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TRANSFORMATIONAL LEADERSHIP PRACTICES AMONG LEADERS IN SELECTED CATHOLIC SCHOOLS TOWARDS A PROFESSIONAL DEVELOPMENT FRAMEWORK

Abeba Fitiwe Sebhat
College of Education and Liberal Arts
Graduate School Faculty
Adamson University – Manila, Philippines

ABSTRACT

The study was aimed to assess the prevalence of transformational leadership in selected Catholic Schools in Addis Ababa, Ethiopia, in order to generated a professional development framework that will developed. The study employed the descriptive comparative-correlational method. Questionnaires were distributed to 77 teachers 60 administrators from the sampled catholic schools in Addis Ababa Ethiopia. Data was analyzed using SPSS v. 25 for Windows PC and was reported in percentage, frequency, mean and standard deviation. Quantitative data was analyzed as follows; descriptive statistic like percentage would be used to show respondents' demographic characteristics, qualification, filed of specialized, age, experience and class size. Mean and the standard deviation scores used to answer questions dealt with description such those ask about status. The inferential statistics of ANOVA and Pearson Correlation Coefficient Matrix was used to identify if there was a school administrator's transformational leadership practiced in selected Catholic secondary schools in Addis Ababa. The finding revealed that the education level of both admins and teachers are not well developed, since only few respondents indicated that they were masters and above holders. The level of performing transformational leadership styles were not interrelated with any demographic factors in the case are except the education level and intellectual stimulation insignificant correlation was reported. Idealized influences items were well performed by leaders comparing with other dimensions of transformational leadership practices. Moreover, admin staffs were more confirmed that transformational leadership practices were implemented in the schools, while teacher respondents still were not confirmed the issue. As the overall mean value for all variables were rated on satisfactory it was concluded that school leaders in Ethiopian Catholic Church were not well implemented transformational leadership for better organizational performance and development.

The results of the study revealed that the principals' transformational leadership practices did not show the level of expected relationship. In other words, the computed means scores and the Pearson coefficient correlation results indicated that the principals' transformational leadership practices were not developed people. Based on the finding it was recommended that; Principals in catholic schools in Ethiopia need to facilitate collaborative actions that are focused on continuous development of staff especially teachers and administrators: by providing capacity building programs, including long- and short-term training. Finally, suggested that a more detailed and comprehensive study has to be explored on the practices of exercising transformational leadership in Catholic schools as well as in public schools so as to complemented the deficiencies observed in the study and to enhance principals' leadership quality and enhanced school effectiveness and student achievement.

Keywords: Transformational Leadership, Idealized Influence,Individualized Consideration, Inspirational Motivation, Intellectual Stimulation

INTRODUCTION

Educational leadership had become a priority in education policy programs worldwide. It played a crucial role in refining school outcomes by influencing the motivations and capabilities of the teachers, as well as the school climate and environment. (Radhika Kapur, 2018). Predominantly transformational school leaders, underscore their significance as key actors in bringing about school effectiveness. School effectiveness generally refers to the ability of a school to achieved or exceed its goals. The goals have been reflected the outcomes a school expects to achieve (Creemers & Kyriakides, 2008).

Therefore, researched on practice of transformational leadership practiced by school principals was aimed to explore and show ways to applied transformational leadership in Catholic schools in Ethiopia. The researcher believed that, transformation leaders are those who stimulated and inspired followers to both achieved extra ordinary outcomes and, in the process, develop their own leadership capacity. In addition, transformational leadership was a style of leadership that involved a change. Through the strength of their vision and personality, transformational leaders were able to inspired followers to change expectations, perceptions and motivations to work towards common goals. (Money, 2017).

Therefore, as its name indicated transformational leadership style was for transformation. Discussed about school administrators and teachers, their transformational leadership style was an important factor that impacted student satisfaction, motivation, empowerment and learning and it was style where students actively engaged in developed knowledge and skills, critical thinking, higher-order skills, communication and holistic development are facilitated.

Furthermore, effective school leaders applied their educational expertise and management skills in order to focus their efforts, and those of their teaching staff, on improved the quality of student learning outcomes. Part of this involved keep up-to-date on the latest teaching technologies and trends. It also required excellent interpersonal skills – as leaders worked with students, staff, parents and external communities to gain constant feedback and find opportunities to innovated. School leaders needed to have a solid grasp of operational best practices and an aptitude for enabled continuous development.

Consequently, the researcher was intended to explore the transformational leadership practiced in Catholic secondary schools in Ethiopia, Addis Ababa, after the researcher came out with the result ether transformational leadership was being applied in the catholic secondary schools in Addis Ababa or not. The positive outcome of research encouraged to keep it up and the negative outcome, initiate the practice of transformational readership by giving awareness, and training to administrators and teachers in Catholic high schools in Ethiopia.

Statement of the Problem

The study aimed to assess the prevalence of transformational leadership in selected Catholic Schools in Addis Ababa, Ethiopia in order to generate a professional development framework that will develop and practice this kind of leadership to school administrators.

Specifically, the study sought to answer the following questions:

1. What is the profile of the teacher respondents in terms of:
   1.1 age
   1.2 length of service
   1.3 highest educational attainment?
2. What is the profile of the administrator respondents in terms of:
   2.1 age
   2.2 length of service
   2.3 highest educational attainment?
3. What is the assessment of the respondents on the transformational leadership practiced school leaders in terms of:
   3.1 Idealized influence
   3.2 Intellectual stimulation
   3.3 Inspirational motivation
   3.4 Individualized consideration
4. Is there a significant difference between the profile of the respondents and the assessed transformational leadership practices of school leaders?

5. Is there a significant difference on the assessed transformational leadership practices between teachers and administrator respondents?
6. What professional development framework have been generated that would have developed transformational leadership among school leaders?

METHODOLOGY

Research Design

This study on school administrators' transformational leadership practiced in Catholic secondary schools in Addis Ababa, employed the descriptive comparative-correlational study. The study compared the assessment of the respondents and correlated the profile to the prevalence of transformational leadership.

Research Locale and Research Participants

According to the data from Catholic Church Education Office, in Ethiopia, (2019) the Catholic Church was able to reach out all parts of the country provided quality education through 430 primary and secondary schools and educational institutes. Currently 11 Catholic Secondary Schools, (which are grades 9 - 12), were located in Addis Ababa city Ethiopia Administration.

These schools were: Lazarist, school, St. Mary's girls' school, St. Joseph school, St. John Baptist De La Salle school, Nativity girls' school, Nazareth girls' school, Kidanemehret school, Lideta Cathedral school, Maria Robarto school, Mariam Tsion school, Don Bosco Secondary School. The total population in the 11 schools was consisted of 227 teachers and 83 school leaders.

Sampling Method

MaMillan & Schhumacher (2001) specified that choosing a sit was a negotiation process to obtain freedom of access to a site that was suitable for the research problem and feasible from the research's resource. In addition, according to Israel (1992) there were several approaches to determining the sample size. These included used a census for small populations, imitating a sample size of similar studies, one approach was to use the entire population as the sample. Although cost considerations made this impossible for large populations, a census was attractive for small populations (e.g., 200 or less). A census eliminates sampling error and provided data on all the individuals in the population. In addition, some costs such as questionnaire design and developing the sampling frame were "fixed," that was, they would be the same for samples of 50 or 200. Finally, virtually the entire population would have to be sampled in small populations to achieved a desirable level of precision. Therefore, the study focused on four secondary schools from 12 catholic primary and secondary schools by employing Israel's suggested formula which is:

$$n = \frac{N}{1+N(e)^2}$$

Where n is the sample size and N is the population size and e is level of perception which detrained at 5%.

Number of Respondents Population & Samples

No	Name of the School	Administrators		Teachers		Grand Total
		Population	Sample	Population	Sample	
1	St. Mary's Catholic School	11	11	23	22	34
2	Lazarist Catholic School	11	11	15	15	26
3	Don Bosco Catholic School	24	23	21	20	45
4	Nativity Girls' Catholic School	15	15	21	20	36
	Total	**61**	**60**	**80**	**77**	**141**

Research Instrument

The study depended in collecting data employed in their preparation on two basic sources: the initial sources used on purpose of collecting data from the sample of study for statistical analysis purposes aiming at answering the questions of study and tested the hypotheses. For collected the data, the study

adapted the Multi Factor Leadership Questionnaire (MLQ), which was a questionnaire on four domains of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation and individual consideration).

Data Gathering Procedure

In order to answer the research questions raised, researcher done through series of data gathering procedures: Supporting letter from education department of Catholic Church in Ethiopia and the authorized official cooperation letters from each school Principals. Then researcher sought and obtained necessary permitted and authorizations to conduct research.

The researcher required and got informed consent from the respondents prior to the administration of the data collection and assured them that confidentiality would be upheld by ensuring and anonymity of the participants and the schools remain unnamed. Questionnaires were distributed to 77 teachers 60 administrators from the sampled catholic schools in Addis Ababa Ethiopia.

Data Analysis

Data was analyzed using SPSS v. 25 for Windows PC and was reported in percentage, frequency, mean and standard deviation. Quantitative data was analyzed as follows; descriptive statistic like percentage would be used to show respondents‟ demographic characteristics, qualification, filed of specialized, age, experience and class size. Mean and the standard deviation scores used to answer questions dealt with description such those ask about status.

Descriptive statistics were used to obtain the frequency, percentage, mean and standard deviation. The inferential statistics of ANOVA and Pearson Correlation Coefficient Matrix was used to identify if there was a school administrator's transformational leadership practice in Catholic secondary schools in Addis Ababa.

All hypotheses were evaluated at the alpha level of 0.05.

All data were normally distributed. Levine's test for homogeneity of variance was also conducted to determine equality of variance for assumption testing. The null hypothesis was rejected at a P confidence level less than 0.05.

T-test for independent sample was employed to analyze and determine the significance difference between the responses of respondents for their leadership.

The results of the survey questionnaire were reviewed and analyzed. The mean score should indicated the following descriptions:

Five-point Likert Ranking Scale Interpretation.

RANGE - VALUES	DESCRIPTION	INTERPRETATION
3.51 – 4.00	Strongly Agree	Very Satisfactory
2.51 – 3.50	Agree	Satisfactory
1.51 - 2.50	Disagree	Fair
1.00 – 1.50	Strongly Disagree	Poor

Ethical Considerations

The researcher sought and obtained necessary permits and authorizations to conduct research followed by seeking permission from principals of the sampled schools prior to commencement of the data collection exercise.

The intended cover latter was attached with the questionnaires to respective catholic schools informing that the information that obtained from individual response was used only for the purpose of the study, for confidentiality consideration; the names of the respondents were not be included in the questionnaires format and the responses were kept confidential and used for academic purpose only.

Finally taking the severity of the ethical considerations in mind, this study did with highest importance place on ethics, confidentiality, and anonymity and respect of the sampled schools and respondents.

FINDINGS

Demographic variables

		Teachers		Admin	
		Frequency	**Percent**	**Frequency**	**Percent**
Age	Under 34	17	20	7	12.3
	35-45	51	60	33	57.9
	Over 46	17	20	17	29.9
	Total	**85**	**100**	**57**	**100**
Education level	Certificate	-	-		
	Diploma	2	2.4	6	10.5
	BA degree	51	60	30	52.6
	Masters	32	37.6	21	36.8
	PhD	-	-	-	-
	Total	**85**	**100**	**57**	**100**
Experience	Below 5	10	11.8	18	31.6
	6-10	17	20	11	19.3
	11-15	21	24.7	15	26.3
	16-20	21	24.7	7	12.3
	Above 20	16	18.8	6	10.5
	Total	**85**	**100**	**57**	**100**

Regarding about the age, education level, and experience of respondents majority of both teachers and admin respondents were aged under the categories of 35-46 Years old. Moreover, 60% of teachers and 52.6% of the admin respondents are BA degree holders. According to the experienced information majority of the admin staffs indicated that they had worked in the organization for 11 to 15 years while 24.7% of respondents from teacher participants were worked for 11-15 and 16-20 years equally.

Summary of Results

	Dimensions	**Teachers**			**Administrators**		
		Over all Mean	Desc	Inter	Mean	Desc	Inter
1	Idealized influence	3.32	A	S	3.54	SA	VS
2	Intellectual motivation	3.09	A	S	3.46	A	S
3	Intellectual stimulation	3.05	A	S	3.31	A	S
4	Individualized consideration	3.0	A	S	3.38	A	S
	OVER ALL MEAN	**3.11**	**A**	**S**	**3.46**	**A**	**S**

Legend: 3.51-4.00 Very Satisfactory; 2.51-3.50 Satisfactory; 1.51-2.50 Fair; 1.00-1.50 Poor

According to both Group of respondents idealized influence was the most implemented dimension of transformational leadership as it had mean value from both teachers and Admins respondents 3.32 and 3.54 Accordingly. Intellectual motivation was also the next ranked dimension based on the Agreement of teachers and Admin respondents. Finally intellectual stimulation was the least implemented dimension according to Admins respondent, while individualized consideration was the least according to teacher's respondent. Similarly, Shewaye Turiye, (2018) on similar topic (Practice and challenges of transformational school Leadership in Secondary Schools of Gurage Zone), her funding indicted that the principals‟ practices in individualized consideration such as trainers, teachers, and advisors to other school members as well as communicating effectively were low.

Correlation between age and leadership practice

In the research age of the respondents had no significant relation with any dimension of transformational leadership (idealized influence, intellectual stimulation, intellectual motivation, individualized consideration).

Correlation between Experience and leadership practices

The correlation coefficient for length of service and transformational leadership dimensions also indicated that they were not significant more detail sig value between Experience and idealized influence = .648, experience and intellectual stimulation .042, experience and intellectual motivation 0.755, experience and individualized consideration 0.838. all the significant value were greater than 0.05 which indicated that all the relation were not statistically significant.

Correlation between education level and leadership practices

In the result it was reported that intellectual stimulation had significant correlation with education level with R values of .307 and P value 0f 0.02. the remaining Idealized influence. Intellectual stimulation and individualized consideration had no statically significant relation with education level of respondents.

Comparing between teachers and admin responses

Except idealized influence the p value for the remaining variables t value were significant. For detail discussion intellectual stimulation had t values of 1.774 with sig value of 0.048 which indicated significant difference between teachers' respondent and admins on the variable. The t value 3.258 for variable intellectual stimulation was also had p value of 0.001 it was also indicated significant difference between the two groups of participants.

CONCLUSIONS

Based on the major finding the following conclusions were provided:

The education level of both admins and teachers are not well developed, since only few respondents indicated that they were masters and above holders. It maybe because of that the institutions (Catholic schools in Ethiopia) poor staff development and promotion policies.

The level of performing transformational leadership styles were not interrelated with any demographic factors in the case are except the education level and intellectual stimulation insignificant correlation was reported.

Idealized influences items were well performed by leaders comparing with other dimensions of transformational leadership practices. Moreover, admin staffs were more confirmed that transformational leadership practices were implemented in the schools, while teacher respondents still were not confirmed the issue.

As the overall mean value for all variables were rated on satisfactory it was concluded that school leaders in Ethiopian Catholic Church were not well implemented transformational leadership for better organizational performance and development.

Transformational leadership of this study comprised four dimensions, as earlier mentioned in the section of conceptual framework of the study. Those dimensions of it had positive relationship to school effectiveness and organizational commitments. However, the results of the study revealed that the principals' transformational leadership practices did not show the level of expected relationship. In other words, the computed means scores and the Pearson coefficient correlation results indicated that the principals' transformational leadership practices were not developed people.

RECOMMENDATIONS

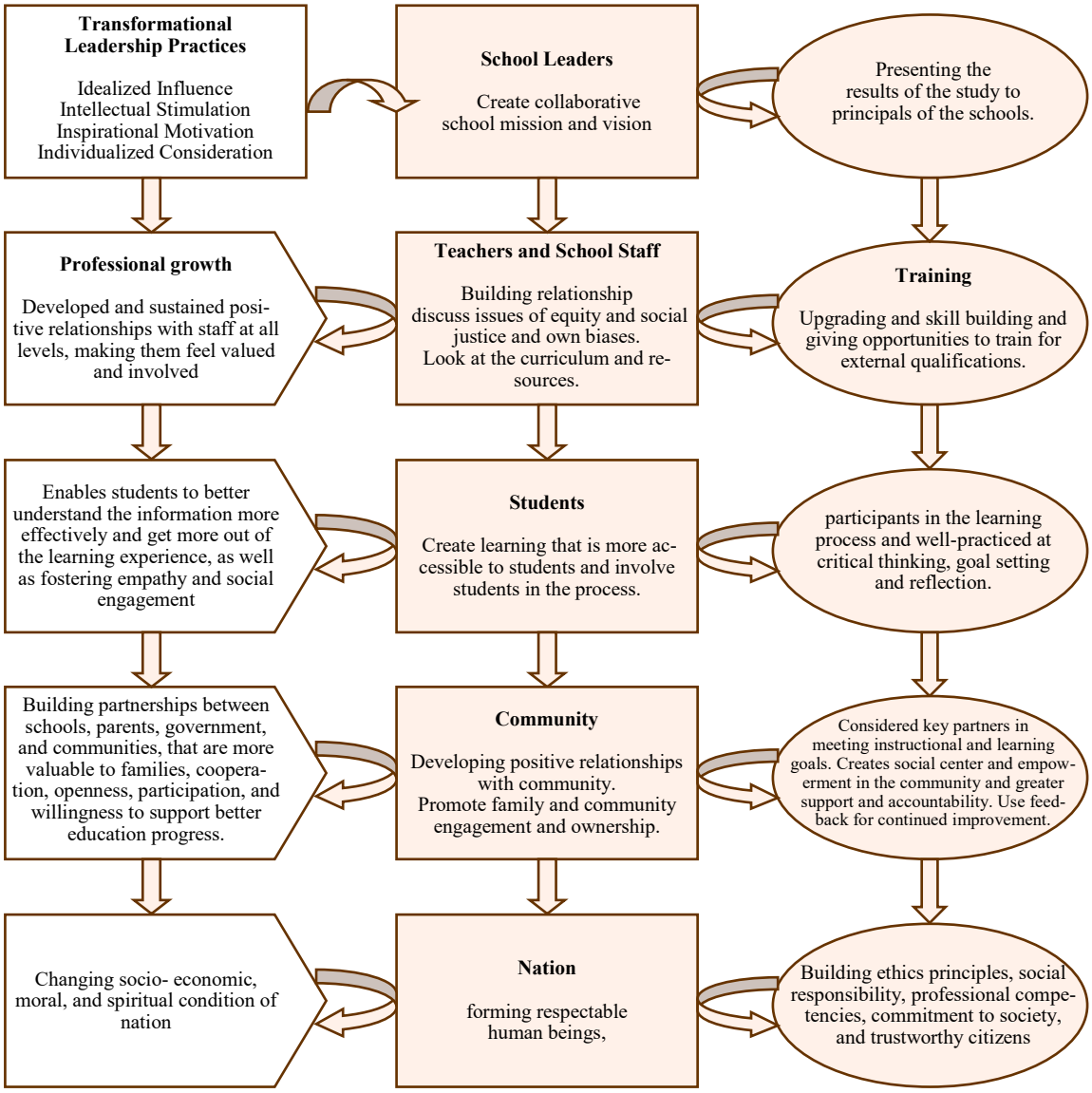
Principals in catholic schools in Ethiopia need to facilitate collaborative actions that are focused on continuous development of staff especially teachers: by providing capacity building programs, including long- and short-term training. In addition, seminars, workshops, and panel discussions, must be designed to enhance the competence level of lower and middle level managers, teachers, and other staff in Catholic schools.

Leaders in the catholic schools should understand their potential and the power to motivate, inspire, and influence others to stay engaged, excited, and immersed at work. leaders must also recognize that by being more empathetic in their actions and attitude toward employees, they can assist people in avoiding burnout symptoms especially to teachers.

To maintain a balance between the job to be done and employee engagement, top management of the schools as a whole, and department level managers in particular, should use financial rewards as an alternative leadership mechanism on a regular basis. In order to generate better and longer-term employee engagement, psychological benefits such as acknowledgment, gratitude, praise, and others should be given more weight whenever their subordinates perform well.

Finally, the researcher suggests that a more detailed and comprehensive study has to be explored on the practices of exercising transformational leadership in catholic secondary schools as well as in public schools so as to complement the deficiencies observed in the study and to enhance principals' leadership quality and enhanced school effectiveness and student achievement.

