelerate students' learning (Archer & Hughes, 2011).

The other term is direct instruction, it is affiliated with an instructional approach and curriculum materials developed by Siegfried Englemann and Carl Bereiter in the late 1960. Both explicit and direct instructional design and delivery procedures are one of the best tools available to educators, a structured, systematic, and effective methodology for teaching academic skills. This instruction is very important for the student successful performance and development of their skills in school especially in the development of pupil's reading ability and comprehension. By the use of explicit instruction, this provide an effective instruction and increased students' academic growth (Pfannenstiel, 2015 as cited by Archer & Hughes, 2011, p. 1).

VanPatten and Cadierno (2008) in their experiment study on explicit instruction that compares traditional form-focused instruction and what we call processing instruction. Traditional instruction involves explanation and output practice of a grammatical point. Processing instruction involves explanation and practice/experience processing input data, taking learner strategies in input processing as the starting point for determining what explicit instruction should look like. Pretest and posttest measures involving both a sentence-level interpretation (comprehension) task and a sentence-level production task were submitted to an analysis of variance. Results reveal significant gains in both comprehension and production for subjects who experienced processing instruction. For those experiencing traditional instruction, significant gains were made in production only. The effectiveness of

this instruction is significant to reading comprehension and performance.

Reading comprehension is an important skill for children and their success in learning across all academic areas. It requires students to relate to their life experiences and their reading text. It also requires students to incorporate decoding skills to understand the text they are reading (Sierra, 2012). However, Pilonieta (2010) argues that instruction in comprehension strategies is particularly important for struggling readers as they are unlikely to discover these strategies on their own.

The ability to read is important if one is to succeed in school. This is due to the fact that the comprehension of everything that is learnt in school depends on the learner's good reading skills (Mwanamukubi, 2013).

Furthermore, the study showed that students' comprehension scores increased from 25% to 50% over the course of intervention (Sierra, 2012). The Direct Instruction program has proved to improve these students' reading comprehension skills.

In the theory of Cognitive Processes, PASS (Planning, Attention, Simultaneous, and Successive) of Naglieri and Das, (1997), proposes that cognition is organized in four processes and that these processes are functions of four areas of the brain. The first process is planning, which involves executive functions responsible for controlling, organizing, and monitoring behavior. For example, shifting attention during reading to different parts of the text and selectively allocating resources and effort to different information involve this kind of processing. The second process is attention, which ensures sufficient arousal levels and focus on specific stimuli. For example, performance in selective attention and reading comprehension tasks is likely to be related when there is a need to inhibit stimuli that are not the primary focus of attention (e.g., when a word or a sentence is degraded or masked by non-targets in the surround). Simultaneous processing is relevant when the task or behavior requires integration into whole units of information, or a gestalt.

Bandura's (1997) Theory of Social Learning highlights the idea that much of human learning occurs in a social environment. By observing others, people acquire knowledge of rules, skills, strategies, beliefs, and attitudes. Individuals also learn about the usefulness and appropriateness of behaviors by observing models and the consequences of modelled behaviors and they act in accordance with their beliefs concerning the expected outcomes of actions.

Whereas, the 1987 Philippine Constitution stated in Article XIV, Section 1 that the state shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all.

The government is expected to commit itself in advancing the right to education of every Filipinos. No one is deprived to obtain such opportunity of life because education is made to be equal to all and the purpose of education is to provide an individual with knowledge, skills, competence or usually desirable qualities of behavior and character to render him fit for the duties of life.

Moreover, in Article III, Section 1 of the Code of Ethics for Professional Teacher states that a teacher is a facilitator of learning and of the development of the youth; he shall therefore, render the best service by providing an environment conducive to such learning and growth. This provision means that the teacher shall impart the best learning to develop pupils' potentialities and give full dedication in cultivating the minds of the pupils for total development.

This aims to teach public elementary pupils with planned training in reading and writing to make them independent young readers and writers. Moreover, this is to ensure that the country's public schools produce well-equipped graduates who could cope to the different challenges in life.