Professional Development Framework



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INSTRUCTIONAL LEADERSHIP AND STUDENTS' ACADEMIC ACHIEVEMENT IN SELECTED CATHOLIC SCHOOLS TOWARD A LEADERS' TRAINING PROGRAM

Ashebir Imo Erago
Graduate School
Adamson University
Manila, Philippines

ABSTRACT

Principals, as instructional leader, were responsible to improve students' academic achievement. School principals are inconsistently apply instructional leadership role to improve students' proficiency and exploring the relation between instructional leader's role and students' academic achievement. The main purpose of this research was to enhance the skills of instructional principal leader and teacher, thereby, to influence students' academic achievement. This study employed the descriptive comparative-correlational design. This study was conducted to five Catholic Secondary Schools only out of eleven in Addis Ababa City Administration (Ethiopia). These schools are Lazarist Catholic, St. Mary‟s Catholic Secondary School, Nativity Girls‟ Catholic School, St. John Baptist De La Salle Catholic School and Kidane Meheret Catholic Secondary School. This study focused only on school leaders (principals, vice principals and department heads) and teachers of the selected schools. For this study, Grade Point Average (GPA) were taken, Questionnaire, interview and document analysis were used as data gathering instrument .The study used the stratified random sampling technique with School Leaders and teachers as respondents of the study. The sample size of teacher's respondents was 184; and school leader was 129. The total number of respondents was 316. Data was analyzed by Pearson Correlation Coefficient and SPSS. The study findings indicated that there was a significant and positive relationship between principal's instructional leadership role implementations and students' academic achievement.

INTRODUCTION

One of the main aims of schooling (education) is the cultivation of the citizens with an all-education capable of playing conscious and active role in the economic, social, and political life at various levels. The overall education system centered around on academic performance of students. Therefore, success and failure of any educational institution is measured in terms of students' academic achievement. For the any successes or failure of schools and students' achievement, the contribution of the instructional principal was determined.

When a principal is applying fully an instructional leader role, there are positive outcomes in students achievement (Getachehu : 2020).An instructional principal is one of the valuable assets for quality education. The role of the instructional leader principal cannot be ignored in the process of development and success in one country. Being an instructional leader is a profession that has low emphasis but principal have a great role in their students' intellectual, personal and social development, there by influencing the whole nation's development. Development of any country depends on its educational system that is the quality of its graduates, so principals are the nation builders. Empowering principal as a instructional leader the same as enhancing students for achievements The goal of the instructional leadership model is to promote student to enhance on achievement (Fuentes: 2020). In order to promote student academic achievement, principals will have a clear school mission, managing the instructional program, and promoting a positive school learning climate etc.

The main reason of this study was to capacitate in today's dynamic and competitive environment, Catholic school principals must recognize and scale-up themselves to compete the pace with other private schools by performing the instructional leadership role and influencing students' academic achieve-

ment. Recently, students who graduated from other private schools scored the highest mark in the National Exam than that of the students from the Catholic schools. The study conducted at the Institute of Education Research of Addis Ababa University in selected schools of four regional states in 2018 revealed that the quality of primary and secondary education was declining. It stated that most primary and secondary students scored below the minimum 50% expected for all subjects. The study identified poor performance and negligence of school principals on his instructional roles as some of the factors.

STATEMENT OF THE PROBLEM

This study focused what significant relation between the role of the instructional

principal and students' academic achievement in selected Catholic schools .This study aimed to analyze the relationship between the school leaders' instructional leadership role and the students' academic achievement toward developing a training program for school leaders to improve students' learning and performance. Specifically, this study sought to answer the following questions:

1. What is the assessment of the teacher and leader respondents on the level of instructional leadership of school in terms of:
   Defining and communicating the school Mission, Promoting School Learning Climate, Protecting Instructional Time, Providing Incentives for Teachers, Providing Incentives for Students, Promoting Professional Development, Maintaining High Visibility, Managing Instructional Program, Supervising and Evaluating Instruction and Monitoring Student's Progress
2. Is there a significant difference in the assessment of the teachers and school leader on the level of instructional leadership of school principals in terms of the mentioned variables?
3. What is the level of the academic achievement of the students based on the grade point average as reflected on the SY. 2021-2022 report cards?
4. Is there a significant relationship between the level of instructional leadership of school leaders and the students' academic achievement?
5. How far, the principal committing themselves to performing instructional leadership role and the outcome of the students' academic achievement and finally to give relevant solutions for the problems.
6. Based on the results of the study, what training program may be developed for the
7. instructional leadership of school leaders?

METHODOLOGY

Research Design

This study employed the descriptive comparative-correlational design. A descriptive survey design creates a snapshot of the current thoughts, feelings, or behaviors of individuals, used to uncover new facts, and provides a relatively complete picture of what was occurring at a given time. Correlational research involves the measurement of two or more relevant variables and an assessment of the relation between or among those variables.

The descriptive survey design derived the relation between the instructional leaders' roles and students' academic achievement by using Correlational research design.

The researcher-made questionnaire for school principals, assistance leader, department head and teachers were derived from the literature.

The questionnaire refers to the appropriate information about the roles of the instructional leadership and influence of students' academic achievement of some selected Catholic schools in Addis Ababa.

The questionnaire was divided into three sections to obtain necessary information about the role of the instructional leader and the influence of students' academic achievement:

First Section: background information of respondents

1. Name of the school ---------- Sub city ----------District ------

Academic qualification

A. 12+2 (Diploma) □

B. BA□

C. MA□

D. Others (please specify) …….
Total years of service
A. 5 years and below □
B. 6-10 years □
C. 11-15years □
D. 16-20 years □
E. 21 years and above □
Current position:
A. Teacher □ B. Department head □ C. Principal □ D. Vice principal □

Second Section: Teachers' and department leaders' perception of principal's roles and students' academic achievement

Third Section: principals and assistant principal perception about their roles and student's academic outcome .

Questionnaires were structured with closed ended type. The items in each dimension were prepared on four-point Likert type scale. The respondents indicated the extent of their engagement to a particular behavior or practice by choosing one of the 4 - point scale ranging from "Strongly Agree" (4) to "Strongly Disagree" (1). The total number of questions is 37.

Does your principal:

- Establish strong and clear vision and set of values for their school, which heavily influenced their actions and the actions of others?
- Establish strong school Mission Statement driving your school where it shall be headed ?
- Support school Mission: accountability rating, community feedback, district data and Institution, students back ground, curriculum effectiveness analyzed ?
- Establish a clear sense of direction and purpose for the school. These were shared widely, clearly understood and supported by all staff. It acted as a key milestone ?
- Consider some Mission statement items: (1) it considers on service offered by the schools; (2) focusing on student's needs; (3) adapting new technology, (4) the philosophy inherent in the school to ensure that the mission developed is valued; (5) focuses on quality; (6) staff empowerment ?
- Ensure that intended school mission and goal should be applied by teachers, students and parents ?
- Establish unequivocal finance system ?
- Dedicate and concern for students' discipline and moral issues ?
- Work for ability to grow, maintain and keep the pace ?
- Maintain good relation with concern district authority ?
- Ensure and protect teachers instructional time from any interruptions ?
- Develop school wide polices to protect teachers instructional time ?
- Visit class rooms to see that instructional time is used for learning actively and practicing new skills and concepts ?

The researcher employed the most suitable data collection technique and approached the respondents to obtain relevant and accurate information by distributing questionnaires, and conducting semi-structure interview, observation and focus group discussion. The researcher conducted pilot testing of the research instrument to ensure that it was reliable. The researcher sought the school head's legal permission to conduct the data collection. The researcher explained to the respondents the purpose of the study, then together with respondents settled a timeline about semi-structure interview and distribution of questionnaires. Finally, the data were analyzed.

The study employed the stratified random sampling technique among the school leaders and teachers as respondents of the study. The number of teacher respondents was 187; while the number of leader respondents was 129. The total number of respondents was 316.

The researcher selected five schools among eleven Catholic schools in Addis Ababa town Administration. These schools are established to accomplish the educational needs of girls, orphans, and children from needy families. Thus, the researcher assessed and analyzed how far instructional leader were

influencing targeted students' academic achievement. These schools included the following: Lazarist School , St. Mary's School, St. John Baptist De La Salle School ,Nativity Girl's School and Kidane Meheret School (KMS)

Research Participants

Table 1 Sample Size of Respondents

Locale	Teachers		School Leaders	
	Population	Sample	Population	Sample
Lazarist	64	35	37	26
St. Mary's	73	41	39	27
St. John Baptist	65	36	35	25
Kiden Meheret	72	40	39	27
Nativity Girls	64	35	34	24
Total	**338**	**187**	**184**	**129**

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Data Gathering technique

The researcher employed the most suitable data collection technique and approached the respondents to obtain relevant and accurate information by distributing questionnaires, and conducting semi-structure interview, observation and focus group discussion. The researcher conducted pilot testing of the research instrument to ensure that it was reliable.

Data Analysis

The results of the survey questionnaire were reviewed and analyzed. The mean score indicated the following descriptions:

Table 2. The General Weighted Average

RANGE-VALUES	DESCRIPTION
90 and above	**Very High**
80 – 89	**Average**
70 – 79	**Low**
70 and below	**Very Low**

Table 3. Four-point Likert Ranking Scale Interpretation

RANGE-VALUES	DESCRIPTION	INTERPRETATION
3.51 – 4.00	**Strongly Agree**	**High**
2.51 – 3.50	**Agree**	**Average**
1.51 - 2.50	**Disagree**	**Low**
1.00 – 1.50	**Strongly Disagree**	**Very Low**

Statistical Treatment

In order to analyze the results of the survey the following statistical treatments has been used: The Frequency Distribution, and Mean were used to determine the perception on determining the instructional leadership role and students' academic achievement.

The Independent Samples t Test compared the means of two independent groups in order to determine whether there was statistical evidence that the associated population means were significantly different. It was a parametric test.

The Pearson Product-Moment Correlation Coefficient was used to determine the relationship between the role of the instructional leader and students' achievement.

The data were computed and analyzed through the use of the Statistical Package for the Social Sciences (SPSS).

The findings of the study were also discussed in a relation to the literature review.

Table: 4 Profile of Respondents

Profile	Teachers		School Leaders	
	Frequency	Percentage	Frequency	Percentage
Sex				
Male	118	63.6	78	60.5
Female	69	36.4	51	39.5
Total	**187**	**100**	**129**	**100**
Age				
>30	47	25	36	27.9
31-40	90	48.9	60	46.5
41-50	31	16.3	21	16.3
51 Above	19	9.8	12	9.3
Total	**187**	**100**	**129**	**100**
Educational Attainment				
Diploma	8	3.3	**0**	**0**
BA degree	87	46.7	**66**	**51.1**
Master's	92	50	**63**	**48.9**
Total	**187**	**100**	**129**	**100**
Years of Experience				
>5 year	35	18.5	**1**	**0.007**
6-10 years	67	36.4	**52**	**40.3**
11-15 years	56	29.9	**59**	**45.7**
16-20 years	24	12.5	**14**	**10.9**
Above 20 years	5	2.7	**3**	**0.02**
Total	**187**	**100**	**129**	**100**

Table shows that majority of the respondents were male which accounts 62.5% of the total respondents and the remaining 37.5% of respondents were females. It implied that males were more engaged in the education sector than females.

Different research finding indicated that teacher age has significant effect on their method of delivery and the effectiveness of their teaching. For instance, Arshadrozita ,(2018) found that there was a significant difference between age and teacher effectiveness. Majority of the respondents (49.2) are under the age category of 30-40 followed by 25.6% of the respondents are under the age category of less than 30. The remaining 15.6 and 9.6% of the respondents are 41-50 and above 50 years old, accordingly. Most of the workers in the education sector are under the age category of productivity and are eager to learn and teach new things and knowledge.

Other important issues should be considered in students‟ academic achievement is academic qualification of teachers. Different scholars argue that teacher's academic qualification and student achievement has positive relationship. Dahnhui, (2016) investigated the effects of teacher's education level on students‟ academic achievement. There was a positive relationship between a teacher's education level and student's achievement. Majority of the respondents indicate that they are master's degree holders which represent 50.8% of the total respondents; 46.5% are BA degree holders. The remaining 2.7% indicate that they graduated with a diploma degree. It implies that most of the academic staff in the schools have better academic qualification.

Table 5. Summary of School Instructional Leadership

Instructional Leadership	Teacher			Leaders		
	Mean	Inter	Rank	Mean	Inter	Rank
Defining and Communicating the School Mission	2.82	Average	1	2.876	1	Average
Protecting instructional time	2.72	Average	4	2.65	6	Average
Provide incentives for teachers	2.60	Average	8	2.69	5	Average
Provide incentives for learners	2.67	Average	6.5	2.56	7.5	Average
Promote Professional Development	2.67	Average	6.5	2.61	7.5	Average
Maintain high visibility	2.78	Average	2	2.874	2	Average
Supervise and evaluate instruction	2.75	Average	3	2.71	4	Average
monitoring students' progress	2.68	Average	5	2.80	3	Average

The summary table5 showed the mean values of 2.56 to 2.87 on all variables for both teachers and school leader's respondents interpreted as average. It implied that the principals play "Average" role on each variable which may need special attention for better academic achievements. Furthermore, the highest mean value for both teachers and school leader's respondent was reported on variable one

"defining and communicating school Mission" with mean values of 2.82 for teachers and 2.87 for leaders. It implied that communicating school mission was the most significant role played by school leaders.

Table 6. Test of Significant Difference between the Responses of the Teachers And Administrators

Instructional Leadership	Respondents	Mean	T	Sig	Inter.	Dec.
Defining and Communicating the School Mission	Teachers	2.82	-1.738	0.083	Not significant	Accept
	Leaders	2.877				
Protecting instructional time	Teachers	2.72	1.9	0.05	Significant	Reject
	Leaders	2.65				
Provide incentives for teachers	Teachers	2.60	-1.84	0.066	Not significant	Accept
	Leaders	2.69				
Provide incentives for learners	Teachers	2.67	1.95	0.05	Significant	Reject
	Leaders	2.56				
Promote Professional Development	Teachers	2.60	-1.84	0.066	Not significant	Accept
	Leaders	2.69				
Maintain high visibility	Teachers	2.784	-2.038	0.042	significant	Reject
	Leaders	2.876				
Supervise and evaluate instruction	Teachers	2.75	1.043	.298	Not significant	Accept
	Leaders	2.71				
monitoring students' progress	Teachers	2.68	-2.80	0.005	Significant	Reject
	Leaders	2.80				

The test of significant difference between the responses of the teacher s and Administrator table 6 showed that the mean difference between teachers and school leaders on a role such as protecting instructional time, provide incentives for learners, maintaining high visibility, and monitoring students' progress have significance values which were equal or less than 0.05. It implied that teacher and leader's response on such variables were significantly different and the values were come from different population.

The remaining significance values on defining and communicating the School Mission, providing incentives for teachers, and supervising and evaluating instruction have significance values greater than the alpha level. It implied that the mean difference of teachers and leaders were not statically significant on such variables.

Table 7. Students' Academic Achievement

General Weighted Average	Frequency	Percentage
90 and above	**39**	**12.5**
80 – 89	**271**	**86.5**
70 – 79	**3**	**1**
70 and below	**0**	**0**

Table 8. The Relationship between Instructional Leadership and Academic Achievement

	Principal roles	R	Sig	Inter	Decision
Students' academic achievement	Defining and Communicating the School Mission	.506**	.000	Significant	Reject
	Protecting instructional time	.392**	.000	Significant	Reject
	Provide incentives for teachers	.654**	.000	Significant	Reject
	Provide incentives for learners	.318**	.000	Significant	Reject
	Professional development	.241	.007	Significant	Reject
	Maintain high visibility	-.047	.408	Not Significant	Accept
	Supervise and evaluate instruction	.574**	.000	Significant	Reject
	monitoring students' progress	.689**	.000	Significant	Reject

Concerning Instructional leader and students academic achievement in the study it was revealed at table 8:

The two independent variable of Instructional leader and students academic achievement , the principal roles on monitoring student progress, and stakeholder's principal roles on provide incentives for

teachers have strong relationship with student academic achievement. The other two variable principal roles on defining and communicating the school Mission and supervising and evaluating instruction have moderate and significant relationship with student academic achievement. Professional development and incentive for learners have a weak but significant relation with student academic achievement. Finally, maintaining high visibility and promoting professional development have no significant relation with student academic achievement.

Xianxuan (2018) investigated the effect of principal leadership on student academic achievement and finally reported that role in maintaining high visibility, monitoring students' progress and providing incentives for students have significant effect on students' academic achievement.

The level of Instructional Leadership in terms of defining and communicating the school Mission' with mean values 2.82 for teacher respondents and 2.97 for school leader's respondents are interpreted as "Average.

The level of Protecting Instructional Time with mean value 2.64 for school leaders and 2.72 for teachers are interpreted as "Average" which indicates that the role of principals on protecting instructional time was limited and not satisfactory.

Providing incentives for teachers with mean value 2.61 and 2.69 on for teacher respondents and school leader respondents indicate that on average, the respondents evaluated the role of principals in "providing incentives for teacher" to motivating for better student academic achievement was still on average rate and it needed more attention.

Providing incentives for learners with mean values 2.67 and 2.57 from teacher and school leaders, respectively indicate that both respondents confirmed that the role of principals in motivating student for better academic achievement was average only.

Professional development with mean values ranged from 2.55 to 2.91 interpreted as "Average" which indicates that principal's role on promote professional development of the teachers for better student academic achievement was limited and not satisfactory.

Maintaining high visibility with mean value of 2.78 and 2.87 for teacher respondents and school leader respondents indicate that both teachers and school leaders agreed that level of roles played by principals in maintaining high visibility is average.

Supervising and evaluating instruction obtained the mean values were 2.75 and 2.622 for teachers and school leaders accordingly interpreted as average.

Monitoring students' progress mean with value 2.66 for teachers and 2.82 for school leader's response interpreted as average.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

Table 8, showed that Establish strong and clear vision and set of values for their school which heavily influenced their actions and the actions of others to influence students' academic achievement. The same table 8, revealed that allocate time for the teaching and learning, increase better gain of student achievement. On the same table, collaboratively work with variety of actors, such as school principals Counsellors, teachers, students, parents, education bureau collectively provide positive learning climate it boosts students' academic achievement.

Create structure that rewards and recognize teachers for their efforts, it motivates better student academic achievement. Incentive for learners provided by principals stimulate learners to study harder and in which the students value academic achievement and work hard for the opportunities to reward and recognition of their academic achievement. Ensure visibility on the campus and in the classrooms increases interaction between the principal and students as well as with teachers this interaction could boost students' achievement.

RECOMMENDATIONS

In the light of foregoing conclusions, the following are hereby recommended:

Encourage teamwork with variety of actors, such as school principals, counsellor, teachers, students, parents, education bureau, collectively provide positive learning climate boosts students' academic achievement. Encourage teachers' professional development to enhance the academic outcome of students. Continue work vigorously to boost student academic achievement on establish strong and clear vision, rewards and recognize teachers for their efforts, stimulate learners, make visible on the campus and in the classrooms and giving direction after checking. Continue work vigorously skills training on instructional leadership roles of principals to improve student academic achievement. One of the great methods to improve and update the skills of principals is conducting training in instructional leadership role on students' academic achievement.

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SOCIAL MEDIA EXPOSURE IN RELATION TO ACADEMIC PERFORMANCE OF SENIOR HIGH SCHOOL TECHNICAL-VOCATIONAL LIVELIHOODSTUDENTS OF PINAYAG NATIONAL HIGH SCHOOL

Emily E. Espada, Nenita M. Bolisay, and Marry A. Abareta
Nueva Vizcaya State University
Bambang, Nueva Vizcaya

ABSTRACT

This study aimed to determine the level of social media exposure in relation to the academic performance of Senior High School Technical-Vocational Livelihood (TVL) students of Pinayag National High School, Pinayag Kayapa Nueva Vizcaya, academic year 2022-2023. It utilized the descriptive-correlation approach, which involved randomly selected 30 respondents. A validated survey questionnaire checklist and 5-point Likert were utilized to gather data, which was analyzed and interpreted using the mean, T-test, ANOVA and Pearson-r at 0.05 level of significance. Results revealed that Facebook was the most preferred social media platform and a cellphone was the most used gadget. The level of social media exposure in terms of learning was high, information awareness and updates were both high, connectivity was high, and addiction was deemed average. There is a significant difference in social media exposure when grouped according to age and final grade in the last quarter, but otherwise when grouped according to grade level, sex, social media platform, and gadget used. In terms of the relationship between the level of social media exposure and academic performance, there is a significant relationship based on the p-value of 0.00 and there is a positive correlation. Hence, the results imply that social media exposure contributes to learning and helps students with information awareness and connection with diverse groups of people, which boosts their social interaction, which can directly affect their academic performance.

Keywords: academic performance, addiction, connectivity, information awareness and updates, gadget, learning, social media exposure, social media platforms

INTRODUCTION

According to Teo (2019), social media is a collection of activities that involve interacting with others through text, images, and videos. It's a type of digital communication media that allows users to connect, associate, communicate, and create a space where content can be shared online (Pan, 2019).

Social media has grown to be a potent force that has affected everyone on the planet, but notably students. These days, with social media and the internet becoming a part of everyday life, students cannot function without them. Given that the modern educational system requires students to learn through online means, social media can undoubtedly have an impact on their academic experience. According to the findings of a study, social media exposure benefits students' academic performance by enhancing their reading, general knowledge, and socializing abilities. However, excessive and inappropriate social media use may negatively impact their academic achievement (Alalwan, 2017).