STATEMENT OF THE PROBLEM

The study aims to determine the effects of explicit instruction method to pupil's reading performance in the district of Candijay, Alicia, Mabini, Anda and Guindulman (CAMAG) Bohol during the school year 2018- 2019. Specifically, it aims to discover the following aspects of the problem:

1. What is the profile of the teacher respondents in terms of age, sex, highest educational attainments and length of teaching experience?
2. What is the profile of the pupil-respondents in terms of age, sex, and 2nd rating academic performance?
3. What is the level of effectiveness of explicit instruction method as perceived by the respondents?
4. What is the level of reading of the pupil-respondents?
5. Is there a significant relationship between the profile of the respondents and the explicit instruction method?
6. Is there a significant relationship between explicit instruction method and the level of pupils' reading performance?

METHODOLOGY

Research Design

The researcher utilized descriptive survey method. An Explicit Instruction and Reading Performance questionnaire was used to gather factual information from the respondents regarding the effects of explicit instruction to pupil's reading performance in the district Candijay, Alicia, Mabini, Anda and Guindulman during the school year 2018 - 2019.

Environment and Participants

This study was conducted in the third congressional district of Bohol, specifically in the elementary schools of Candijay, Alicia, Mabini, Anda and Guindulman (CAMAG) Districts. These locations are situated in the eastern part of the province of Bohol and forming a zone district of the Department of Education.

The respondents subjected in this study were the elementary school teachers in the said zone. They were composed of one (1) male and twenty-three (23) females for a total of twenty- four (24) teacher respondents. Likewise, the pupil respondents were also included in the study with seventy (70) males and eighty (80) females of grades four in the said elementary schools.

Instruments

The researcher used two sets of modified questionnaire for the research purpose and was used as the main tool in gathering data from the respondents of the study. The questionnaire was composed of two parts: Part I consist of the profile of the teachers including their sex, age, highest educational attainment, and length of teaching experience. Part II is consists twenty-one (21) items on effectiveness of explicit instruction. This questionnaire was part of a survey being conducted by Demant and Yates (2003) on their study on primary teachers' attitudes toward the direct instruction construct at the University of South Australia.

Another set of questionnaire was in checklist form wherein the respondents were requested to answer the questions regarding the level reading performance which is composed of seventeen (17) items. The researcher also gathered the pupil's reading comprehension rating from their respective adviser.

Statistical Treatment

To determine the profile of the respondents, the percentage and weighted mean are used. The Spearman Rank Order Coefficient Correlation rs. was used to determine the relationship between the teacher- respondents' profile and the Explicit Instruction and to determine the relationship between the teachers' explicit instruction and pupils' reading performance, the Spearman Rank Order Coefficient Correlation (rs) formula was used.

FINDINGS

The gathered data were tallied and carried in tabulated and textual form. The data were anatomized through the use of statistical formula and interpreted in conformity to the problems of the study.

Table 1 revealed that majority of the teacher respondents have the age ranging from thirty- six to forty (36-40) years old with the frequency of eight (8) or 33.3% of the total sample size and none of the respondents on the age ranges from twenty- one to twenty- five (21-25) years old, below twenty (20), fifty- one to fifty- five (51-55) years old, fifty-six to sixty (56-60) years old, and above sixty (60) years old. It implies that majority of the respondents are relatively in their late adulthood and matured enough to do their responsibilities.

At this age, the respondents have already gained a considerable length of experiences as well as the youthful energy which would grant them to become skillful, effective and efficient in doing diverse tasks (Susa, 2018). The maturity of handling responsibility and managing the pupils in school at this period has been brilliant.

Table 1. Profile of Teacher-Respondents
N=24

1.1 Age	**Frequency**	**Percentage (%)**	**Rank**
21-25 years old	0	0.0	7
26- 30 years old	2	8.3	5
31-35 years old	5	20.8	2.5
36-40 years old	8	33.3	1
41-45 years old	4	16.7	4
46-50 years old	5	20.8	2.5
51 years old and above	0	0.0	7
Total	**24**	**100%**	
1.2 Sex			
Male	1	4.17	2
Female	23	95.83	1
Total	**24**	**100%**	
1.3 Highest Educational Attainment			
Bachelor's Degree Holder	7	29.17	2
With units in Masters' degree	16	66.67	1
With Masters' Degree	1	4.17	3
With Ph.D./Ed. D. units	0	0.0	4
With Ph.D./Ed. D. degree	0	0.0	5
Total	**24**	**100%**	
1.4 Teaching Experience			
below 1 year	1	4.2	6
1-5 years	4	16.7	3.5
6-10 years	6	25.0	1.5
11-15 years	6	25.0	1.5
16-20 years	4	16.7	3.5
21-25 years	3	12.5	5
26-30 years	0	0.0	0
31 years & above	0	0.0	0
Total	**24**	**100%**	