Social media interaction with other people is a great way for students to learn and improve their communication skills. Using different social applications like gaming sites, Facebook, Instagram, Twitter, YouTube, and other blogging sites can expose students to interacting with other individuals with confidence, learning different beliefs and gaining more friends. In the study of Baria (2020), social media exposure enabled people to be connected in a borderless world, providing social interaction across cultures and in the paradigm shift of educational practices, attitudes, and performance of students as it became an apparent part of day-to-day activities.

Further, according to a study, students exposed in social media-based activities frequently outperform their peers academically. This study has demonstrated that creative factors frequently grow, but their primary purpose is usually entertaining, which raises students' awareness and general knowledge (Chiang, 2019).

Since a lot of students were born in the technology age, social media, as a medium of instruction, is used in reality and innovative learning for their good academic performance. Especially during the pandemic, the serviceability and exposure to social media sites have increased.

However, there are also disadvantages of using social media as a medium of instruction for learners that can impact their academic performance negatively. Social networking websites grab the attention of students and then divert them towards non-educational and inappropriate action including useless chatting. Furthermore, Kulidtud (2017) implied that students use and expose the internet for social purposes like reacting to the posts of their friends, topics, and the like. Overuse or misuse of social media can lead to very poor academic performance.

Generally, millions of students are exposed to social media every day by interacting with their online friends, watching videos, playing games, and video calling. As stated by Baria (2020), the Philippines was coined as the social media capital of the world, where millions of Filipinos stay online for scrolling and chatting. Thus, this study aimed to investigate how the learners use social media as a guide in their academic performance in fostering their knowledge and skills, information awareness and updates in posting anything like songs, poems, pictures, works of art, and feelings, and connectivity when interacting with other people and building communities about learning other cultures. Moreover, this study sought to determine social media exposure in relation to their academic performance.

OBJECTIVES

The researchers decided to conduct this study to measure the social media exposure in relation to academic performance of Senior High School Technical-Vocational Livelihood students at Pinayag National High School in the academic year 2022-2023. The result of this study will encourage the students to know the importance of social media for the improvement of their academic performance.

Specifically, this study aimed to:

1. determine the socio-demographic profile of the TVL-Senior High School in terms of grade level, sex, age, preferred social media platform, mostly used gadgets, grade for the last quarter and their level of social media exposure;
2. determine the level of social media exposure of the respondents in connection to learning, information awareness and updates, connectivity, and addiction.
3. identify the significant difference between the respondents' level of social media exposure and the respondents' profile variables; and
4. determine if the level of social media exposure is significantly related to their level of academic performance.

Hence, this study tested the null hypothesis that there is no significant difference in the respondents' level of social media exposure when grouped according to their socio-demographic profile variables, and that there is no significant correlation between the level of social media exposure and academic performance.

RESEARCH METHODOLOGY

A descriptive- correlation research design was used in this study to collect, to analyze, and to interpret the data. The researchers involved the following processes: formulation and validation of questions; data gathering; analysis and interpretation of data. These methods determined the respondent's social media exposure in relation to their academic performance.

The respondents of this research were the 30 students who were randomly selected, which was equivalent to 70% of the 43 students who were enrolled in the Technical-Vocational Livelihood Program from Grades 11 to 12 at Pinayag National High School.

The data were gathered through a validated survey questionnaire and checklist which was divided into two categories, where the first part was the respondents' socio-graphic profile, followed by the criteria for evaluating of the level of social media exposure in relation to their academic performance. The gathered data were analyzed and interpreted using the mean, T-test, ANOVA and Pearson r at the 0.05 level of significance.

The five-point Likert rating scale was utilized in this study with its verbal interpretation, as shown in Table 1 below. The responses of the respondents on the level of social media exposure were scored and interpreted using the following scoring guide:

Table 1. The five-point Likert Rating Scale with Verbal Interpretation

Rating	Verbal Interpretation	Mean Interval	Qualitative Rating
5	Always	4.20-5.00	Very High
4	Often	3.40-4.19	High
3	Sometimes	2.60-3.39	Average
2	Rarely	1.80- 2.59	Low
1	Never	1.00-1.79	Very Low

RESULTS AND DISCUSSION

This chapter presents the results of the study, after the thorough research and gathering data about social media exposure from the students of Pinayag National High School, the researchers came up with the following results, as discussed, analyzed, and interpreted in the succeeding tables.

1. Socio-demographic profile of the respondents in terms of grade level, sex, age, preferred social media platform, mostly used gadgets, final grade for the last quarter and their level of social media exposure

Table 2. Frequency and Percentage Distribution of the respondents from Senior High School Technical-Vocational Livelihood Students According to Grade Level

Grade Level	Frequency	Percentage
Grade 11	15	50
Grade 12	15	50
Total	**30**	**100.00**

As shown in the table 2, the respondents were both 15 students from Grade 11 and Grade 12 with the percentage of 50% in each grade level.

The respondents were randomly selected who have the same percentage due to having nearly the same number of enrolled students from each level.

Table 3. Frequency and Percentage Distribution of the Respondents According to Age

Age	Frequency	Percentage
15	0	0
16	1	3.33
17	4	13.33
18	6	20
19	10	33.33
20 above	9	30
Total	**30**	**100**

The data in Table 3 revealed that most of the respondents are 19 years old with a total frequency of 10 TVL students, which is equivalent to 33.33%, followed by 20 years old with a total frequency of 9 students, which is equivalent to 30%, 18 years old with a total of 6 students, which is equivalent to 20%, 17 years old with a total of 4 students, which is equivalent to 13.33%, and 16 years old, which is equivalent to 3.33%.

A recent study that surveyed different students at TVL found that 19-year-olds are mostly engaged on social media.

This implied that, at a young age, they are engaged in exploring social media, which came from the age of 16 and above. It came after Kulidtud et al. (2017)'s study, which found that young individuals, often between the ages of 18 and 20, frequently utilize social networking sites.

Table 4. Frequency and Percentage Distribution of the Respondents According to Sex

Sex	Frequency	Percentage
Male	16	53.33
Female	14	46.67
Total	**30**	**100**

As exposed in Table 4, there are 16 male respondents with 53.33 % and 14 female respondents with 46.67%.

There are 16 male respondents with 53.33% and 14 female respondents with 46.67%. The male respondents exceeded the female respondents due to the greater number of males enrolled in senior high school, TVL Track of Pinayag National High School.

The result inferred that all students, both males and females, are exposed to social media. This finding was supported by the findings of Alnjadat et al. (2019) which found that many students (both males and females) are interested in social networking, and some become addicted. Many students around the world reported significant findings about gender variations in social media usage among students.

Table 5. Frequency and Percentage Distribution of the Respondents According to their Preferred Social Media Platform

Preferred Social-Media	Frequency	Percentage
Facebook	13	43.33
Twitter	1	3.33
Instagram	1	3.33
YouTube	9	30
Viber	0	0
Skype	0	0
Email	0	0
TikTok	6	20
Total	**30**	**100**

As gleaned from table 5, Facebook is the most preferred social media platform by the 13 respondents with a percentage of 43.33%; YouTube is the next social media app preferred by the 9 respondents, which is equivalent to 30%; followed by TikTok with a frequency of 6, which is equivalent to 20%; and Twitter and Instagram with a frequency of 1 which is equivalent to 3.33%.

As the gathered data was analyzed, it shows that Facebook is the most used by the respondents for social interaction, but it is not the only platform they can explore. YouTube, TikTok, Instagram, and Twitter were also discovered by the students to be used as learning tools.

This finding was supported by the findings of Al-Khawalda (2010), wherein Facebook is not the only tool or a site to get to know new friends, communicate with friends, or know what is going on around the world; it is also a great learning tool if used effectively and an important resource of information. Jones and Cutherll (2011) also cited the possible uses of YouTube in the educational process, stating that YouTube videos can be used directly in the classroom as part of the teaching process.

While Baria (2021) said that Facebook is the most highly utilized and preferred social media platform as it is the most accessible and popular among students, the cellphone is the most widely available gadget used for accessing social media platforms; most likely, it fits the financial limitations of students.

Table 6. Frequency and Percentage Distribution of the Respondents According to their most used Gadget

Gadget	Frequency	Percentage
Cellphone	22	73.33
Tablet	2	6.67
Laptop	6	20
Desktop	0	0
I-pod	0	0
Total		**100**

Table 6 displays the frequency and distribution of the most used gadget by the respondents wherein cellular phone is mostly used by 22 respondents with 73.33%, 6 respondents used laptop with 20%, and 2 respondents used tablet with 6.67%.

It projected that the most available and very accessible gadget used by the respondents was cellular phone. Mobile phones are the most popular gadget because it is easy to access and to use for learning and communication.

The finding of the recent study is supported by the study of Haruna et al. (2016), as cited by Haryanto (2019) that the mobile phones are the most necessary medium of communication for adolescents. It has virtually affected the society's accessibility, security, safety, and coordination of social activities and has hence become a part of a culture of the whole world. Besides, the critical review of Pedro et.al (2018) cited that some researchers agreed that mobile technologies have great potential for facilitating more innovative educational methods. Simultaneously, these patterns in educational methods will likely not only help subject content learning, but may also facilitate the development of communication, problem-solving, creativity, and other high-level skills among students.

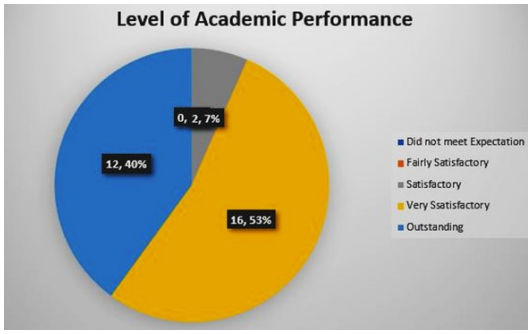

Figure 1. Frequency and Percentage Distribution of the Respondents According to their TVL- track Grade for the last Quarter

Figure 1 reflects the frequency and percentage distribution of the respondent's grade for the last quarter, along with the ranges. There were 16 students with grades ranging from 85-89, which is equivalent to 53 percent of the sample described as very satisfactory. Twelve students had grades that range from 90-100, which is equivalent to 40 percent labeled as satisfactory and lastly, with the range of 80-84, there were 2 students, which is equivalent to 7 percent rated as satisfactory.

A lot of students from the sample have satisfactorily reached the outstanding range of grades from 80 to 100, wherein they can excel with the use of gadgets as an instructional tool in learning.

2. Level of social media exposure of the respondents in connection to learning, to information awareness and updates, to connectivity, and to addiction.

Table 7. Respondents' Level of Social Media Exposure in Terms of Learning

Learning	Weighted Mean	Qualitative Rating
Social Media helps me to do my assignments.	3.67	High
Social Media assist me to learn more about my lesson.	3.87	High
Social Media helps me to do my research.	4.27	Very High
Social media enriches my vocabulary	3.67	High
Social media improves my spelling proficiency	3.93	High
Overall Mean	**3.88**	**High**

The table 7 shows the item mean, qualitative description or rating and the level of social media exposure in terms of learning which is interpreted as high based from the overall mean of 3.88.

Despite the high level of social media exposure among respondents, it is indeed beneficial to learning. It helps the student to do their assignments, to learn more about their lesson, to do their research, to enrich their vocabulary and to improve their spelling proficiency.

The result is supported by the study of Kulidtod and Pasagui (2017) who found that social media is used to gain knowledge for academic purposes; it helps them find answers for their schoolwork, benefits

them in earn better grades in school, and provides them with an excellent opportunity for effective forums in class discussion. Moreover, using social media helps them improve their participation in school, and highly motivates them to become participative in the classroom.

Table 8. Respondents' Level of Social Media Exposure in Terms of Information Awareness and Updates

Information Awareness and Updates	Weighted mean	Qualitative Rating
I keep on updating my profile picture on my social media account.	3.2	Average
I use social media to keeps me updated about my family and friends.	3.8	High
I use social media for news update.	3.7	High
I use social media for posting ideas, information, pictures and videos.	3.43	High
I check my social media account every day.	3.2	Average
Over All Mean	**3.47**	**High**

Table 8 displays that respondents have a high level of social media exposure based on the practices provided in terms of information awareness and updates, which have a 3.47 weighted mean.

The respondents responded that they engaged in social media to keep themselves updated and aware of their friends, families and acquaintances. Besides, social media helps students with news updates, sharing ideas, information, pictures and videos.

As supported by the study of Kulidtod and Pasagui (2017) that the students of the Institute used the social networking media to be updated with latest news, helps them to become updated on current issues and events that can help on their studies, helps them to share topics online, gives them information related to their academic or future career, and helps them to become smart because of the information they get from the sites.

Table 9. Respondents' Level of Social Media Exposure in Terms of Connectivity

Connectivity	Weighted Mean	Qualitative Rating
Social media allows me to make more friends	4.1	High
I used social media for communication with my friends.	3.93	High
I react and comment on every feed I receive in my account.	3.27	Average
I use social media to interact with diverse group of people.	3.17	Average
I used social media to learn others culture.	3.47	High
Over All Mean	**3.59**	**High**

Based on Table 9, the level of social media exposure of respondents in terms of connectivity to diverse groups of people is high, with a 3.59 overall weighted mean.

Furthermore, the respondents use social media to make more friends, communicate and interact with diverse groups of people through exchanging comments and reacting to their posts, and also to learn each other's culture.

This finding was supported by Kulidtod and Pasagui (2017) who found that social media is used by students to communicate with people who are away from them and likewise helps them to improve their communication skills. They also cited the findings by Fox News' Dr. Manny that teenagers use their social networking media accounts to like, comment and follow, and they base their self-worth on the number of likes, comments, and followers they obtain from them (Talreja, 2013).

Table 10. Respondents' Level of Social Media Exposure in Terms of Addiction

Addiction	Weighted mean	Qualitative Rating
I use social media when I get bored of studying.	3.87	High
I spend more time browsing my social media account rather than reading my lesson.	3.7	High
I prioritize using social media than doing my homework.	2.73	Average
I feel irritated if I can't check my social media account.	2.57	Average
I stay awake late at night updating my social media account and watching videos	3.2	Average
Over All Mean	**3.21**	**Average**

Table 10 show the average level of social media exposure in terms of addiction to using social media platforms with an over all mean of 3.21, which means they minimize using social media.

The recent study interpreted that the level of social media exposure in connection with addiction to using social media platforms is average, which means they minimize addiction. But the results cannot deny the use of social media exposure rather than reading notes and books when they get bored, though sometimes they minimize using social media while doing their school activities based on the reflected qualitative rating, which is average. Some respondents also feel irritated when they can't pay attention to their social media accounts. Moreover, some students stay awake late at night browsing social media to update their accounts and watch videos.

The finding of the study was parallel to the study of Kolhar et al (2021) who reported that the students were more likely to use such technologies to have fun and pass time than for learning purposes. These habits substantially affect academic performance, learning, and knowledge acquisition (Abbas et al., 2019).

Hence, social media exposure benefits their academic performance and likewise boosts their confidence for social interaction. However, they sometimes used social media to kill their free time instead of reading books for leisure.

3. Significant difference of respondents in the level of social media exposure according to the respondent's socio-demographic profile variables

Table 11. Analysis of difference of the respondent's level of Social Media Exposure in Terms of Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Grade Level

Grade	Means	SD	df	t-test	p-value	Interpretation
11	3.69	0.34	28	1.99	0.06	not significant
12	3.37	0.51				

Table 11 shows that there is no significant difference on the respondents' level of social media exposure in terms of learning, information awareness and updates, connectivity and addiction when grouped according to grade level. As shown in the computed t-value of 1.99 with a corresponding p-value of 0.06, respectively, which is greater than the level of significance set for this study, which is 0.05. Hence, the null hypothesis is accepted.

The study deduced that the respondents who are TVL students have the same level of learning, information awareness and updates, connectivity, and addiction when grouped according to their grade level.

Table 12. Analysis of difference in the respondent's level of Social Media Exposure in Terms of Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Age

Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation
Between Groups	8.61	5	1.72	3.72	0.010	2.53	Significant
Within Groups	13.91	30	0.46				
Total	**22.52**	**35**					

The table above indicates that the analysis of the difference in the respondent's level of social media exposure in terms of learning, information awareness and updates, connectivity and addiction when grouped according to age is significant, as reflected by the p-value of 0.01 which is lower than the alpha significance 0.05 with a corresponding f-value of 3.72. Hence, the null hypothesis is rejected.

This implies that the level of learning, information awareness and updates, connectivity, and addiction to social media of TVL students have significant the difference when grouped according to age. It implies the younger age of the respondents, they are more exposed to social media where they learn more information from it, they become more aware and updated, connected and even addicted to social media which eventually affects their academic performance since the younger students are more exposed to social media compared to older ones who are not competent enough in using the social media.

This finding is supported by Baria (2021) found in the study of Lennon, Rentfro, and Curran (2012) that young adults whose ages range from 18 to 20 oftentimes use social networking sites compared to those belonging to the higher age brackets.

Table 13. Analysis of difference in the respondent's level of Social Media Exposure in Terms to Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Sex

Sex	Means	SD	df	t-test	p-value	Interpretation
Male	3.37	0.37	26	1.54	0.14	not significant
Female	3.60	0.44				

As reflected in the Table 13, the respondent's level of social media exposure when grouped according to sex is not significant, as portrayed by the p-value of 0.14 and the t-value of 1.54, which means the null hypothesis was failed to reject.

This discloses that males and females have the same level of social media exposure regardless of sex and have been exposed to the same practices and interests in using social media.

This is supported by the study of Baria (2021) who cited that the students, both male and female have been exposed to the same type of social media and probably share the same kind of interest and follow the same trends and practices as they access and use the different sites.

Table 14. Analysis of difference in the respondent's level of Social Media Exposure in Terms of Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Preferred Social Media Platform

Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation
Between Groups	0.06	4	0.02	0.07	0.99	2.76	Not significant
Within Groups	5.86	25	0.23				
Total	**5.928**	**29**					

The level of social media exposure presented in the table above when grouped according to preferred social media platforms is not significant, as perceived by a table above with the p-value of 0.99, which is higher than the 0.05 level of significance that corresponds to the 0.07 f-value. Hence, the null hypothesis is accepted.

The study exposes that social media platforms are important as a social exposure for students towards learning, information awareness and updates, connectivity, and addiction.

Inferred from the study of Ashraf et al. (2021) says that the use of social media has become a key part of education, and it has grown increasingly significant because it increases learning, cooperation, and information sharing among students, teachers, and subject professionals. Social media showed the beneficial effect of integration in education on the profound learning experience of students.

Table 15. Analysis of difference in the respondent's level of Social Media Exposure in Terms of Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Gadget used

Source of Variation	SS	Df	MS	F	P-value	F crit	Interpretation
Between Groups	0.89	3	0.298	1.881	0.158	2.975	Not Significant
Within Groups	4.12	26	0.159				
Total	**5.018**	**29**					

The table above displays that the p-value of 0.158 with a corresponding f-value of 1.88 makes it evident that the level of social media exposure when grouped according to the most gadget used is not significant, which means that the null hypothesis is accepted.

It implies that the level of social media, when grouped according to gadget has no difference. The use of gadgets as instructional tools is important, which can affect the student's academic performance. Gadget is considered an innovative learning medium to be used as an instructional tool for improving students' academic performance, but teachers should be vigilant in using it.

The result of this study is the same with the study of Haryanto (2019) who articulated that mobile gadgets can be an even more significant learning tool. Gadgets are used in learning as a positive learning media for students learning achievement. Gadgets can be an effective and innovative learning medium if they are truly used.

Table 16. Analysis of difference on the respondent's level of Social Media Exposure in Terms of Learning, Information Awareness and Updates, Connectivity and Addiction when grouped according to Final Grade for the Last Quarter

Variable	Df	F-Value	P-value	Remark
Academic Performance	14,14	10.44	0.00004	Significant

The Table 16 displays that the level of social media exposure in terms of learning, information awareness and updates, connectivity, and addiction when grouped according to final grade in the last quarter is significant based on the p-value of 0.0004 with a corresponding f-value of 10.44, which means the null hypothesis is rejected.

In this study, exposure to social media can enhance learning that affects their final grade for the last quarter since there is a significant difference. Social media is used as tool to obtain some learning information. In this study, the final grade of the respondents in the last quarter was good despite being exposed to social media.

This finding is supported by the study of Sharma and Behl (2022) who found that social media is effective for gaining knowledge that will help students enhance their academic performance when used in an appropriate manner. They also indicate that in-depth knowledge of social media platforms and their association with academics should be elucidated to the students so that they may explore the social media opportunities in an optimal manner.

4. Level of social media exposure significantly related to the level of academic performance

Table 17. Relationship between the Level of Social Media Exposure and Academic Performance

Pearson Correlation	R	r2	Significance
Level of Social-Media Exposure and Level of Academic Performance	0.144	0.021	0.00

The Table 17 shows that the relationship between the level of social media exposure and academic performance has significant relationship based on the 0.00 computed p-value, that is lower than the alpha level of 0.05, which implies that the null hypothesis is rejected and there's a positive correlation.

The result indicates that learners who are engaged in using social media, which contributes to learning, help students with information awareness and connection with diverse groups of people which boost their social interaction, which can directly affect their performance.