The table revealed that in terms of sex, female teachers dominated over male teachers garnering 95.83 percent with the frequency of twenty- three (23). Moreover, male teachers has a frequency of one (1) or 4.17%.

Furthermore, in terms of educational attainment, the data disclosed that there were sixteen (16) or 66.67% of the teacher- respondents with units in Master's Degree as highest educational attainment while, only seven (7) or 29.17% of the teacher- respondents were Bachelor's Degree Holder. This explained that majority of them have units in Master's Degree.

In terms of the length of teaching experience, most of the teacher- respondents were equally distributed in the (6-10) and (11-15) years bracket with six (6) or 25.0%. It is believed that, as teachers gain experienced, the pupils/students not only learn more but they also more likely to do better on other means of success (Kini & Podolsky, 2016).

Table 2.1 showed that one hundred thirty- five (135) or 90% of the pupil- respondents were 9 years old that covered majority of the respondents since they are in Grade 4 level in elementary. The lowest were those pupils' ages 11 with (1) or 0.67%.

In terms of sex, there were eighty (80) or 53.33% females, while only seventy (70) or 46.67% were male.

This entailed that majority of the pupil respondents were female and dominated the population in most elementary schools in CAMAG district. Women have increased its population not only in CAMAG area but also in the whole elementary schools in Bohol.

Table 2. Profile of Pupil-Respondents
N=150

2.1 Age	**Frequency**	**Percentage**	**Rank**
8 years old	4	2.67	3
9 years old	135	90	1
10 years old	10	6.67	2
11 years old	1	0.67	4
Total	**150**	**100%**	
2.2 Sex			
Male	70	46.67	2
Female	80	53.33	1
Total	**150**	**100%**	
2.3 Academic Performance in English			
Outstanding (90-100)	101	67.33	1
Very Satisfactory (85-89)	37	24.67	2
Satisfactory (80-84)	12	8.00	3
Fairly Satisfactory (75-79)	0	0.00	4
Did not meet expectations (Below 75)	0	0.00	5
Total	**150**	**100%**	

Table 2 emphasized the profile of pupil-respondents. Most of the respondents achieved the "Outstanding" performance (90-100) garnering one hundred one (101) or 67.33% followed by "Very Satisfactory" with thirty- seven (37) respondents. In contrast, there were twelve (12) or 8.00% of the pupil- respondents with the grades (80-84) or "Satisfactory".

It means that the pupils from these schools met the necessary requirements for the subjects. It further revealed that they were consistent performers as shown in their academic grades. Teachers plays important role in achieving outstanding pupils' performance and with the parents as one of the factors of obtaining such outcome.

Table 3. Effectiveness of Explicit Instruction Method Perceived by Teacher-Respondents
N=24