The finding of the study is relevant to the study of Baria (2021) found that students were performing academically despite accessing social media sites. It is relevant to note that in the face of social media's popularity, students can prioritize and multi-task between academic-related research and social interactions. Correspondingly, students have learned to manage their time and have been able to maximize the advantages of using social media.

Indeed, social media has contributed greatly to facilitating learning in the 21st century. But it is contradictory to the studies of Ahmadi and Zeinali (2018), Kumar et al. (2018) and Azizi et al. (2019) who presented that engagement with social media has a negative impact on academic performance.

CONCLUSIONS AND RECOMMENDATIONS

After all the gathered data from this study were tabulated, analyzed, and interpreted, the following findings were drawn:

1. The respondents were from the Grade 11 and Grade 12 senior high school students who are taking the Technical-Vocational Livelihood Track at Pinayag National High School. It was noted that the respondents were 16 and above years of age, mostly males. Facebook is the most highly utilized and preferred social media platform due to its accessibility and popularity among students, followed by YouTube. In terms of gadgets, the cellphone is the primary device that students can use to access social media to learn, to be aware of the latest information updates, to interact or connect with different culture, to find new friends, and to spend time when bored.

2. The interpreted level of social media exposure in connection to learning, information awareness and updates, connectivity is high. On the contrary, in terms of addiction to social media, the level of exposure is average. This shows that the respondents' exposure to social media cannot be denied, but at the same time, it helps facilitate their learning.
3. Analysis of difference when grouped according to profile variables, which included grade level, sex, preferred social media platform and gadget used, show that there is no significant difference in the respondents' level of social media exposure in relation to learning information awareness, connectivity, and addiction. On the other hand, the study found that age and final grade in the last quarter have a significant difference on social media exposure.
4. Between the level of social media exposure and academic performance, there is significant relationship, which entails that the null hypothesis is rejected and reflects a positive correlation which means that there is social media exposure among students that helps them gain good academic performance.

Based on the above findings and conclusions, the following are the recommendations of the researchers to enhance the academic performance of students:

1. That the same study should be conducted with a large number of participants and respondents to obtain a more reliable, concise, and definite description of the variables under study.
2. That needs to adopt other techniques for gathering the needed information, such as interviewing and observation.
3. That the students need to engage themselves on social media in relation to their academic performance.
4. That social media is not totally evaded to address the academic performance or learning needs of the learners, but the teachers must be vigilant in allowing social media as an instructional passage of learning, intervention and a main source of learning.

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CASH HANDLERS KNOWLEDGE AND PRACTICES IN IDENTIFYING COUNTERFEIT CURRENCY

Jimmy G. Artus Jr., Dr. Nicholas S. Caballero, Dr. Liza Joy B. Barican
STI West Negros University
Burgos St., Brgy. Villamonte, Bacolod City, Philippines

ABSTRACT

This mixed-methods study aimed to investigate the knowledge and practices of cash handlers in identifying counterfeit currency at motorcycle dealers in the province of Iloilo, Philippines, from 2022 to 2023. A total of 30 cash handlers were selected for the study, with seven participants chosen for individual interviews and focused group discussions. A structured questionnaire was administered to assess their knowledge and practices, and descriptive statistical analysis was used to summarize the data. Inferential statistical tests were employed to examine the relationships between demographic variables and knowledge practices. The results showed that cash handlers' knowledge of counterfeit currency identification was high, but their practices were limited, with minimal knowledge of security features. The study also found no significant differences in knowledge levels among cash handlers based on age, sex, length of service, or educational background. The qualitative findings revealed three themes: "traditional methods" of identifying counterfeit currency, "liability and financial consequences" for cash handlers who fail to identify counterfeits, and the "need for training and seminars." The study's findings have implications for the development of orientation programs and workshops to improve cash handlers' knowledge and confidence in identifying counterfeit currency.

Keywords: Counterfeit Currency, Knowledge, Practices, Mixed Method Research, Cash Handlers

INTRODUCTION

A case of fraud rises globally. No business was invulnerable to fraudulent transactions. Counterfeiting was one of the crimes that directly hit companies worldwide. Fake goods circulate globally. The rise of counterfeiting directly hits the economy of a country. Currency counterfeiting is one of the most damaging forms of crime when circulating in the system. The circulation of fake money can destabilize a business operation and even a country. It can cause inflation if it spreads in the financial system on a large scale (Staake et al, 2009)

According to (Domingo, 2022; in Dusaban, 2022), the BSP and NBI confiscated 161 counterfeit Philippine currency banknotes and 78 fake foreign banknotes in operation conducted on January 19, 2022. Further, BSP Governor Benjamin Diokno said the BSP would push a new law that would impose stiffer penalties on counterfeiting banknotes. The BSP carried out 110 law enforcement operations that resulted in the arrest of 179 suspects and confiscation of more than 12,400 pieces of counterfeit peso banknotes and more than 14,300 pieces of counterfeit US dollar banknotes. The BSP chief said enforcement operations have led to the filing of 164 criminal cases in court, with 65 already concluded.

Additionally, in the City of Iloilo, Iloilo City Police Office (ICPO) warned the public against fake peso bills being circulated in the advent of the Christmas Season. The ICPO issued the warning after the arrest of a 20-year-old man for possession of a counterfeit P500 bill.

Furthermore, with the Christmas season just a month away, the importance of community partnerships to thwart criminality, particularly fraudulent acts and crimes against property (theft and robbery). According to Defensor, the public must be extra careful of the paper bill. Check for the authenticity of the banknotes as recommended by the Bangko Sentral ng Pilipinas (BSP). If someone happens to come across fake bills, they must immediately report it to the nearest police station or the BSP.

Finally, while in Iloilo City, there were several cases involving counterfeit currency, one of the famous cases was in 2004 in the Municipality of Barotac Viejo, Province of Iloilo, where a certain Edu-

ardo Pedrajas was arrested for violation of Article 166 of the Revised Penal Code – forging treasury or bank notes. It was detected when there were several reports of counterfeit money circulation not only in the Municipality of Barotac Viejo but also in the Supermarket and Central Market in Iloilo City, where vendors have detected counterfeit bills. The NBI Regional Office 6 has seized many cut and uncut counterfeit bills, including two computers with complete printing accessories.

According to (Staake, et al, 2009) the biggest challenge with researching counterfeit activities and the subsequent implications is due to their illegal nature. Hence, this study is anchored on the Theory of Reasoned Action (TRA) of Ajzen & Fishbein (1980) with the premise that the simplest and most efficient way to predict a given behavior was to ask a person whether he or she was or was not going to perform that behavior. Thus, according to the theory, performance or non-performance of a given behavior is primarily determined by the strength of a person's intention to perform (or to not perform) that behavior, where intention is defined as the subjective likelihood that one will perform (or try to perform) the behavior in question.

Moreover, another theory anchored to this study is the behavioral management theory by Elton Mayo, cited in Ward (2021), the behavioral management theory is often called the human relations movement because it addresses the human dimension of work. Behavioral theorists believed that a better understanding of human behavior at work, such as motivation, conflict, expectations, and group dynamics, improved productivity. The theory relies on the notion that managers will better understand the human aspect of workers and treat employees as important assets to achieve goals. Management's interest in workers makes them feel part of a specific group.

Finally, in the context of identifying counterfeit currency, these two theories might lead to an understanding of such a phenomenon considering the occurrence of the act of counterfeit behaviors, the responsibility of cash handlers, and the company's management practices in handling such occurrences of counterfeiting whose workers are deemed victims of currency counterfeits.

Statement of the Problem

This study aimed to investigate the competence of cash handlers of the different motorcycle dealers in identifying counterfeit Philippine Paper Currencies in the Province of Iloilo for the year 2022-2023.

Specifically, it sought answers to the following questions:

1. What is the extent of knowledge of cash handlers in identifying counterfeit Philippine paper currency as an entire group and when classified according to age, length of service, and educational attainment?
2. Are there significant differences in the level of cash handlers' knowledge in identifying counterfeit Philippine paper currency when they are classified according to age, length of service, and educational attainment?
3. How do cash handlers identify counterfeit currency? What are their practices in identifying counterfeit currencies?

Research Design

This study is geared to determine the level of knowledge and practices in identifying counterfeit currency among cash handlers at Wheeltek Motor Sales Corporation And Des Marketing in the province of Iloilo during the year 2022–2023.

The descriptive mixed-method research design was used to attain the study's objective. The goal of descriptive research is to describe a phenomenon and its characteristics. This research concerns what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data.

Mixed method research design is an integration of quantitative and qualitative and research and data in a research study. According to Burke-Johnson et al., (2007) this is an empirical research in which a researcher combines elements of quantitative

and qualitative research approaches for the broad purposes of breadth and depth of understanding and corroboration. According to Creswell (2014), under mixed method research design, qualitative research brings in open-ended data without predetermined responses while quantitative research brings in closed-ended data.

This design is appropriate since the research aims to employ a mixed research method that will determine the knowledge and practices of cashiers of motorcycle dealers in identifying counterfeit Philip-

pine paper currencies. Mixed method research was used in collecting and analyzing quantitative and qualitative data in the study context.

Moreover, concurrent mixed method data collection strategies are used to validate one form of data with the other, transform the data for comparison, or address different types of questions. The core assumption of this form of inquiry is that the combination of quantitative and qualitative approaches provides a complete understanding of a research problem than either approach alone (Creswell, 2014).

METHODOLOGY

The Respondents

The respondents were the 30 cash handlers assigned at Wheeltek Motor Sales Corp and DES marketing motorcycle dealers in the Province of Iloilo as classified to their age, (30 years old and below and above 30 years old), length of service (1 year and below, more than 1 year up to 3 years, and more than 3 years) and educational background (Accounting Related Course or Non-Accounting Related Course). They were taken using purposive sampling. This is a method of choosing a group of people based on a particular purpose. The purposive sampling technique is a non-probability sampling technique used in selecting samples. Non-probability sampling means that researchers choose the example instead of randomly selecting it, so not all population members have an equal chance of participating in the study (Arikunto, 2010).

Of the 30 motorcycle cash handlers involved in this study, 7 (seven) of them were taken as participants for the qualitative part of the investigation. Three were 3 assigned for individual interviews and 4 for focused group discussions. The distribution of the respondents was categorized into age (30 years old and below and above 30 years old), length of service (1 year and below, more than 1 year up to 3 years, and more than 3 years) and educational background (Accounting Related Course or Non-Accounting Related Course).

The available respondents were taken as the sample at the time of data collection. Thus, reachable and approachable would be selected for the study.

Table 1 shows the distribution of respondents

Category	f	%
Entire group	30	100
Age		
30 years old and below	16	53.33
Above 30 years old	14	36.66
Length of Service		
1 year and below	6	20
More than 1 year up to 3 years	8	26.66
More than 3 years	16	53.33
Educational Background		
Accounting Related Course	7	23.33
Non-accounting Related Course	23	76.66

Data Gathering Procedure

Permission to conduct the study was secured from the Office of the Graduate School, College of Criminal Justice Education in West Visayas State University-Lambunao Campus. Permits were also sought from the General Managers of the different motorcycle dealers in the Province of Iloilo. A letter for the respondents was also secured informing the respondents about the purpose of their participation and in providing data thru the use of the questionnaires. Retrieval of the accomplished questionnaire followed thereafter.

Data Analysis Procedure

The data gathered for this study were subjected to descriptive and inferential statistics.

For descriptive data analysis, mean and standard deviation were used.

Mean. This was used to determine the level of knowledge of cash handlers in identifying counterfeit currency.

Standard Deviation. This was used to determine the homogeneity and heterogeneity of respondents' responses to the computed mean.

This scale of mean and description was used to determine the cash handlers' level of knowledge in identifying counterfeit Philippine paper currencies.

Table 2. Shows the scale and description to measure the knowledge of cash handlers in identifying counterfeit currency

Scale	Description	Interpretation
16.6 - 20.0	Very High	With highest extent of expertise in identifying counterfeit currency
12.7 - 16.5	High	With expertise in identifying counterfeit currency
8.8 - 12.6	Moderate	With mediocre expertise in identifying counterfeit currency
4.9 - 8.7	Poor	With poor knowledge in identifying counterfeit currency
1.00 - 4.8	Very Poor	Without knowledge at all in identifying counterfeit currency

For inferential data analysis, the Mann-Whitney U test was used.

Mann-Whitney U Test. This was used to determine the difference in the level of knowledge in terms of age, length of service, and educational background of the cash handlers of the different motorcycle dealers in identifying counterfeit Philippine paper currencies.

For qualitative part of the study, formulation of themes was used.

Thematic data analysis. This was applied to draw out the significant statements of the participants in an interview (individual and focused group). The significant statements of the participants in identifying counterfeit currency were noted to arrive at a formulation of meaning to create a theme.

RESULTS AND DISCUSSIONS

The findings revealed that the overall knowledge level of cash handlers in identifying counterfeit currencies was high (M=13.60, SD=5.83), though there was significant variation in the responses, as indicated by the standard deviation.

Both cash handlers aged 30 years and below (M=13.12, SD=5.70) and those older than 30 (M=14.23, SD=6.17) demonstrated a high level of knowledge in identifying counterfeit currencies.

Cash handlers with 3 years or less of experience (M=14.54, SD=5.27) and those with more than 3 years of experience (M=12.89, SD=6.28) both showed high levels of knowledge in identifying counterfeit currencies.

Cash handlers with an educational background in accounting (M=16.86, SD=2.91) exhibited a higher level of knowledge than those from non-accounting courses (M=12.61, SD=6.17), though both groups had a high level of knowledge overall.

Table 3. Level of Knowledge of Cash Handlers in Identifying Counterfeit Currencies when Classified According to Age, Length of Service, and Educational Background

Category	Mean	Description	SD
Entire Group	13.60	High	5.83
Age			
30 years old and below	13.12	High	5.70
Older than 30 years old	14.23	High	6.17
Length of Service			
3 years and below	14.54	High	5.27
More than 3 years	12.88	High	6.28
Educational Background			
Accounting related course	16.86	High	2.91
Non-accounting related course	12.61	High	6.17

Inferential Data Analysis

Mann-Whitney U-test results in differences in the knowledge of cash handlers in identifying counterfeit currencies when classified according to age, length of service, and educational background.

Table 3 shows the Mann-Whitney U test result of cash handlers' knowledge in identifying counterfeit currency in terms of their age, length of service, and educational attainment.

The Mann-Whitney U test is a non-parametric statistical test used to determine the difference between two independent groups. In this context, the test was used to analyze the relationship between cash handlers and profile (age, length of service, and educational background).

The findings in Table 3 revealed that no significant differences existed in the level of knowledge of cash handlers in identifying counterfeit currencies when they were classified as to age (z-value=-0.841, p-value = 0.400), length of service (z-value=-0.505, p-value = 0.614) and educational attainment (z-value=-1.601, p-value = 0.109).

This implied that the level of knowledge of cash handlers in identifying counterfeit currencies remains the same regardless of their age, length of service, and educational background.

Their age, based on the cash handlers' profile, is not a factor in this study because most of the victims of counterfeiting rush-up transactions of counting money, leading the cash handlers to undetermined the genuine from the counterfeit. Poor vision may lead to counterfeiting, but it does not affect them because they may naturally identify through feeling it whether the currency can be real or fake.

Their length of service in identifying counterfeit currency must support a study in this profile. Still, the training and seminars of cash handlers in identifying counterfeit money are significant factors. The Bangko Sentral may suggest the best experience in training to identify counterfeit currency among dealers to prevent the charges in their own pockets.

As to their educational background, this study has shown that both accounting and non accounting-related course has no significant differences. It is due to the experiences of their knowledge in identifying counterfeit from their related approach. Still, the accounting-related system has more advantages regarding vision and feels expertise.

The result conforms to the idea of Van der Horst (2017), stating that the ability of participants (experts and non-experts, i.e., general public) to authenticate banknotes as a function of expertise, perceptual modality (sight and touch), and exposure duration suggested that solely seeing banknotes, participants from the public did well above chance even with an exposure duration of 500 ms and even when taking out the counterfeit that was most obviously fake. Interestingly, they did much better than what the participants themselves expected, as most participants had the idea that they were plainly guessing. Critically, looking longer at the banknotes (1000 ms or 10 s until response) did not improve performance. This suggests that one's ability to detect counterfeits when solely relying on vision depends on the first glance.

The performance of experts is much better, but the implementation only increases a little, if anything, with longer exposure durations. For the experts, it is as if a glimpse is enough to authenticate.

Table 4. Mann-Whitney U Test Result for the Differences in the Level of Knowledge of Cash Handlers in Identifying Counterfeit Currencies when Classified According to Age, Length of Service, and Educational Background

Category	z-value	p-value	Statistical Decision
Age	-0.841	0.400	Not Significant
Length of Service	-0.505	0.614	Not Significant
Educational Background	-1.601	0.109	Not Significant

Qualitative Data Analysis

Cash Handlers Practices in Identifying Counterfeit Currency. Cash handlers must know how to counter the counterfeiting attack that spreads beyond its scope. A victim of this practice tends to be the person in charge. At the same time, the person who possesses the counterfeit money that passes through the cash handler is not already liable if there is a careless practice on the part of the cash handler. The ending flow of counterfeit is on the part of the cash handler since the bank they deposited the money is in standard practice to identify counterfeit. The possible action that must take place is to practice identifying counterfeit at the highest level of training and bring the necessary knowledge to counter the problem that arises globally.

The assets and economic stability of that particular nation bolstered currency. The amount of counterfeit currency in circulation would affect everyone who received the fake money and could not pass it on. A country dealing with other countries must be able to lend credibility to the value of its currency for inter-nation purchasing power. The counterfeiter does not commit crimes of violence, yet counterfeiting activities are defined by society as criminal by legal statute. These criminals' deviant behavior threatens the foundations of organized society--economy and incurs losses by specific individuals, banks, and businesses. Counterfeiting continues to be widespread, is international in scope, and presents a significant challenge worldwide for study and control. Tables show statistics for monies seized and circulation of such counterfeits.

The participants or cash handlers of Wheeltek Motor Sales Corporation were interviewed about their practices in their respective branches in the Province of Iloilo, and it was discovered that there were standard practices mentioned that turned out to be the significant statement. Individual interviews and focused group discussions led to the development of three (3) themes to determine the same practices of the cash handlers.

Themes drawn out from the participants' statements

The individual interview and focused group discussions was undertaken to explicate the practices of cash handlers in identifying counterfeit Philippine paper currencies of the various motorcycle companies in the Province of Iloilo. Based on their statements, certain themes were drawn out. The themes were noted accordingly as the conversation with them are guided by the structured interview questions pinpointing their practices in their cash handling transactions. Each of these themes are presented herein with the quoted direct statements of the participants, respectively.

Theme 1: Identifying counterfeit currency in a traditional way. The interview led to cash handlers identifying at least two of twelve (12) security features as standard practices for identifying counterfeit currency. First, they recognize the security thread by looking closely and scratching the paper currency. They added that security thread could be seen easily, the practice they made was to scratch it on a piece of paper, and once it leaves a colored trace on the paper bill, it is identified as genuine. The second practice is the watermark image, with a definite idea of actual currency. These practices have been adapted for how many years as a simple, essential, and standard method of identifying counterfeit currency.

Theme 2: Failure to identify counterfeits are charged from cash handlers own pocket. Cash handlers are held accountable if they encounter counterfeits in their possession, which can affect their standard of living because charges will come from their pockets. The transaction with the cashiers depends on the summary of their collection on the day after it, whether they have cash over or in short of their actual collections. In both cases, the transaction may only be completed if the amount tallied in their collection is completed. Charges on their own may result in depression and resignation if they cannot practice the correct identification of counterfeit currency, depending on how the actual charges appear.

Theme 3. Need of seminar and training. Seminars and training are essential on the part of the cash handlers for them to gain more skills and improve their practices in identifying 12 security features. To avoid being a victim of counterfeiting, they must secure general information on identifying standard patterns to maintain the integrity of their occupation and to spare them from accountability and liability in the company. In this particular event, the cash handlers may improve their skills in identifying counterfeits in general.

Table 5. Themes on the Practices in Identifying Counterfeit Currencies

Themes	Participants' Statements on their Practices
1. Identifying counterfeit currency in a traditional way	Participant #1, participant #3, and Participants in FGD have the same practices, looking and scratching a security thread and clear visibility of watermark image as a method of identifying counterfeit, while Participant #2 has no practices in the identification of counterfeit currency.
2. Failure to identify counterfeits are charged from cash handlers own pocket	All participants stated that they would have personal charges if they encountered a counterfeit after a whole day transaction.
3. Need of seminar and training	All participants in the individual interview as well as those in the FGD raised a statement that they need a seminar and training in identifying counterfeit currency.

FINDINGS

The findings of the present study were:

1. Generally, the extent of knowledge of cash handlers is high in identifying counterfeit currency as an entire group and when classified into their age, length of service, and educational background.
2. No significant differences existed in the level of knowledge of cash handlers in identifying counterfeit currency whether they are classified into age, length of service, and educational background.
3. Three themes were drawn out both in the individual interview and in focused group discussions regarding the participants' practices in identifying counterfeit Philippine paper currency. The first theme is identifying counterfeit currency in a traditional way. In this instance, the participants scrutinized the security thread, and when they scratched it on the piece of paper, the color of the security thread remained on the surface, and the watermark image that can be seen through the rays of light, wherein the same and exact image appeared on the portrait of the genuine note. The second theme is that failure to identify counterfeits is charged from the cash handler's own pocket. In this premise, all participants incur their own liability for their actions if they encounter counterfeit. Finally, the third theme focused on the need for seminars and training. In this context, participants averred the need to undertake seminars and training to become more knowledgeable and may improve their practices in identifying counterfeit currency

CONCLUSION

Based on the findings, the following conclusions are made:

1. The cash handlers' knowledge of identifying counterfeit currency was considered high when categorized according to age, length of service, and educational background. This might indicate that cash handlers need to have a very high degree of knowledge about identifying counterfeit currencies. This also implies their need to undergo seminars and training to prevent them from becoming victims of counterfeiting.
2. Cash handlers' knowledge is the same in identifying counterfeit currency when regardless of their age, length of service, and educational background. The study's findings concluded that age, length of service, and educational background are not factors in the identification of counterfeit currency.
3. As to practices, perhaps the participants need further enhancement in identifying counterfeit currency. Most likely, their exposure to how they secure themselves from liability due to their existing practice in identifying counterfeit currency made them prone to becoming victims of counterfeiting. Should they become careless in using effective techniques in scrutinizing the Philippine paper currency, they may place themselves at a disadvantage.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations are presented:

Here's a more detailed and comprehensive version of each recommendation based on your initial points:

1. Increase Awareness of Cash Handling Responsibilities and Risks.

Motorcycle company dealers must acknowledge their liability when cash handlers fail to identify counterfeit currency. To mitigate this risk, it is essential to provide regular training for all employees involved in cash handling. These trainings should:

- Emphasize the legal and financial implications of accepting counterfeit money.
- Highlight real-world case studies that showcase the impact of negligence in handling cash transactions.

- Encourage a culture of accountability, where cash handlers fully understand their responsibility in detecting fraudulent currency and the consequences of failing to do so.

2. Conduct Routine and Targeted Training Sessions for Cash Handlers

In branches where counterfeit currency has been identified, it is crucial to implement monthly training or meetings for cash handlers. These sessions should:

- Review specific cases of counterfeiting within the branch or industry and analyze potential improvements in processes.
- Foster open discussions among cash handlers to share experiences and best practices for detecting counterfeit money.
- Incorporate routine testing and evaluation of employees to ensure they are up to date on the latest techniques and tools for identifying fraudulent currency.
- Consider designating a team leader or senior handler responsible for providing on-the-job support to others in spotting counterfeit bills.

3. Integrate Advanced Technology and Traditional Methods to Detect Counterfeit Currency

While traditional methods of identifying counterfeit currency (e.g., examining texture, watermarks, and ink) remain valuable, cash handlers must also adopt modern tools to enhance detection capabilities. The following steps should be implemented:

- Provide every cashier and cash handler with reliable counterfeit detection devices such as UV light scanners or money detectors.
- Ensure that all cash handlers are trained to use these devices effectively, particularly during high-volume or rushed transactions when errors are more likely to occur.
- Encourage the development of checklists or guidelines for cash handlers to reference while processing transactions. This could include a step-by-step procedure for verifying large bills or multiple denominations during high-pressure moments.
- Regularly update detection methods based on new counterfeit techniques that might emerge, with input from law enforcement and banking experts.

4. Enhance Procedures for Counting and Monitoring Cash in High-Volume Situations

Cash handlers must adopt stricter measures to safeguard the accuracy and integrity of cash counting, especially when large sums or fast-paced transactions are involved. To do so, dealers should:

- Establish a "double-counting" policy for high-volume transactions, where two cash handlers independently verify the total amount before finalizing a transaction.
- Invest in high-speed counting machines with counterfeit detection capabilities to streamline processes while minimizing errors.
- Implement strict security protocols for handling suspected counterfeit money, such as immediately segregating suspicious bills for further review.
- Instruct cash handlers to pause transactions or take extra caution when they notice discrepancies during fast counting, ensuring that any counterfeit currency is identified before it leads to multiple charges or errors in record-keeping.

5. Implement Ongoing Workshops and Educational Seminars for Cash Handlers

As part of a long-term strategy to protect both cash handlers and the company, motorcycle dealers should consider implementing regular orientation programs and workshops based on the research findings. These seminars should:

- Cover comprehensive topics such as the latest counterfeit detection techniques, regulatory compliance, and the legal ramifications of mishandling currency.
- Feature guest speakers from the banking industry, law enforcement, or financial crime experts to provide insights into emerging counterfeit threats and prevention strategies.
- Include practical exercises, such as handling different counterfeit bills, identifying subtle differences, and using detection tools in simulated high-pressure scenarios.
- Make the workshops mandatory for new hires, with refresher courses for existing employees, ensuring that cash handlers continually improve their skills and remain vigilant against counterfeiting attempts.

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IMPLEMENTATION, PREVENTIVE MEASURES, AND CHILDREN'S COMMUNITY ASPIRATIONS ON NATIONAL TASK FORCE - END LOCAL COMMUNIST ARMED CONFLICT INITIATIVES

Josemarie R. Simangan
Police Lieutenant Colonel
Chief, Provincial Operations Management Unit
Sultan Kudarat Police Provincial Office
Sultan Kudarat State University
EJC Montilla, Tacurong City

ABSTRACT

This study focused on the implementation, preventive measures, and children's community aspirations of National Task Force- End Local Communists Armed Conflict (NTF-ELCAC). Respondents' initiatives wherein the extent of implementation of the preventive measures, level of aspirations of the children in addressing armed conflict, significant impacts of the implementation of NTF-ELCAC Programs in the school community, relationship of the preventive measures undertaken by the NTF-ELCAC as perceived impacts in the school community, and the significant differences between the children's aspirations and impacts of the said program would be discovered and tested. It was conducted in the province of Sultan Kudarat specifically to two (2) schools impacted by armed conflicts in the said province. The respondents were the teachers, learners, and barangay key officials located at the identified last miles. For the extent of implementation of the preventive measures along with Police visibility, Patrolling, Educational awareness programs; and Information, education and communication distribution and dissemination. The results signify that the NTF-ELCAC is strongly managed in the designated community wherein police officers put their full support by thorough patrolling and continuous dissemination of information to people in the entire community. For the level of children's aspirations in addressing armed conflict through the implementation of NTF-ELCAC programs depicts that people in the community strongly believe on the power of education and living in safe and secured place to live in that really give them good future for their children and more opportunities to come if they could finish their studies. For the results of the summary on the impacts of the implementation of the study in the school community convey that the respondents strongly agree that the NTF-ELCAC programs are implemented well and visible in the school community wherein police officers and members convene and participate in the said program for the benefit of the school community. For the significant relationship between the implementation of the preventive measures, the perceived impacts to the school community means that the programs, projects, and activities of the NTF-ELCAC are well implemented, monitored and evaluated. It can contribute more for the betterment of the life status of the school community as to peace and order, community mobilization and participation, addressing conflicts, and education of children. For the significant difference, The result implies that in the community of Lagandang and Molon, the research study contributes best and answers on the Childrens' Aspiration towards the community. People in the barangay acknowledge the presence of the said program and appreciate the program, projects, and activities presented and implemented for the development of the community towards a peaceful and secured environment within the barangay premises. The results also denote that the perceived impacts of the study when grouped by community have a strong effect on the identified respondents or in the whole community in the barangay. It also shows that it is new and different from the other programs implemented by the government. It is highly recommended that the Philippine government shall render their full support to the NTF-ELCAC. This is to improve policies, rules, and orders to fully implement programs, activities, and projects for the benefit of the identified barangay community and other stakeholders in the Province of Sultan Kudarat.

Keywords: Children's Community Aspirations, Government Initiatives, NTF-ELCAC Implementation, Philippine National Police, Preventive Measures

INTRODUCTION

Terrorism is one of the serious factors in the community's productivity and progress. In the Philippines, particularly in Mindanao Island, local armed conflicts are the conditions in some areas that need to be addressed. Community engagement goes beyond clear communication and inclusive decision-making. It requires concerted efforts to build strong partnerships with various community stakeholders, from parents and students to local businesses and non-profit organizations (Bloetner, 2023).

Hence, the National Task Force to End Local Communist Armed Conflict (NTF-ELCAC) is organized by the Philippine government to respond and raise awareness of the ongoing communist rebellion in the Philippines (NTF-ELCAC, 2021) wherein school community will be the main purpose to engage with for a good purpose to achieve peace and progressive school community. It is a whole nation approach response to eradicate disputes, terrorism, and other critical events happening in the country. The formation of the NTF-ELCAC followed the formal termination of peace talks between the Philippine government and the NPA when President Rodrigo Duterte issued Presidential Proclamation 360 on November 23, 2017, citing continued attacks by the NPA despite the then ongoing peace negotiations (Executive Order 70, 2018).

Based on the gathered data, it was found out that the said program gives attention to other aspects and has no focus on the school premises. Therefore, the researcher intends to focus on the identified schools exploring the impact of NTF-ELCAC initiatives on stakeholder perspectives about the implementation, preventive measures, and children's community aspirations. Different processes were used to consolidate information from the group of respondents' shared experiences to address problems, challenges, and issues, and even to create strategies for the betterment of the implementation and even for the sustainability of the ELCAC Program.

STATEMENT OF THE PROBLEM

This research focused on the Implementation, Preventive Measures, And Children's Community Aspirations on National Task Force- End Local Communists Armed Conflict (NTF-ELCAC) Initiatives. Specifically, it sought answers to the following questions:

1. What is the extent of implementation of the preventive measures undertaken by the NTF-ELCAC along with:
   1.1 Police visibility;
   1.2. Patrolling;
   1.3. Educational awareness programs; and
   1.4. Information, education and communication distribution and dissemination?
2. What is the level of aspirations of the children in addressing armed conflict through the implementation of NTF-ELCAC Programs in terms of:
   2.1 Community unity and harmony;
   2.2. Addressing armed conflict;
   2.3. Education and opportunities;
   2.4. Safety and security; and
   2.5. Community participation?
3. What are the significant impacts of the implementation of NTF-ELCAC Programs in the school community in terms of:
   3.1 Peace and order situation of the community;
   3.2. Peace and order situation of the school;
   3.3. Community mobilization and participation;
   3.4. Addressing armed conflict; and
   3.5. Education of children?
4. Is the preventive measures undertaken by the NTF-ELCAC significantly related to the perceived impacts in the school community?
5. Is there significant differences in the children's aspirations and impacts of NTF-ELCAC programs when categorized by the community?

Research Hypothesis

1. There is no significant relationship between the preventive measures undertaken by the NTF-ELCAC and the perceived impacts in the school community.
2. There is no significant differences in the children's aspirations and impacts of NTF-ELCAC programs when categorized by the community.

METHODOLOGY

Research Design

This study utilized the descriptive-correlational research design. Foremost, it was descriptive because it is intended to describe implementation, preventive measures, and children's community aspirations: exploring the impact of NTF-ELCAC initiatives on stakeholder perspectives which sought answers the extent of implementation of the preventive measures undertaken by the NTF-ELCAC.

Locale of the Study

The study conducted at Molon Elementary School, Sitio Bagtik, Brgy, Molon, Palimbang, Sultan Kudarat, as well as in Datu Nasrollah Mama Elementary School, Lagandang Annex, Lagandang, Isulan, Sultan Kudarat It was limited only to schools affected by armed conflicts.

Respondents of the Study

The target population of this study composed of the children, households, community leaders, teachers, and school administrators specifically in the identified schools. A total of 500 respondents will be utilized in the study.

Sampling Technique

The researcher used total enumeration as to the selection of the respondents to answer the survey questionnaire.

Research Tools

This study utilized a prepared survey questionnaire served as the guide questions to the study's respondents. In all computations, the help of the MS Excel Application will be maximized. Tests for relationship will be performed at .05 level of significance.

Methods of Gathering Data

The researcher asked permission from the Graduate School's Dean's Office before beginning the study. Following approval, he will seek permission from the Superintendent of the School Division and the school principals to conduct the study in the various schools. The researcher and the panel of validators prepared and validated the questionnaires. Validation, selection, and identification of identified respondents were followed. Distribution of the survey questionnaire was done in the locale of the study. The conduct was done through visiting the locale, and the interview was being conducted. Their answers were collected and recorded using the prepared questionnaire and statistical treatment was utilized. Lastly, the data were gathered, analyzed, and interpreted to come up with the study results.

Statistical Treatment of Data

The mean and standard deviation (descriptive), Pearson r (correlation) were simply used and all tests were done at 0.05 level of significance.

FINDINGS

This study focused on the implementation, preventive measures, and children's community aspirations of National Task Force- End Local Communists Armed Conflict (NTF-ELCAC). Respondents' initiatives wherein the extent of implementation of the preventive measures, level of aspirations of the children in addressing armed conflict, significant impacts of the implementation of NTF-ELCAC Programs in the school community, relationship of the preventive measures undertaken by the NTF-ELCAC

NTF-ELCAC as perceived impacts in the school community, and the significant differences between the children's aspirations and impacts of the said program would be discovered and tested.

Table 1. Summary on the Implementation of the Preventive Measures undertaken by the NTF-ELCAC

Indicators	Lagandang		Molon		Overall		Verbal Description
	Mean	SD	Mean	SD	Mean	SD	
Police visibility	4.64	0.93	4.60	1.05	4.70	0.54	Strongly Agree
Patrolling	4.59	0.60	4.56	0.61	4.64	0.57	Strongly Agree
Educational awareness programs	4.49	0.76	4.39	0.85	4.68	0.51	Strongly Agree
Information, education and communication distribution and dissemination	4.53	0.69	4.44	0.75	4.70	0.49	Strongly Agree
Grand Mean	**4.56**	**0.74**	**4.50**	**0.82**	**4.68**	**0.53**	**Strongly Agree**

Table 1 presents the summary on the implementation of the preventive measures undertaken by the NTF-ELCAC with a grand mean of 4.68 and standard deviation of 0.53 wherein the respondents strongly agree with the implementation of the Preventive Measures undertaken by the NTF-ELCAC.

The indicators Police visibility, Information, education and communication distribution and dissemination got the highest mean of 4.70 with a standard deviation of 0.49 described as strongly agree while Patrolling got the lowest mean of 4.68 with standard deviation of 0.51.

Summary of the Level of Children's Aspirations in Addressing Armed Conflict through the Implementation of NTF-ELCAC Programs

Table 2. Summary of the Level of Children's Aspirations in Addressing Armed Conflict through the Implementation of NTF-ELCAC Programs

Variables	Lagandang		Molon		Overall Mean		Verbal Description
	Mean	SD	Mean	SD	Mean	SD	
Community unity and harmony	4.53	0.76	4.58	0.57	4.56	0.65	Strongly Disagree
Addressing armed conflict	4.64	0.53	4.55	0.56	4.59	0.55	Strongly Disagree
Education and opportunities	4.82	0.44	4.58	0.54	4.67	0.52	Strongly Disagree
Safety and security	4.60	0.58	4.52	0.59	4.55	0.59	Strongly Disagree
Community participation	4.59	0.63	4.54	0.58	4.56	0.60	Strongly Disagree
Grand Mean	**4.64**	**0.59**	**4.55**	**0.57**	**4.58**	**0.58**	**Strongly Disagree**

Table 2 shows the summary of the level of children's aspirations in addressing armed conflict through the implementation of NTF-ELCAC programs which has a grand mean of 4.58 with a standard deviation of 0.58 described as strongly agree. It shows also that the "Education and opportunities" of the respondents in the community got the highest mean of 4.67 with a standard deviation of 0.52 while the indicator "Safety and Security" got the lowest mean of 4.55 with a standard deviation of 0.59.

Summary on the Impacts of the Implementation of NTF-ELCAC Programs in the School Community

Table 3. Summary on the Impacts of the Implementation of NTF-ELCAC Programs in the School Community

Indicators	Lagandang		Molon		Overall		Verbal Description
	Mean	SD	Mean	SD	Mean	SD	
Peace and order situation in the community	4.40	0.66	4.71	0.48	4.51	0.62	Strongly Agree
Peace and order situation of the school	4.36	0.74	4.63	0.53	4.46	0.68	Strongly Agree
Community mobilization and participation	4.44	0.65	4.67	0.53	4.52	0.62	Strongly Agree
Addressing armed conflict	4.43	0.58	4.68	0.50	4.52	0.57	Strongly Agree
Education of children	4.33	0.69	4.71	0.47	4.47	0.65	Strongly Agree
Grand Mean	**4.39**	**0.66**	**4.68**	**0.50**	**4.50**	**0.63**	**Strongly Agree**

Table 3 shows the results of the summary on the impacts of the implementation of NTF-ELCAC programs in the school community with a grand mean of 4.50 with a standard deviation of 0.63 wherein the respondents strongly agree with the statement.

The two indicators community mobilization and participation and addressing armed conflict got the highest mean of 4.52 with different standard deviations of 0.62 and 0.57 respectively. It was reflected in the table also that the lowest mean of 4.46 with a standard deviation of 0.68 was garnered by the indicator peace and order situation of the school.

Relationship between the Preventive Measures undertaken by the NTF-ELCAC and the Perceived Impacts to the School Community

Table 4. Correlation Analysis between the Preventive Measures undertaken by the NTF-ELCAC and the Perceived Impacts to the School Community

Variables	Police visibility	Patrolling	Educational awareness programs	Info, educ & communication distribution/ dissemination	Interpretation
Peace and order situation of the community	0.407*	0.575*	0.519*	0.517*	Significant
Peace and order situation of the school	0.200*	0.372*	0.364*	0.420*	Significant
Community mobilization and participation	0.448*	0.593*	0.520*	0.546*	Significant
Addressing armed conflict	0.339*	0.498*	0.507*	0.519*	Significant
Education of children	0.170*	0.316*	0.345*	0.361*	Significant

Note: Critical r (.05, 322) = 0.1097, r - significant*

Table 4 presents the correlation analysis between the preventive measures undertaken by the NTF-ELCAC and the perceived impacts to the school community that cross its path.

Based also to the table above, it implies that there is a significant relationship between the two variables that r=0.1097 is lesser than the critical value of r (.05, 322) at level of significance of 5%. The data signify that the programs, projects, and activities of the NTF-ELCAC are well implemented, monitored and evaluated that lead to the betterment of the life status of the school community as to peace and order, community mobilization and participation, addressing conflicts, and education of children.

Comparison of the Children's Aspiration on their Community due to NTF-ELCAC Programs

Table 5. Results of the t-test analysis of the Children's Aspiration on their Community due to NTF-ELCAC Programs

Community	Mean	SD	df	t-stat	p-value
Lagandang	4.58	2.13	285.00	0.72	0.47
Molon	4.55	0.37			

Note: p<.05, significant

Table 5 reveals the results of the t-test analysis of the children's aspiration on their community due to NTF-ELCAC programs. It shows that Lagandang has a mean of 4.58, with standard deviation of 2.13 while Molon has a mean of 4.55, with standard deviation of 0.37 at degrees of freedom (df) of 2.85 with a t-test of 0.72. The result of the t-test analysis of the Children's Aspiration on their Community due to NTF-ELCAC Programs is significant which the p-value is lesser than 0.05 (p<.05).

Significant Difference of the Perceived Impacts of NTF-ELCAC Programs when grouped by Community

Table 6. The t-test analysis Results of the Perceived Impacts of NTF-ELCAC Programs when grouped by Community

Community	Mean	SD	df	t-stat	p-value	Interpretation
Lagandang	4.52	0.61	296.00	2.58	0.01	There is a significant difference
Molon	4.68	0.35				

Note: p<.05, significant

Table 6 indicates the results of the t-test analysis of the perceived impacts of NTF-ELCAC programs when grouped by community which reflected that there was a significant difference in Barangay Lagandang with a mean of 4.52 and standard deviation of 0.61 while Molon has a mean of 4.68 and standard deviation of 0.35. It also reveals that the degrees of freedom (df) is 296.00 which is equivalent to t-value of 2.58 with a p-value of 0.01 which is lesser than $p<.05$.

CONCLUSIONS

1. The results signify that the NTF-ELCAC is strongly managed in the designated community wherein police officers put their full support by thorough patrolling and continuous dissemination of information to people in the entire community.
2. For the level of children's aspirations in addressing armed conflict through the implementation of NTF-ELCAC programs depicts that people in the community strongly believe on the power of education and living in safe and secured place to live in that really give them good future for their children and more opportunities to come if they could finish their studies.
3. For the results of the summary on the impacts of the implementation of NTF-ELCAC programs in the school community convey that the respondents strongly agree that the NTF-ELCAC programs are implemented well and visible in the school community wherein police officers and members convene and participate in the said program for the benefit of the school community.
4. For the significant relationship between the implementation of the preventive measures undertaken by the NTF-ELCAC and the perceived impacts to the school community, it means that if the programs, projects, and activities of the NTF-ELCAC are well implemented, monitored and evaluated, it can contribute more for the betterment of the life status of the school community as to peace and order, community mobilization and participation, addressing conflicts, and education of children.
5. For the significant difference, The result implies that in the community of Lagandang and Molon, the NTF-ELCAC Programs contributes best and answers on the Childrens' Aspiration towards the community. People in the barangay acknowledge the presence of the NTF-ELCAC program and appreciate the program, projects, and activities presented and implemented for the development of the community towards a peaceful and secured environment within the barangay premises. The results also denote that the perceived impacts of NTF-ELCAC programs when grouped by community have a strong effect on the identified respondents or in the whole community in the barangay.