Statement	**WM**	**DI**	**Rank**
Explicit instruction is a useful teaching method for teaching basic skills	3.54	SA	2
Explicit instruction as a teaching method, is harmful to children's mental development.	1.71	SD	19.5
Explicit instruction receive teaching based on direct instruction deprives children of the ability to think for themselves.	2.63	A	15
Explicit instruction can be used to teach thinking skills.	3.58	SA	1
Explicit instruction is a highly effective teaching method with all students.	3.42	SA	4
Explicit instruction is useless in helping students to really understand things.	1.71	SD	19.5
Explicit instruction is fine but only to slow learners.	2.38	D	18
Explicit instruction is just part of our normal teaching practices.	2.96	A	12
Explicit instruction relates to out dated views of learning that no longer apply.	2.58	A	16
Explicit instruction is not consistent with the view that students are active learners who develop personal self-management strategies.	2.54	A	17
Explicit instruction selected carefully the text to use when first beginning to teach a given strategy.	3.25	SA	10
Explicit instruction shows students how to apply the strategies they are learning to different texts, not just to one text.	3.38	SA	3
Explicit instruction ensures the text is appropriate for the reading level of students.	3.33	SA	6.5
Explicit instruction use teaching students how to use comprehension strategies.	3.33	SA	6.5
Explicit instruction provides the appropriate amount of guided practice depending on the difficulty level of the strategies that the students are learning.	3.29	SA	9
Explicit instruction use when on teaching comprehension strategies to make sure students understand the content of the text.	3.33	SA	6.5
Explicit instruction have longitudinal effects on students' conventional achievement and participation leve	3.21	A	11
Explicit instruction use to prepare students for an activity in which the students work collaboratively on a group project with guidance and coaching from the teacher as needed	3.33	SA	6.5
Explicit instruction can be rigid enough to hinder the creativity of the teacher.	2.79	A	14
Explicit instruction an activity like in reading are much more teacher-guided than in certain other methods.	2.92	A	13
Average Weighted Mean (AWM)	**2.93**	**Agree**	

Legend:		
Rating Scale	**Descriptive Interpretation (DI)**	**Weighted Mean (WM)**
3.25 – 4.00	Strongly Agree (SA)	
2.50 – 3.24	Agree (A)	
1.75 – 2.49	Disagree (D)	
1.00 – 1.74	Strongly Disagree (SD)	

In table 3, among the itemized description of explicit instruction method used by the grade IV teachers of the selected public elementary schools in CAMAG districts, item number 4 "can be used to teach thinking skills" rated as the highest rank receiving a weighted mean of 3.58 or "Strongly Agree". The greatest goal of explicit instruction/ direct instruction is to increase the learning of the students and also systematically developing vital background knowledge and explicitly applying it and connecting it to new knowledge (Hall & Vue, 2014).

However, the lowest in rank were the item number 2 "as a teaching method, was harmful to children's mental development" and number 6 "useless in helping students to really understand things" with a weighted mean of 1.71 or described as Strongly Disagree. The respondents failed to agree about the two statements regarding the use of explicit instruction. However, these proved by Hollingsworth and Ybarra (2018), who provided several designs for lessons and strategies to achieve the used of explicit instruction including the "Checking for Understanding" to continually attest that pupils/ students are learning what they are being taught (Hammond & Moore, 2018).

In general, explicit instruction items received an average weighted mean of 2.93, categorically described as "Agree". It can be illustrated based on the data collected that grade IV teachers agreed that explicit instruction is useful to pupils. The respondents coincided that the used of explicit instruction to the classroom is effective and helpful especially in obtaining good academic grades. By the use of explicit instruction, this provide an effective instruction and increased students' academic growth (Pfannenstiel, 2015 as cited by Archer & Hughes, 2011, p. 1).

Table 4. Reading Performance of the Pupil- Respondents N=150

Statement	WM	DI	Rank
During instruction, the pupils…			
grasp the main idea of the material while reading English.	4.23	E	3
turn to dictionaries when coming across new words in the English reading.	4.01	VS	6
do not bother with the grammatical structure of sentences while reading.	3.95	VS	7
predict the main idea of the whole passage from its title or subtitles.	3.81	VS	10
guess the meaning of new words by analyzing their roots or prefixes or suffixes.	3.55	VS	14
do not pay attention to the implied meaning of the reading material.	2.75	S	17
read articles, they skip the words that are new to me.	3.03	S	16
pause and analyze the structure of sentences when reading.	3.77	VS	11
try to guess the main ideas of the text on the basis of pictures, charts or figures.	4.19	E	4
try to understand complicated sentences by analyzing their structure.	4.13	VS	5
grasp the gist of the reading material through quickly reading the first and the last paragraphs.	4.25	E	2
guess the meanings of new words in context when reading in English.	4.27	E	1
try to interpret the writer's intention while reading.	3.67	VS	13
overlook the sentences with complicated structures.	3.31	S	15
use simple words to replace difficult ones in sentence understanding.	3.91	VS	9
predict the main idea of the whole passage from key words.	3.77	VS	12
try to grasp the general idea of a sentence before going to read the next sentence.	3.94	VS	8
Average Weighted Mean (AWM)	**3.77**	**Very Satisfac-**	