RECOMMENDATIONS

1. The Philippine government in collaboration with the Philippine National Police (PNP) and the Department of Education (DepEd) organizations should render their full support to the NTF-ELCAC program in all aspects in order to improve policies, rules, and orders and fully implement programs, activities, and projects for the benefit of the identified barangay community and other stakeholders in the Province of Sultan Kudarat.
2. NTF-ELCAC is the best avenue to implement and advocate for peaceful and advantageous techniques to address the root causes of the insurgency in the province and the whole country.

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MEN AND WOMEN IN THE TEACHING PROFESSION: THEIR WORK MOTIVATION, WORK VALUES, JOB SATISFACTION AND CAREER ASPIRATIONS

Rosana S. Abundo
Associate Professor V
College of Education
Catanduanes State University
Calatagan, Virac, Catanduanes

ABSTRACT

Teaching as a profession is about inspiring and motivating students to realize and exceed their potential. Nevertheless, men and women in the teaching profession are challenged with the various functions they have to perform coupled by the challenges of the pandemic. This delved into the work motivation, work values, job satisfaction and career aspirations related to the performance of four-fold function of 119 men and women during the new normal. The data gathered using a validated instruments were quantitatively analyzed and results show that along work motivation, the men and women in the teaching profession has a high level of motivation along all aspects of Self-determination theory with autonomy in the highest level. The men and women are highly motivated with factors such as growth or having opportunities to acquire new knowledge and skills and reach personal potential. The men and women find work values as Important with Self-transcendence and Openness to Change as Very Important. Moreover, they are highly satisfied in their jobs. Job motivators of the men and women are the work itself, meaningfulness of the job and respectful treatment to all employees at all levels. They as well have high aspirations along educational aspects but in leadership attaining lowest aspiration. The results also revealed a no significance difference between the sexes which concluded that both the men and women in the teaching profession has similar perspectives along the variables covered. It is highly recommended that the results of the study be highly considered in policy formulation and management planning of the university.

Keywords: Work Motivation, Work Values, Job Satisfaction, , Career Aspirations, Teaching Profession

INTRODUCTION

Philippine Higher Institutions are challenged to cope with the diverse demands of performing their academic roles as well as other functions especially during this post pandemic period such as exploring new knowledge through research and enhancing production services on top of the challenges of coping with the new normal. Universities are facing various challenges such as ASEAN integration, internationalization, quality assurance and alignment of curriculum with K12. With so many things to accomplish, various regulatory requirements confront faculty members aside from their duty of delivering quality instructions. They are as well expected to perform various responsibilities in their four-fold functions – instruction, research, extension and production (RA 10229). The four-fold functions are mandates to Higher Education Institutions as required by CHED in relation to RA 7722. These changes in their roles may directly or indirectly affect work dynamics and behaviors.

No one doubts that employees are the key to success in any organization. It is immensely important that employees feel good at work, know their role and significance and are well motivated. Work motivation refers to human drive to work in order to gain rewards from that work whether those rewards be physical, emotional, social or monetary (Recepoglu, 2017). A highly motivated team of employees helps in achieving the targets of an organization or institution. In educational setting, teachers as well, play a very important role in the implementation of all educational reforms, In any organization, the workers play primary role in maintaining its drive as they serve as the main characters in executing fundamental functions. One key factor that fuels them to undertake tasks is their work motivation which comes from

both extrinsic and intrinsic sources (Parreño, 2016). Surprisingly, there are what can be called demotivation sources apart from motivation sources. The study found out factors that form worker motivation: 1) interest in task at hand; 2) income; 3) drive to compete; and 4) Amotivation or the level of demotivation. It was further identified that motivation rooted from interest in task at hand and the drive to compete was lesser in age group 30-39. This implies that age factor affects the motivation that an employee may have in his work. Aside from age, gender also exhibits in the lack of motivation to work which is higher in male respondents than their female counterparts.

Van den Broeck et al. (2021), in their study Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation, found out that differentiating between each of the various types of motivation is valuable for understanding employee well-being, attitudes, and behavior.

Nevertheless, teachers should not only be motivated. Several studies have linked work motivation to job satisfaction; as such work motivation is positively associated with job satisfaction (Nwasaki and Cummins, 2018). Teachers who are highly motivated are likely to be successful at their job.

As pointed out by Javier and Deligero (2014), job satisfaction refers to the pleasurable or positive emotional reaction to a person's job experiences. People who are satisfied with their works perform efficiently and productively for the institution (Culibrk et al, 2018). They possess a greater sense of responsibility and exhibit commitment to contribute something for the success of the institution. Atalic (2016) also defined job satisfaction as the total cluster of emotional state an individual who had about his occupation or job. Moreover, he interpreted that the nature of the job itself, the pay, the work environment, etc. were all important variables that led to a feeling of job satisfaction.

Along job satisfaction, Herzberg' s theory is one of the most significant (Alshmemri, 2017). The main concept of this theory is the difference between motivation factors and hygiene factors. Hygiene factors are considered less important to job satisfaction than motivation factors. Hygiene factors are related to 'the need to avoid unpleasantness. They include company policies and administration, relationship with supervisors, interpersonal relations, working conditions and salary. On the other hand, motivation factors lead to job satisfaction because of 'the need of the individual for self-growth and self-actualization. They include achievement, recognition, the work itself, responsibility, advancement and the possibility for growth.

Moreover, work values are another important variable in the work performance of faculty members. According to McKay (2018) work values are the subset of a person's belief and ideas that are related to one's occupation or job. These core principles are an important part of who a person is. One must identify what work values a person cherishes the most before choosing a career or deciding whether to accept a job offer.

The Schwartz Theory of Basic Personal Values identifies 10 basic personal values presumably recognized by and motivating for individuals across cultures. Each value expresses an underlying motivation or goal that is more or less compatible or in conflict with each of the other values. The values are arrayed on a circular motivational continuum such that the closer any two values on the circle, the more compatible they are with one another, and the more distant, the more they are in conflict. (Schwartz, 2015).

Work values serve as fundamental foundation of change in every organization. These often take form in their love for their work thus, proving their self-worth and satisfying their basic human needs. (Acero, 2016; Gomez-Manongsong, 2016; de Leon, 2022). Additionally, Llenares' (2015) study on the Contribution of demographics and human resource management practices to work values of employees indicated that their work values were associated with civil status, training program and performance appraisal.

On the other hand, career aspiration refers to the path that an individual wants to follow in his career. Aspirations do not always have to move upwards or expand. There are many people who aspire to move to an entry level job in a different industry. Some of the common career aspirations are enhancing professional skills in order to advance in the organization, find stable job security, become an expert in the field, gain more autonomy at work, better balance home and work life, network more on a professional level, become better motivated to complete your job, educate oneself more (She, 2018)

Employees' level of career aspiration plays an important role in organizational readiness and dynamism to achieve success. De Gulan and Aguiling (2021a) noted that employees with entry level posi-

tions (job levels 1-4) are more likely to signify their intention for higher positions and or signify interest to take on bigger roles and tasks. On the other hand, employees with senior positions, are found to have mixed responses which may have influenced their level of career adaptability and career intentions. Because of their high level of job experience, they demonstrate high level of career adaptability, which they utilize to make constructive decisions and change-oriented work performance.

Focusing on women, the work values of punctuality, honesty, respect, cooperation and industry practiced by women-employees in the performance of their job have contributed to their high level of career aspiration in their present and future career status (Gelido, 2018). Rudolph et al. (2017) found out that career adaptability is significantly associated with measures of adaptivity (i.e., cognitive ability, big five traits, self-esteem, core self-evaluations, proactive personality, future orientation, hope, and optimism), adapting responses (i.e., career planning, career exploration, occupational self-efficacy, and career decision-making self-efficacy), adaptation results (i.e., career identity, calling, career/job/school satisfaction, affective organizational commitment, job stress, employability, promotability, turnover intentions, income, engagement, self-reported work performance, entrepreneurial outcomes, life satisfaction, and positive and negative affect), as well as certain demographic characteristics (i.e., age, education).

As the country shifts toward institutionalizing research-related activities for both basic and higher education, it was found out that the faculty's confidence in their research skill-sets is attributed to their in-depth skills in manipulating technological resources, reviewing relevant literature, creating theoretical and conceptual paradigms, and writing research abstracts (Alcazaren & Robiños, 2022).

Teachers are important component of education in the realization of educational goals. They are also the most important person in teaching who manages learning experiences and environments. In teaching, teachers use themselves and their knowledge, skills, attitude, and practice. Students learning achievement highly depends on teachers' readiness in establishing the activity (Namunga & Otunga, 2017). Teachers play an important role in teaching and learning process to improve student outcomes and their effects towards students' learning appear to be sustained and accumulative (Darling-Hammond, Wei, & Johnson, 2017).

Similar to other professionals, faculty members in the Catanduanes State University face challenges everyday, which affect their performance, emotions and attitudes towards work. They need to be motivated to continuously desire to fulfill their duties. To be motivated for the career-of-choice, driving force for education and life-long professional development are required. Aspiration from career choice boosts motivation, leading their career to a desired level and ultimate success. The university recognizes the role of human resources in the achievement of its visions. Several development programs were in placed to ensure that the its human resources are being developed. This study delved into the work motivation, work values, job satisfaction and career aspirations of the teaching force which may serve as input for a faculty development program.

STATEMENT OF THE PROBLEMS

This study sought to determine the various factors related to the work of men and women in the teaching profession in relation to their four-fold function. Specifically, it sought to answer the following questions:

1. What is the degree of work motivation of the respondents along the following factors:
   a. Autonomy
   b. Relatedness
   c. Competence
2. What is the degree of work values of the respondents as categorized into:
   a. Openness to change
   b. Self-enhancement
   c. Conservation
   d. Self-transcendence
3. What is the level of job satisfaction of the respondents in terms of:
   a. Job motivator or intrinsic factors

b. Hygiene factors or extrinsic factors

4. What level of career aspirations do the respondents want to accomplish along:
   a. Achievement
   b. Leadership
   c. Educational
5. Is there a difference between men and women in the teaching profession along their level of:
   a. Work Motivation
   b. Work values
   c. Job satisfaction
   d. Career aspirations

METHODOLOGY

The study employed the quantitative research design. This study used a validated survey questionnaire that provides the numerical explanation regarding the degree or level of the respondents' perspectives on the variables included in the study.

The survey questionnaire was composed of four parts covering the scale for Work Motivation patterned from Work Motivation Questionnaire (MQ) using Self-determination Theory of Ryan and Deci (2015); Work Values which was adapted from Schwartz Work Values Questionnaire (WVQ) based from the Schwartz Theory of Basic Work Values; Job Satisfaction which took the factors fron Employee Job Satisfaction and Engagement Report (2016) guided by the Herzberg's Two Factor Theory; and Career Aspirations which was adapted from Career Aspiration Scale- Revised (CAS-R) by Gregor and O'Brein (2015). Validity and Reliability of the instrument was conducted among teachers enrolled in graduate studies of the university who are employed in DepEd schools.

This study was conducted at Catanduanes State University Main and Panganiban Campus to regular faculty members in the Main and Panganiban Campus during the 1st semester of SY: 2022-2023. One hundred nineteen regular faculty members was surveyed using a questionnaire to gather data. The actual respondents were randomly selected from the total of 170 regular employees of CatSU. Quantitative data was analyzed using frequency count, weighted mean, and t-test.

FINDINGS

Results of the study is reflected in Table 1.

Table 1. Degree of Work Motivation, Work Values, Job Satisfaction and Career Aspiration of Men and Women in the Teaching Profession in Catanduanes State University

	Indicators	Overall Weighted Mean	Interpretation
WORK MOTIVATION			
	Autonomy	3.40	High Motivation
	Relatedness	3.19	High Motivation
	Competence	3.15	High Motivation
	Grand Mean	**3.23**	**High Motivation**
WORK VALUES			
	Self-Enhancement	3.07	Important
	Self Transcendence	3.64	Very Important
	Conservation	2.49	Moderately Important
	Openness To Change	3.53	Very Important
	Grand Mean	**3.18**	**Important**
JOB SATISFATION			
	Hygiene Factors	3.32	Highly Satisfied
	Job Motivators	3.29	Highly Satisfied
	Grand Mean	**3.31**	**Highly Satisfied**
CAREER ASPIRATION			
	Achievement	3.04	High Aspiration
	Leadership	2.36	High Aspiration
	Educational	3.54	Very High Aspiration
	Grand Mean	**3.23**	**High Aspiration**

Degree of Work Motivation of Men and Women in the Teaching Profession

Motivation is one of among those factors which affect the teacher's performance. It is psychological -based process which refers to the forces within the human being that affect direction, strengthens and determines voluntary behavior (Gupta & Gehlawat, 2013).

According to the self-determination theory, an individual is driven by three innate and universal psychological needs – the need for competence, relatedness and autonomy. The fulfillment of these needs is the motivating force that drives them to perform in their work.

Anchored on the self-determination theory, the degree of motivation of the men and women in the teaching profession was analyzed. From the findings in Table 1, it could be gleaned that men and women in the teaching profession display a high level of motivation along all aspects of the self-determination theory with autonomy with the highest level. Autonomy involves being able to make own decisions and is associated with feelings of independence. Specifically, along autonomy, men and women are motivated by factors such as growth or having opportunities to acquire new knowledge and skills and reach personal potential, ethics or working in accordance with ethical standards and personal principles as well as independence or having the freedom and discretion to decide how to carry out work.

Previously conducted studies revealed that factors associated with personal growth motivates employees such as affiliation and achievement (Nitafan and Camay, 2020), promotional opportunities (Bautista & Balaria, 2018) providing opportunities for employees' development (Borowski, 2014).

Degree of Work Values of the Men and Women in the Teaching Profession

Work values are global aspects of work that are important to a person's job satisfaction. These are subsets of person's belief and ideas (Mckay, 2018) that are related to one's occupation or job. They are important and lasting beliefs or ideals shared by the members of a culture about what is good or bad and desirable or undesirable. Values have major influence on a person's behavior and attitude and serve as broad guidelines in all situations (Mckay, 2018).

This study analyzed work values of men and women in the teaching profession using the Schwartz Theory of Basic Personal Values (Schwartz, 2015). In this theory, 10 values are organized along two axes, each one representing a bipolar dimension whose poles constitute a higher order value.

As reflected in Table 1, men and women in the teaching profession find work values as Important with a weighted mean of 3.18 with Self- transcendence and Openness to Change work values as Very Important.

Level of Job Satisfaction of the Men and Women in the Teaching Profession

Job satisfaction is the result of various attitudes the employee holds towards his job, towards allied factors and towards life in general. Job satisfaction is related to feelings and the emotional aspects of individual experience towards his job. Green and Baron (2008) viewed job satisfaction as a feeling that can produce a positive or negative effect toward one's roles and responsibilities at work and added that it is important to understand the concept of job satisfaction as there is no single way to satisfy all workers in the workplace. They saw it as a positive feeling toward a person's job.

Table 1 presents the level of job satisfaction of the men and women in the teaching profession. The grand mean of 3.31 shows that the respondents are highly satisfied.

The study was analyzed using the Herzberg two-factor theory, focusing on the hygiene factors and job motivators. According to this theory, satisfaction depends on the motivators and dissatisfaction is the result of hygiene factors. Motivators are intrinsic to the job while hygiene factors are extrinsic to the job. Results shows that job motivators of the men and women in the teaching profession are the work itself, meaningfulness of the job and respectful treatment to all employees at all levels. On the other hand, among the hygiene factors are job security, security in the work environment and overall benefits.

Level of Career Aspirations of Men and Women in the Teaching Profession

Career aspiration is a path that one wants to follow in his/her career. In this study, career aspirations of men and women in the teaching profession was determined using Career Aspiration Scale-Revised (CAS-R) of O'Brien (2015). This is a self-reported questionnaire measuring subscales of career aspirations including leadership, achievement and education. Results are reflected in Table 1.

As revealed by the results of the data gathered, the level of career aspiration of the respondents is High with a weighted mean of 3.23.

Notably, getting the highest weighted mean (3.54) in terms of career aspirations are related to education which specifically include "I will work to remain updated regarding knowledge in my field, I will pursue additional training in my area of interest and I will attend conferences annually to advance my knowledge"

It is worthy to note that the careers aspirations are very commendable considering the fact that majority of the faculty members are already holders of master's degree and are pursuing doctoral studies. These are preparations towards a higher career aspiration.

On the contrary, aspirations along leadership got the lowest mean (2.36) or Moderately True". The respondents find it moderately important for them to attain leadership status in their career, to become a leader in their job is not all important to them and to plan to rise to the top leadership position in the organization.

Differences in the Degree of Work Motivation, Work Values, Job Satisfaction and Career Aspirations between Men and Women in the Teaching Profession

Considering the respondents of the study, the teaching force of the university is composed of 57.98% women and 42.02% men. It can be gleaned that the group has a very slight difference as to the number. As stipulated in the qualification for hiring of teaching staff is not discriminating gender.

Differences in the Degree of Work Motivation

An independent-samples t-test was conducted to determine whether there is a difference in Work Motivation between Men and Women. The results as shown in Table 7 indicates a not significant difference between male (M=3.2294, SD=.37) and female (M=3.2957, SD=.37), [t_C = -.928, p = .481 > .05]. Using 95% confidence interval of the difference between means, the test failed to reject the null hypothesis that there is no difference between the sample means.

Table 2. T-Test Result comparing Men and Women on the Degree of Work Motivation

Gender	n	Mean	SD	t-cal	t-crit	df	p	Decision
Male	46	3.2294	.37	-.928	1.984	107	.481	Do not reject Ho
Female	63	3.2957	.37					

Differences in the Degree of Work Values

As reflected in Table 3, when compared, it was found out that there is no significant difference on the degree of work values of the men (M=3.2294, SD=.37) and women (M=3.2957, SD=.37), [t_C = -..255, p = .748 > .05]. in the teaching profession. Both men and women find importance on similar ideals and beliefs while performing their teaching profession.

Table 3. T-test Results Comparing Men and Women on the Degree of Work Values

Gender	n	Mean	SD	t-cal	t-crit	df	p	Decision
Male	46	3.27	.36	-.255	1.984	107	.748	Do not reject Ho
Female	63	3.25	.34					

Differences in the Level of Job Satisfaction

Table 4 shows the result of comparison between men and women in the teaching profession as to the level of job satisfaction. With the result [t_C = -..255, p = .748 > .05] the test failed to reject the null hypothesis. There is no significant difference in the level of job satisfaction of the respondents.

Table 4. T-test Results Comparing Men and Women on Job Satisfaction

Gender	n	Mean	SD	t-cal	t-crit	df	p	Decision
Male	46	3.31	.49	-.200	1.984	107	.842	Do not reject Ho
Female	63	3.29	.74					

Differences in the Level of Career Aspiration

Similarly, as to the level of Career Aspiration, no significant difference was noted as to gender. Results can be gleaned from Table 5.

Table 5. T-test Results Comparing Men and Women on Career Aspiration

Gender	n	Mean	SD	t-cal	t-crit	df	p	Decision
Male	46	2.80	.47	-.1.691	1.984	107	.189	Do not reject Ho
Female	63	2.99	.64					

Magallanes et al., (2019) study supports the findings of this study. The former determined the differences in work motivation and job satisfaction as well the relationship between work motivation and job satisfaction between male and female teachers. Work motivation and job satisfaction of basic public schools in Metro Vigan and Caoayan is very high and there was no correlation between work motivation of both gender and job satisfaction. Moreover, there was no difference between job satisfaction of male and female teachers and as a whole, there was no difference between work motivation of both genders.

Extrinsic and intrinsic factors may lead to motivation and demotivation of employees (Van den Broeck et al, 2021, Parreño, 2016). Similarly that age factors and gender affect the motivation an employee may have in his work (Parreño, 2016). In his study among workers in a government-controlled corporation, male respondents tend to exhibit lack of motivation to work. In this case, among teachers, motivation does not necessarily have a difference in terms of gender.

On the other hand, sex is not a significant predictor or explanatory variable for job satisfaction (Loquias & Sana, 2013). Female faculty members had slightly higher level of job satisfaction than males although the difference is not significantly significant. The nature of the job itself is not discriminatory (Ali & Akhter, 2009) gender does not play any critical role. Female faculty members thought thay they have the same opportunity to work as of male teacher.

In terms of career aspiration which the study has found no significant difference between men and women, Domenico & Jones (2006) explained that career aspirations maybe influenced by factors such as gender, socioeconomic status, race, parent's occupation and education level.