Legend:		
Rating Scale	**Descriptive Interpretation (DI)**	**Weighted Mean (WM)**
4.20 – 5.00	Excellent (E)	
3.40 – 4.19	Very Satisfactory (VS)	
2.60 – 3.39	Satisfactory (S)	
1.80 – 2.59	Fair (F)	
1.00 – 1.79	Poor (P)	

Table 4 revealed the responses of the pupils on their reading performance. Majority of the pupils during instruction, applied the item "guess the meanings of new words in context when reading the English" receiving 4.27 weighted mean described as "Excellent". Reading is a skill that should not be neglected because it is the source of new vocabulary for learners. The learners mostly see vocabulary in a context. A good learner should have the ability of guessing the meaning of the unknown words based on the context (Zhang, 2011).

In contrast, pupils least applied the item "do not pay attention to the implied meaning of the reading material" with the weighted mean of 2.75 described as "Satisfactory". In an overall, it can be interpreted that pupils' responses will be described as "Very Satisfactory" in reading English with an average weighted mean of 3.77. Students who were given direct instruction in word meanings were better able to discern meanings of untaught words (Baker, Grossen, and Gersten, 2002).

Table 5. Relationship Between the Teacher-respondents' Profile and the Explicit Instruction $N_1=24$; $N_2=150$

Explicit Instruction and ……	X^2	p-value at $\alpha=0.05$	Interpretation	Decision
Age	1.09	0.896	Not Significant	Accept Ho
Highest Educational Attainment	3.15	0.532	Not Significant	Accept Ho
Length of Teaching Experience	3.08	0.687	Not Significant	Accept Ho

Table 5 showed the Relationship between the Teacher-respondents' Profile and the Explicit Instruction, the data were then gathered and the result is there is no significant relationship between the

teachers' profile and the explicit instruction. Since the computed chi- square value of 1.09, 3.15 and 3.08 with p- values of "0.896", "0.532" and "0.687" for age, highest educational attainment, and length of teaching experience, respectively are greater than of 0.05 at level of significance thus, the null hypothesis (Ho1) is accepted.

According to Nikolaros (2014), years of teaching experience does impact high school teachers' perceptions regarding the effectiveness of direct instructional strategies. Each grouping variable of years of teaching experience recorded significant differences with increased scales of measurement from least effective to within the high range of effective.

Table 6. Relationship Between Teachers' Explicit Instruction Method and Pupils' Level of Reading Performance N=150

Reading Performance and…	r	p-value at α=0.05	Interpretation	Decision
Explicit Instruction	0.092	0.667	Not Significant	Accept Ho

The table 6 was computed using Spearman Rank Order Coefficient Correlation (r_s) test and data revealed that there was no significant relationship between teachers' explicit instruction method and pupils' level of reading performance since, the computed correlation value of 0.092 with p- value of "0.667" is greater than 0.05 level of significance thus, the null hypothesis (Ho_2) is accepted. This means that explicit instruction method has slight effect to the pupil's reading performance.

However, contrary to the findings of Butler (2010) and Ballou (2012) that teachers who engage their pupils/ students in learning to read provide small group instruction and explicit skill instruction in comprehension provide the students with better outcomes in learning to read. Pupil's attitudes toward reading improved and their ability to use a wide variety of strategies increased after receiving explicit instruction.

CONCLUSIONS

In the light of the findings presented, the researcher concluded that there was an insignificant relationship between the teachers' profile and the explicit instruction. Additionally, the study found out that teachers' explicit instruction method was said to be inconsiderable to pupils' level of performance in reading, however, it is useful only to the basic skills but not directly related to the reading performance. Therefore, there are many other factors or instructional methods use by the teachers that influence the level of reading performance of the pupils.

RECOMMENDATIONS

Based on the conclusions drawn from the study, the researcher came up with the following recommendations:

1. Teachers must constantly use the monitoring and evaluation tool to measure the pupil's performance in order to device an instructional method best suited to the level of the learners.
2. Teachers should be encouraged to attend and participate in the most recent professional development workshops or conferences.
3. Future researchers are inspired to conduct similar studies that will help the teachers to improve more their instruction and to develop more the reading performance of the pupils.

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