CONCLUSIONS

This study elucidates the level of work motivation, work values, job satisfaction and career aspiration of the Men and Women in the teaching profession in relation to their experiences while performing their four-fold function during this post pandemic time. It has arrived on the following conclusions:

1. The men and women in the teaching profession has a high degree of motivation. They are motivated by their innate drive for teaching, drive for comfort and security as well drive for competence.
2. The men and women in the teaching profession finds Self-transcendence Work Values Very Important. More particularly, their work values are towards career advancement, preservation of status, maintaining dignity at worn, equality, development and close social relations.
3. The level of job satisfaction of the men and women in the teaching profession is High. They have a high level of contentment along their sense of recognition, sense of belonging and sense of security.
4. The men and women in the teaching profession has a Very High Aspiration along educational aspect. They likewise have a high aspiration in terms of their personal, organization and client's attributes.
5. The level of work motivation, work values, job satisfaction and career aspirations of the men and women in the teaching profession is not significantly different.

RECOMMENDATION

The following are the recommendations of the study:

1. The quantitative results of this study showed high level or degree in the variables covered, hence, these results should be considered by the university management team in their planning activity to achieve the highest level or degree the men and women in the teaching profession must have towards the mentioned variables.
2. Work motivation, work values, job satisfaction and career aspirations are factors in the performance of employees, the study did not touch on this aspect, hence it is highly recommended to conduct a study considering these variables and work performance of employees.

3. The no significant difference between the sexes' work motivation, work values, job satisfaction and career aspiration shows that the policy of the university in hiring has not discriminated sexes, hence must be sustained as part of the policy.
4. While mixed methods started gaining popularity, it is further encouraged through this research, that the qualitative aspects of the study be explored to gain a deeper understanding of the specific experiences of the respondents.

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TECHNOLOGY INTEGRATION AS CORRELATES TO ACADEMIC PERFORMANCE OF SELECTED STUDENTS IN TALA SENIOR HIGH SCHOOL: BASIS FOR A SCHOOL DEVELOPMENT PLAN

Andrea P. Jonson
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

This study delved into the impact of technology integration on academic performance at Tala Senior High School. With classrooms evolving into dynamic spaces blending diverse teaching methods and advanced technologies, understanding the factors influencing academic success has become crucial. Against this backdrop, the research aimed to uncover the complex relationships between students' academic performance, teachers' professional development, and technology integration levels. Employing a descriptive-correlational approach, the study rigorously explored how these variables interact to shape student achievement within the unique context.
In the study involving 116 senior high school students from Tala Senior High School. The students emphasized the crucial role of technology in enriching their learning experiences, particularly in enhancing engagement, facilitating collaboration, and creating a dynamic educational environment. Correlation analyses revealed significant relationships between students' academic performance, teachers' professional development, and the level of technology integration. Increased technology integration was positively associated with improved academic performance, emphasizing the importance of effective technology utilization in education. Additionally, greater teacher engagement and collaboration correlated with more advanced technology integration, highlighting the interconnectedness of pedagogical practices and technological innovation. Based on the study's findings, recommendations emphasize tailored interventions to enhance teachers' technology skills and foster collaborative approaches to technology integration. Prioritizing ongoing professional development and cultivating a culture of collaboration can optimize educational practices, ultimately boosting student academic achievement and preparing them for success in the digital age. These insights contribute valuable practical implications for enhancing teaching practices and enriching student learning experiences, not only within Tala Senior High School but also in educational institutions globally.

Keywords: technology integration, academic performance, senior high school

INTRODUCTION

In the ever-evolving landscape of education, the role of teachers as facilitators of knowledge has undergone a profound transformation. As the study stood on the precipice of the third decade of the 21st century, the classroom has become a dynamic hub where pedagogical techniques, technological advancements, and student aspirations converge. In this era of unprecedented change and innovation, the factors that influence academic performance were more multifaceted than ever before.

In the contemporary educational landscape, the symbiotic relationship between technology integration and academic performance has become increasingly apparent. As the world becomes more interconnected, the role of technology in education has evolved to play a pivotal role in shaping the academic outcomes of students. At the global level, the advent of the Information Age has revolutionized the way information was accessed, processed, and disseminated (Emre, 2019). Technological advancements have permeated every facet of society, creating an imperative for educational institutions to adapt to these changes. The global landscape of education was marked by the integration of technology to enhance teaching and learning experiences.

The integration of technology in education, spurred by the digital revolution and the internet's transformative power, has thrust classrooms into an era marked by unprecedented accessibility to information, interactive learning resources, and global connectivity. This technological evolution has altered the traditional roles of teachers and students, challenging educators to adapt and evolve continually (Francom, 2020).

The Philippine educational landscape, in relation to other countries, was also shaped by policies, curriculum frameworks, and initiatives that aim to align education with the demands of the digital era. National education policies often emphasize the importance of technology integration to improve the quality of education and prepare students for the demands of the modern workforce (De Souza et al., 2021). Analyzing this context allows for a comprehensive understanding of how external factors, such as government initiatives and regulations, impact the implementation of technology in education at Tala Senior High School. Additionally, it provides insights into the challenges and opportunities that may arise from the national educational context. At the core of this transformative journey were the students themselves, the ultimate beneficiaries of the interconnected elements of this research. The modern classroom reflects the technological and pedagogical tools that educators employ to engage students, foster critical thinking, and cultivate a love for learning. As education adapts to the demands of the digital age, academic performance remains the north star guiding this transformative journey.

The educational journey of students was no longer confined to textbooks, chalkboards, or the four walls of a classroom. It spans digital platforms, interactive apps, online resources, and global networks. It was the linchpin upon which the integration of technology and the subsequent enhancement of academic performance depend (Tondeur et al., 2019). As educators engage in lifelong learning and adapt their methodologies to meet the digital demands of the 21st century, the synergy between these elements becomes clear.

On the local scale, Tala Senior High School serves as the focal point of this study. Located within a specific community, the school's unique characteristics, resources, and challenges influence the dynamics of technology integration and its impact on academic performance. Investigating the local context allows for a nuanced exploration of how the school community perceives and adapts to technology in education. Factors such as infrastructure, teacher training, and student accessibility to technology play a crucial role in shaping the local narrative of technology integration. Understanding these local dynamics was essential for developing a school development plan that aligns with the specific needs and aspirations of Tala Senior High School.

In this context, this research seeks to address several pivotal questions. How does integration of technology impact academic performance in the classroom? What was the role of pedagogical innovation in this dynamic interplay? These questions serve as guideposts for the comprehensive exploration of the complex relationships that bind these three elements together.

As the study embarked on this research journey, the study recognized that the landscape of education was continually shifting, and its demands were ever evolving. The evolution of technology, the needs of modern students, and the expectations of society propel us forward (Navarro et al., 2021). This study offered a holistic perspective on the correlation between technology integration and academic performance. By triangulating data from these different levels, the research seeks to provide actionable insights for the development of a comprehensive school development plan tailored to the unique context of Tala Senior High School. In doing so, the study contributed not only to the academic discourse on technology in education but also offers practical recommendations for school administrators, educators, and policymakers seeking to enhance the overall educational experience and outcomes for students at the local level.

Tala Senior High School, located amid our ever-evolving society, serves as a microcosm of the broader educational landscape where students' futures take shape and our nation's foundation was laid. The interplay between these elements, as witnessed in the daily experiences of both educators and students, offers a crucial perspective to assess and enhance the school's development plan. This step was crucial in fostering a learning environment that fully utilizes the potential of technology, ensuring that all students have equitable opportunities for academic excellence. This initiative aligns with the school's mission to equip students with the skills and knowledge required to thrive in an increasingly digital and interconnected world. It was important to recognize that the futures of the students, the prosperity of the community, and the vitality of the school itself were deeply intertwined with the outcomes of this research.

Investigating the correlation between technology integration and academic performance at Tala Senior High School was rooted in the imperative to enhance educational outcomes through informed development strategies. In the contemporary educational landscape, technology serves as a powerful tool that can potentially revolutionize teaching and learning methodologies. By examining how technology was integrated into the academic environment, this study seeks to identify correlations with students' academic performance. Tala Senior High School serves as a microcosm for this investigation, allowing for a localized understanding of the dynamics at play within a specific educational context. The outcomes of this research informed the development of a school-specific plan, tailored to the unique needs of Tala Senior High School, ensuring that the integration of technology aligns with educational goals and positively influences academic performance. Ultimately, the study aimed to contribute valuable insights that can guide evidence-based decision-making and foster a more conducive learning environment for students in the digital age.

Statement of the Problem

The study aimed to determine the influence of technology integration to academic performance within the context of Tala Senior High School. Specifically, this study pursues to answer the following questions:

1. What is the level of students' academic performance (GWA)?
2. What is the degree of professional development of the teachers assessed by the students in terms of:
   2.1 engagement; and
   2.2 collaboration
3. What was the level of technology integration of the teachers assessed by the students in terms of:
   3.1 technology usage; and
   3.2 technology skills.
4. Is there any significant relationship between:
   4.1 student academic performance and degree of professional development;
   4.2 student academic performance and level of technology integration; and
   4.3 degree of professional development and level of technology integration?
5. What programs should be proposed to improve students' academic performance through technology integration?

METHODOLOGY

In this chapter, the study provided a detailed explanation of the methodological framework utilized in this study. The study expounded upon the approach adopted for conducting this research, which encompasses the chosen research strategy and culminates in the communication of the study's findings.

Research Design

In this study, the researcher employed a descriptive-correlational research approach, utilizing a survey instrument to evaluate the impact of technology integration and academic performance in the unique setting of Tala Senior High School.

Participants

The research centered its analysis on students who were currently enrolled in Tala Senior High School. To compile this sample, the research employed a straightforward random sampling method, ensuring that the representation across the designated location remains free from bias.

Research Instrument

A custom-made questionnaire was developed to evaluate the influence of technology integration on academic performance, tailored specifically for the study's context.

Data Analysis

To effectively analyze the gathered data, the researcher will employ various statistical treatments.

The interpretation methods to be applied include the frequency, percentage, weighted mean, ranking, and Pearson's r.

RESULTS AND DISCUSSIONS

This chapter showed the presentation of the data gathered from the questionnaires answered by the respondents. Such presentation was in accordance with the specific questions posited on the objectives of the study.

1. Level of Students' Academic Performance (GWA)

Table 1. Level of Students' Academic Performance (GWA)

General Weighted Average	Frequency	Percentage	Rank
90 - 100 (Outstanding)	75	64.66	1
85 - 89 (Very Satisfactory)	34	29.31	2
80 - 84 (Satisfactory)	7	6.03	3
Total	**116**	**100**	
Mean Grade	**90.44 (Outstanding)**		
Standard Deviation	**3.55 (Compressed)**		

As given in Table 1, the outstanding grades of 90 - 100 made the highest frequency count of 75 or 64.66% at rank 1. This result presented that most students achieved outstanding grades ranging from 90 to 100. These grades were ranked at the top position, indicating that a remarkable number of students performed exceptionally well, earning the highest marks in their assessments or evaluations.

2. Degree of Professional Development of the Teachers Assessed by the Students

2.2 In Terms of Engagement

Table 2. Degree of Professional Development of the Teachers Assessed by the Students in Terms of Engagement

Items	Weighted Mean	Interpretation	Rank
My teachers using technology in our classes helps me understand academic concepts better.	4.48	Strongly Agree	5
My teachers integrating technology into our lessons makes learning more interesting for me.	4.66	Strongly Agree	1
My teachers participating in technology-related activities in class keeps me engaged in the learning process.	4.59	Strongly Agree	3
Learning through technology with my teachers makes me feel more confident in my understanding of the subjects.	4.63	Strongly Agree	2
My teachers using educational technology tools makes learning more enjoyable for me.	4.39	Strongly Agree	6
My teachers interacting with educational technology tools in our lessons motivates me to participate more actively in class discussions and activities.	4.55	Strongly Agree	4
Composite Mean	**4.55**	**Strongly Agree**	

As presented in Table 2, the student-respondents strongly agreed that integrating technology into their lessons makes learning more interesting for them with the highest weighted mean of 4.66 and the highest rank of 1. The results underscored their recognition of technology as a valuable resource that enhances their engagement and interest in the educational material.

2.2. In Terms of Collaboration

Table 3. Degree of Professional Development of the Teachers Assessed by the Students in Terms of Collaboration

Items	Weighted Mean	Interpretation	Rank
My teachers assigning work with my classmates on technology-related projects enhances my learning experience.	4.57	Strongly Agree	4
Collaborating with other students on technology assignments from my teachers improves my understanding of the topics.	4.59	Strongly Agree	2.5
Group activities involving technology, guided by my teachers, encourage me to interact more with my peers.	4.59	Strongly Agree	2.5
Collaborating with classmates, under the guidance of my teacher, to integrate technology into our studies helps me grasp concepts better.	4.62	Strongly Agree	1
Discussing and sharing ideas with my teacher and peers about using technology in our studies is helpful to me.	4.45	Strongly Agree	6
Collaborating with classmates on technology projects, with guidance from my teacher, makes me feel more connected to my school community.	4.56	Strongly Agree	5
Composite Mean	**4.56**	**Strongly Agree**	

As stated in Table 3, the student-respondents strongly agreed that collaborating with classmates, under the guidance of their teacher, to integrate technology into their studies helps them grasp concepts better which yielded the highest weighted mean of 4.62 and the highest rank of 1. This finding suggested that peer collaboration, coupled with teacher support, creates an effective learning environment where technology serves as a tool for deeper comprehension.

3. Level of technology Integration of the Teachers as Assessed by the Students

3.1. In Terms of technology Usage

Table 4. Level of technology Integration of the Teachers as Assessed by the Students in Terms of technology Usage

Items	Weighted Mean	Interpretation	Rank
My teachers frequently incorporate technology into their lessons.	4.54	Strongly Agree	5
technology is a regular part of my teachers' teaching methods.	4.66	Strongly Agree	1
Teachers at my school consider technology an essential tool for teaching.	4.60	Strongly Agree	3
I benefit from the technology my teachers use in the classroom.	4.62	Strongly Agree	2
My teachers effectively integrate technology into their subjects.	4.42	Strongly Agree	6
I notice that my teachers are comfortable using technology for educational purposes.	4.56	Strongly Agree	4
Composite Mean	**4.57**	**Strongly Agree**	

As revealed in Table 4, the student-respondents strongly agreed that technology is a regular part of my teachers' teaching methods which garnered the highest weighted mean of 4.66 and the highest rank of 1. The findings indicated that technology integration is pervasive in the classroom, with teachers frequently incorporating digital tools and resources into their teaching practices.

3.2. In Terms of technology Skills

Table 5. Level of technology Integration of the Teachers as Assessed by the Students in Terms of technology Skills

Items	Weighted Mean	Interpretation	Rank
I believe that my teachers have confidence in their technology skills.	4.55	Strongly Agree	2
My teachers can efficiently troubleshoot technological issues in the classroom.	3.92	Agree	6
Teachers at my school continuously improve their technology skills through professional development.	4.47	Strongly Agree	3
Teachers have sufficient technology skills to meet the demands of modern education.	4.34	Strongly Agree	5
I think my teachers' technology skills enhance my learning experience.	4.61	Strongly Agree	1
My teachers seem to enjoy using new technologies in their teaching.	4.43	Strongly Agree	4
Composite Mean	**4.39**	**Strongly Agree**	

As reflected in Table 5, the student-respondents strongly agreed and think that their teachers' technology skills enhance their learning experience which garnered the highest weighted mean of 4.61 and the highest rank of 1.

This indicated that students perceive their teachers as proficient in utilizing technology to improve the quality of education they receive.

4. Relationship Between the Variables of the Study

4.1 In Terms of Student Academic Performance and Degree of Professional Development

Table 6.1. Relationship Between Student Academic Performance and Degree of Professional Development

Variable	r-value	p-value	Decision	Interpretation
Student Academic Performance Versus Degree of Professional Development				
Engagement	0.40	0.00001	Reject Ho	Highly Significant
Collaboration	0.38	0.00003	Reject Ho	Highly Significant

As written in Table 6.1, when the academic performance of the student-respondents was compared to their assessment of the degree of professional development of teachers, the computed r-values of 0.40 for engagement and 0.38 for collaboration have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

4.2. In Terms of Student Academic Performance and Level of technology Integration

Table 6.2. Relationship Between Student Academic Performance and Level of technology Integration

Variable	r-value	p-value	Decision	Interpretation
Student Academic Performance Versus Level of technology Integration				
technology Usage	0.41	4.86E-6	Reject Ho	Highly Significant
technology Skills	0.15	0.10802	Failed to Reject Ho	Not Significant

As shown in Table 6.2, when the academic performance of the student-respondents was compared to their assessment on the level of technology integration of their teachers, the computed r-value of 0.41 for technology usage has a corresponding p-value of less than 0.01, thus rejecting the hypothesis. On the contrary, the computed r-value of 0.15 for technology skills has a corresponding p-value of more than 0.05, thus failing to reject the hypothesis.

4.3. In Terms of Degree of Professional Development and Level of technology Integration

Table 6.3. Relationship Between Degree of Professional Development and Level of technology Integration

Variable	r-value	p-value	Decision	Interpretation
Degree of Professional Development Versus Level of technology Integration				
Engagement				
technology Usage	0.87	0.00000	Reject Ho	Highly Significant
technology Skills	0.57	0.00000	Reject Ho	Highly Significant
Collaboration				
technology Usage	0.62	0.00000	Reject Ho	Highly Significant
technology Skills	0.94	0.00000	Reject Ho	Highly Significant

As discussed in Table 6.3, when the assessment of the student-respondents on the degree of professional development of the teachers in terms of engagement were compared to their assessment on the level of technology integration of their teachers, the computed r-values of 0.87 for technology usage, and 0.57 for technology skills have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

5. Proposed Programs to Improve Students' Academic Performance through Technology Integration

Table 7. Proposed Intervention Program

PROGRAM	DESCRIPTION	OBJECTIVES	OUTPUT
Technology Integration Workshops	This intervention program entails conducting regular workshops aimed at enhancing teachers' proficiency in integrating technology into their instructional practices. The workshops will cover topics such as utilizing educational apps, multimedia presentations, online collaboration tools, and digital assessment methods.	To familiarize teachers with various technological tools and resources available for educational purposes. To provide hands-on training and practical experience in integrating technology into lesson planning and delivery. To empower teachers to create dynamic and interactive learning experiences using technology. To cultivate a culture of innovation and experimentation among educators regarding technology integration.	Increased confidence and competence among teachers in leveraging technology to enhance instruction. Development of a repository of technology-integrated lesson plans and resources created by participating teachers. Improvement in student engagement and learning outcomes as evidenced by classroom observations and assessments.
Tech-Savvy Teacher Mentorship Program	This intervention program involves pairing experienced "tech-savvy" teachers with colleagues who may require additional support in integrating technology into their teaching practices. Mentors will provide one-on-one guidance, troubleshooting assistance, and personalized coaching sessions to mentees.	To provide targeted support and guidance to teachers in developing their technology skills and confidence. To foster a culture of collaboration and peer learning among educators regarding technology integration. To facilitate the sharing of best practices and innovative approaches to technology-enhanced teaching. To create a supportive learning environment where teachers feel empowered to experiment with new technologies and instructional methods.	Increased proficiency and comfort level among mentee teachers in using technology to support instruction. Establishment of a network of peer support and collaboration among participating teachers. Enhanced integration of technology into teaching practices as evidenced by classroom observations and feedback from mentors and mentees.
Technology Integration Showcase Events	This intervention program involves organizing showcase events or "Tech Fairs" where teachers have the opportunity to share their innovative technology-integrated lesson plans, projects, and classroom activities with colleagues and administrators. These events will provide a platform for celebrating successes, exchanging ideas, and inspiring further technology integration efforts.	To recognize and celebrate teachers' achievements in effectively integrating technology into their instructional practices. To facilitate knowledge sharing and peer learning through the demonstration of successful technology-integrated teaching strategies and projects. To inspire and motivate other teachers to explore and implement technology-enhanced teaching methods in their own classrooms. To garner support and buy-in from administrators and stakeholders for ongoing technology integration initiatives.	Increased awareness and enthusiasm for technology integration among teachers and administrators. Adoption of innovative technology-integrated teaching strategies and projects by participating teachers. Creation of a collaborative and supportive community of practice focused on technology integration in education.
Online Professional Development Modules	This intervention program entails the development and implementation of online professional development modules focused on various aspects of technology integration in education. These self-paced modules will cover topics such as digital literacy, online teaching methodologies, educational technology tools, and data-driven instruction.	To provide flexible and accessible professional development opportunities for teachers to enhance their technology skills and knowledge. To accommodate the diverse learning needs and preferences of educators through self-paced online learning modules. To support teachers in staying current with emerging trends and best practices in educational technology. To empower teachers to leverage technology effectively to meet the needs of 21st-century learners.	Increased participation and engagement in professional development activities related to technology integration. Improvement in teachers' technology skills and knowledge as evidenced by pre- and post-assessments. Integration of newly acquired technology skills into classroom instruction, resulting in enhanced student engagement and learning outcomes.

Technology Integration Coaching Teams	This intervention program involves establishing technology integration coaching teams comprised of experienced educators with expertise in leveraging technology for instructional purposes. These teams will provide ongoing coaching, support, and professional development opportunities for teachers interested in enhancing their technology integration skills.	To provide personalized coaching and support to teachers in developing their technology integration competencies. To foster a culture of collaboration and peer learning among educators through coaching team activities and initiatives. To promote the effective use of technology to enhance teaching and learning experiences across various subject areas and grade levels. To empower teachers to become technology integration leaders and advocates within their schools and communities.	Enhanced technology integration skills and confidence among participating teachers as a result of personalized coaching and support. Implementation of innovative technology-integrated teaching strategies and projects in classrooms, leading to improved student engagement and learning outcomes. Creation of a sustainable model for ongoing technology integration support and professional development within the school or district.

Table 7 showed the proposed intervention program derived from the results of the study. The intervention programs were designed to enhance technological integration among teachers. Workshops provided hands-on training, while mentorship programs paired experienced teachers with those needing support. Showcase events celebrated successful integration efforts, inspiring others. Online modules offered flexible professional development, and coaching teams provided personalized support. Objectives included improving teachers' technology skills, fostering collaboration, and enhancing student engagement. These initiatives aimed to create a culture of innovation and empower educators to leverage technology effectively. The target outputs included increased proficiency, adoption of innovative strategies, and sustainable support structures for ongoing technology integration efforts.

CONCLUSIONS

1. The study illuminated the pivotal role of teacher professional development in influencing student academic achievement. The data revealed a strong correlation between the degree of professional development among educators and the performance of students.
2. The integration of technology emerged as a transformative force in modern education, profoundly influencing student engagement and learning outcomes. The study highlighted the importance of leveraging technology to create dynamic, interactive learning environments that stimulated students' curiosity and facilitated deeper comprehension of academic concepts.
3. The study underscored the symbiotic relationship between technology integration and teacher professional development. Investing in professional development programs that focused on both engagement and technology integration empowered educators to leverage digital resources effectively, thereby enriching teaching practices and improving student outcomes.

RECOMMENDATIONS

Based on the insights gleaned from the study, several recommendations can be proposed to further enhance student academic performance, teacher professional development, and technology integration in educational settings.

Firstly, educational institutions should prioritize the continuous professional development of teachers through targeted training programs, workshops, and collaborative learning opportunities. By investing in teachers' pedagogical skills, content knowledge, and technology proficiency, institutions can ensure that educators remain abreast of best practices and innovative teaching methodologies.

Additionally, the Department of Education (Dep Ed) must mandate school institutions to foster a culture of collaboration among educators by providing platforms for sharing best practices, exchanging ideas, and co-creating innovative teaching approaches is crucial. Encourage collaborative lesson planning, peer observation, and mentorship programs to facilitate knowledge sharing and professional

growth among teachers. Embracing technology as a tool for enhancing teaching and learning experiences is also paramount.

Provide teachers with access to cutting-edge digital resources, instructional technology tools, and professional development opportunities focused on technology integration. Encourage educators to explore innovative ways of leveraging technology to create dynamic, interactive learning environments that engage and inspire students.

Moreover, institutions, with the assistance of Dep Ed must ensure that teachers have access to adequate support and resources to effectively integrate technology into their instructional practices. Offer technical assistance, troubleshooting guidance, and professional development workshops focused on enhancing teachers' technology skills and confidence. Promoting student-centered learning approaches, such as project-based learning and inquiry-based learning, that leverage technology to foster critical thinking, creativity, and problem-solving skills among students is essential. Regularly assess the impact of professional development initiatives and technology integration efforts on student academic performance and teacher effectiveness. Collect feedback from students, teachers, and other stakeholders to identify areas for improvement and make data-driven decisions to refine strategies and approaches.

Ultimately, by implementing these recommendations, educational institutions can foster a culture of continuous improvement, innovation, and excellence that enhances student academic achievement and prepares learners for success in an increasingly digital world.

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DIFFICULTIES IN THE UTILIZATION OF INNOVATIVE APPLICATION IN TEACHING SCIENCE IN SELECTED PRIVATE HIGH SCHOOLS IN ORIENTAL MINDORO

Eugenia E. Magbuhos
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

In the realm of education, the integration of innovative applications has become increasingly recognized as a valuable approach to enhancing teaching and learning experiences, particularly in the field of science education. This study investigated the utilization of innovative ICT applications in teaching science, with a comprehensive focus on ICT applications, content, pedagogy, and assessment strategies in selected private high schools in Oriental Mindoro. Quantitative methodology was adopted to quantify and visually represent the collected data, utilizing a custom-designed survey tool to assess the variables. Findings revealed that the respondents continue to attend seminars/ trainings even majority are new in the teaching profession to pursue professional development. Also, it suggests that they manifest the ability to utilize the innovative applications in teaching science subjects to a great extent in terms of ICT application, content, pedagogy, and assessment. Thus, they were able to integrate innovative ways even in the early years of their teaching. Its utilization was deemed significant for learning, contributing positively to both teacher and students' educational experiences in today's digital age teaching learning process. This research uncovered challenges faced by respondents in using innovative methods for teaching science, such as the need to design activities that promote both individual and group work, not just as exercises, but as essential to inquiry. It highlighted the correlation between the difficulties teachers encounter in using innovative teaching methods for science and the level of their implementation. Also, the correlation between respondents' profiles and their utilization of innovative teaching methods, as well as the challenges they faced. Notably, both science-specialized and non-specialized teachers encountered in its utilization. This underscores the significance of creating and readily providing activities to enhance their utilization, promoting innovation among teachers and ensuring quality instruction. Furthermore, the study recommends ongoing professional development opportunities to enhance student learning experiences, aiming for more engaging and effective learning environments, not only in private but also in public high schools.

INTRODUCTION

Explore, try things out, make choices, and have fun. Probably, these are some of the things an individual want to experience in life. It all started from being a little innocent child turning to a spirited teen, up to an experienced adult. Undeniably, future leaders are the product of today.

The school is a place where clearer expectations for all should be established at the very first day. Expectations of a child from school and vice versa are expected to be visible including students' active engagement in learning. Teachers are highly expected to cater students' diversity specially when it comes to their prior learning and interests. How it is addressed in the classroom might be similar or different from how it was experienced at their home. In other words, school is where a child spends most of his time and expected to learn more about himself and things around him.

Definitely, education is vital to one's life and pertains not only to the output but also to the process underlying it. In other words, the significance of education can be measured not only from what you do but more of how you do it. Also, it is not only about on what you are experiencing but also talks about on how you are dealing with it no matter what. Mostly think that learning is firstly and only found in

school but unknowingly, it already started from home where he belongs. Whatever he learned there would greatly affect how he shall learn from school particularly from their second parents—teachers.

Furthermore, education is highly believed to be a light that shows the mankind the right direction to surge. Its purpose is not just making a student literate but adds rationale thinking, knowledgeability and self-sufficiency. When there is a willingness to change, there is hope for progress in any field. Creativity can be developed and innovation benefits both students and teachers. If education fails to inculcate self-discipline and commitment to achieve in the minds of student, it should be converted into a sport because learning process has to generate interest in the students and motivate them to stay back in the institution than to run away from it. Indeed, education should become a fun and thrill to them rather than burden and boredom. It is an integral part of their growth and helps them become good citizens. Therefore, teachers are expected to make learning as an active process and visible to both teacher and student.

Innovation in education is an ongoing process and is needed every once in a while to keep thing healthy and engaging for students as well as teachers. Particular set patterns and pedagogies cannot work all the time, a little "twist" or innovation is needed to keep monotony off the bay and keep students interested thoroughly. Innovations are always needed because every problem needs its solution; so it becomes the need from time to time to discover something new and useful in education.

Innovation in education is defined as "the process of making changes to something established by introducing something new." It applies to radical or incremental changes to products, processes or services. Students today are on lookout for challenges and opportunities that helps them explore and connect to outside world for better opportunities. And so, they challenge educators to be innovative and to make learning environments more exciting, challenging and rewarding for them.

No doubt, each country has its own ideals when it comes to education. Philippines which is true to be young in engaging to K- 12 Curriculum is still a Western lifestyles and ideals inspired country and continuing to patronize "the global education". Meanwhile, due to ASEAN integration, Filipinos should pass global standards in Science subjects.

Given the diversity of learners and the views expressed in many classrooms, the science teachers' role needs to be more about managing the construction of knowledge between learners. Considering what works best rather than finding the best method could help to bring this to realization. In other words, teachers job is highly expected to affect the learners of becoming productive one.

With competencies at the center of an educational system, the focus is directed more on the student than on the teacher or the curriculum. The main question is "what did the student learn and understand, and how is he or she able and willing to apply this knowledge for his own purposes?" This provides a different theoretical framework for education, and competence models should facilitate the connection of the abstract definition with school praxis. However, the teacher is the most important player in the educational system and therefore the question of how teachers adopt this new idea and this shift of paradigm is the most crucial one. It includes a question of whether teachers also given enough time, support and opportunity to make these expectations possible.

Indeed, learning is best achieved when learner is an active participant in the process. Although learning is a life-long process, the ability and opportunities to learn is acquired in school. Truly, learning is constructed within the mind of the learners and that the successful transferring of knowledge is more likely to occur when the students are engaged and performing before, during and after the teaching-learning process and the teacher facilitate and guide them.

In other words, as specified by the current curriculum in use, science follows a spiral progression approach. It is indeed that teachers are highly expected to deliver a particular content in a specific term, week and time of the year to the learners. However, how to put the required knowledge across to learners might often be a problem to the teachers. This problem could arise from having to teach much within a short time, not having the required materials or not knowing the strategies to teach with.

Results from the PISA 2022 showed a trend of decline in terms of mean scores or averages for reading across 81 countries. The Philippines, while having a lower average score in reading in 2022 (347) compared to 2018 (353), ranked higher, moving up four spots, to 75th, as it was able to score a 6.9 percentage point hike in reading. The country was previously ranked the second lowest during the 2018 edition of PISA. OECD stated that the overall decline in results for all member states can be partially attributed to the COVID-19 pandemic. The organization noted that there was an unprecedented drop in scores for the latest assessment. "The decline in performance can only partially be attributed to the

COVID-19 pandemic," OECD shared in an official statement, "with falling scores in reading, science, and math already apparent prior to 2018."

The results also showed that the Philippines registered one of the largest changes between 2018 and 2022 in the percentage of students who had repeated a grade at least once in primary, lower secondary or upper secondary school. However, the country has one of the highest levels of preparedness for digital learning among OECD and partner countries/economies.

Therefore, challenges are really inevitable but how to overcome these is the big question. At the end, teachers are highly expected to find ways but without the help and support from other stakeholders, it would turn to burden for them instead of motivational challenge. If that so, students will be highly affected. As a science educator, the researcher believes with the idea that teaching is an art. It is one of the most delightful and exciting of all human activities when it is done well and that is also one of the most humiliating and tedious when it is done poorly. Effective science teaching is a purposeful means to an important end, not the end itself. Teachers who embrace this philosophy accept some measure of responsibility for their students' struggles and failure to learn.

Yet, it is undeniably true that students deserve to be engaged with a 21st- century learning environment to hone their skills and apply knowledge to real-life situations rather than sitting for the whole class hour period and ending up running away from school when get bored. In other words, providing a quality of education that students highly need and deserve to prepare them not only for the present but as future citizens is indeed one of the responsibilities of today's teachers. This refers to shaping young minds and utilizing different relevant innovative activities which allow students to learn by doing leading them to become scientifically literate citizens and globally competitive individuals should highly be considered.

In the teaching profession, aside from the purpose of renewing CPD units, teachers need to really embrace training, seminars, and workshops for professional development and put into practice whether it is district up to international level. The researcher aims to investigate its relevance and significant relationship to instruction. It is not only to be well-equipped and nurture excellence but also to flourish students in science subjects.

Moreover, given that the today's learning platforms involves even more of technology-based, and the majority of the high schools in Oriental Mindoro are not situated in urban areas, still, their aspirations to pursue and provide quality education should not be wavered. The researcher believes that shifting to those innovative activities was never easy but always worth trying. After determining the profile variables of the teachers, the extent, and the difficulties met by the teachers in the utilization of innovative applications in teaching Science, enhancement activities to maximize its use will be proposed, thus, to cater today's future innovators and solvers of problems even of those that do not yet exist.

Statement of the Problem

This study aimed to investigate the difficulties in utilization of innovative application in teaching Science among selected private high schools in Oriental Mindoro. Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
    1.1 area of specialization (science and non- science major);
    1.2 number of years in teaching; and
    1.3 seminars/ trainings attended?
2. What is the extent of utilization of innovative application in teaching Science in terms of:
    2.1 ICT application;
    2.2 content;
    2.3 pedagogy; and
    2.3 assessment?
3. What are the difficulties met by teachers in the utilization of innovative application in teaching Science?
4. Is there a significant relationship between the utilization of innovative application in teaching science and difficulties met?
5. Based from the findings, what enhancement activities can be proposed to maximize the use of innovative applications in teaching Science?

METHODOLOGY

In this chapter, an overview of the methodology employed in the study is provided. This encompasses an examination of the research design, data resources, the demographic under study, tool validation, data collection procedures, ethical considerations, data handling, and the analytical techniques utilized.

Research Design

The researcher used the descriptive method of research to meet the purpose of the study. Descriptive research is concerned with acquiring information about current events or occurrences in order to describe and interpret them.

Participants

This research study is focused on selected private high school teachers currently teaching science subjects in the Division of Oriental Mindoro. The researcher utilized and adapted the Raosoft Formula to limit the margin of error of 6% to effectively determine an appropriate sample size of 100 from the estimated population of 570. This chosen sample size is well-aligned with the research's objectives. Using a simple random sampling method, ensuring an unbiased representation across the designated locations is observed.

Research Instrument

Given that this study is quantitative, the main instrument used in gathering the data needed was a researcher-made questionnaire. With this, the researcher had thoroughly crafted the questionnaire, incorporating a set of statements that respondents assessed using a 4-point Likert Scale. This scale ranges from 1, denoting strong disagreement, to 4, signifying strong agreement

Data Analysis

To interpret the data effectively, the researcher employed the following statistical treatments. The frequency, weighted mean, ranking, and Pearson's r were utilized.

RESULTS AND DISCUSSIONS

This part of the study provided the presentation, analysis, and interpretation of the gathered data from the questionnaires answered by the respondents in accordance with the specific questions posited on the objectives of the study.

1. Extent of Utilization of Innovative Application in Teaching Science

In Terms of ICT Application

Table 1. Extent of Utilization of Innovative Application in Teaching Science In Terms of ICT Application

Items	Weighted Mean	Interpretation	Rank
The teacher manifests ability to....			
use multimedia to maximize students' participation in classroom activities.	3.51	Great Extent	3
set up multi-media tools.	3.41	Great Extent	8
select relevant programmed materials for viewing.	3.43	Great Extent	7
browse and download from the Internet facts and information about the lesson.	3.53	Great Extent	2
organize lessons to be viewed through either television or computer, along with overhead projector.	3.44	Great Extent	6
direct classroom activities when multimedia is being used.	3.46	Great Extent	5
utilize programmed educational materials to improve further and supplement the currently used ones in the classroom.	3.27	Great Extent	10

verify the reliability of the current lessons through comparing them with those used by countries using modern technology.	3.36	Great Extent	9
synchronize lessons with downloaded facts and information from the websites.	3.49	Great Extent	4
utilize online and/or offline simulations of the lesson and/or activity (e.g PHET (Physics Education Technology) Interactive Simulations	3.54	Great Extent	1
Composite Mean	**3.44**	**Great Extent**	

As gleaned in Table 2, the respondents responded that the teachers manifest ability to utilize online and/or offline simulations of the lesson and/or activity (e.g PHET (Physics Education Technology) Interactive Simulations to the great extent which made the highest weighted mean of 3.54 and the highest rank of 1.

In Terms of Content

As written in Table 3, the respondents answered that the teachers manifest ability to share and emphasize the learning objectives and success criteria to the learners to the great extent which yielded the highest weighted mean of 3.55 and the highest rank of 1.

Table 2. Extent of Utilization of Innovative Application in Teaching Science In Terms of Content

Items	Weighted Mean	Interpretation	Rank
The teacher manifests ability to....			
1. prepare snapshots (summary) of a whole year- round of teaching and share it to class.	3.45	Great Extent	8
2. prepare self- constructed lesson plan based on DepEd guidelines at least one week advance.	3.46	Great Extent	6.5
3. consider other resources such as internet in creating the content of the lesson.	3.50	Great Extent	3
4. share and emphasize the learning objectives and success criteria to the learners	3.55	Great Extent	1
5. discuss with co- teachers regarding horizontal curriculum for possible collaborative efforts (discussion, projects and activities).	3.53	Great Extent	2
make sure that every lesson starts and ends in allotted time.	3.46	Great Extent	6.5
7. integrate the significance and relevance of the lesson to real life situations.	3.47	Great Extent	4.5
8. share science- related current trends and issues	3.47	Great Extent	4.5
9. have mastery in innovating content- based experiment.	3.41	Great Extent	10
10. manipulate electronic gadgets in presenting the lesson to the class efficiently.	3.43	Great Extent	9
Composite Mean	**3.47**	**Great Extent**	

The composite mean of 3.47 generalized that the respondents utilized innovative application in teaching Science in content to the great extent. The digital competencies required of a teacher include subject content knowledge that is mediated through quality pedagogical content knowledge leveraged by quality technological proficiency.

In Terms of Pedagogy

Table 3. Extent of Utilization of Innovative Application in Teaching Science In Terms of Pedagogy

Items	Weighted Mean	Interpretation	Rank
The teacher manifests ability to....			
1. guide students to generate ideas coming from simulators and demonstrate what they have been observed.	3.41	Great Extent	10
2. encourage the students to set goals, make decisions and assess own progress.	3.46	Great Extent	8.5
3. encourage students investigate, relate information and draw conclusions	3.50	Great Extent	4
4. encourage critical thinking skills in understanding the lesson by giving different examples	3.55	Great Extent	1
5. ask students to apply scientific method in solving problems.	3.48	Great Extent	7
6.employ different strategies that maximizes the use of innovative applications efficiently.	3.49	Great Extent	5.5
7. engage the students to answer questions that improves creative, critical and logical thinking.	3.46	Great Extent	8.5
8. increase and sustain the interest of students.	3.54	Great Extent	2
9. provide authentic and meaningful learning experiences to students considering their backgrounds and diversity.	3.52	Great Extent	3
10. facilitate the students to share their thoughts about particular concept.	3.49	Great Extent	5.5
Composite Mean	**3.49**	**Great Extent**	

As revealed in Table 3, the respondents affirmed that the teachers manifest ability to encourage critical thinking skills in understanding the lesson by giving different examples to the great extent which gained the highest weighted mean of 3.55 and the highest rank of 1. This coincides with the idea that critical thinking has been a significant issue in education. In keeping up with the ever-changing technological advances, learners will need to acquire, understand, and analyze information on a much more efficient scale by training them to develop higher metacognition skills.

In Terms of Assessment

Table 4. Extent of Utilization of Innovative Application in Teaching Science In Terms of Assessment

Items	Weighted Mean	Interpretation	Rank
The teacher manifests ability to....			
1. use rubrics in assessing specific learning task provide immediate feedback to learners.	3.55	Great Extent	1
2. utilize assessment results to improve students' performance.	3.48	Great Extent	4.5
3. check for the student's validity of their line of reasoning and judgements.	3.40	Great Extent	9
4. perform monitoring functions and observations to assess learners.	3.48	Great Extent	4.5
5. identify learning gaps and what hinders learning through diagnostic assessments and other formative assessments.	3.51	Great Extent	2.5
6. assess whether learning expectations have been met for a specified duration *(example: ticket out).*	3.51	Great Extent	2.5
7. make decisions on whether to proceed with the next lesson, re- teach or provide for the corrective measures or interventions/ reinforcements.	3.45	Great Extent	6
8. conduct remediation and/ or enrichment with specific student as needed.	3.43	Great Extent	7
9. regularly track learner's progress in individual and group works.	3.42	Great Extent	8
10. encourage students to record their scores through self- created graphs after every formative assessment to track their own learning progress.	3.30	Great Extent	10
Composite Mean	**3.45**	**Great Extent**	

As reflected in Table 4, the respondents agreed that the teachers manifest ability to use rubrics in assessing specific learning task provide immediate feedback to learners to the great extent which obtained the highest weighted mean of 3.55 and the highest rank of 1. ICT based –technology supports students in completing their assessment tasks such as the use of electronic portfolios and project-based assessment.

2. Difficulties Encountered by Teachers in the Utilization of Innovative Application in Teaching Science.

Table 5. Difficulties Encountered by Teachers in the Utilization of Innovative Application in Teaching Science

Items	Weighted Mean	Interpretation	Rank
In the utilization of innovative applications in teaching science, the teacher encountered difficulty in….			
using technology to deliver effective discussion and formative assessments.	3.06	Agree	2
designing many of the activities for learning science to require individual or group work, not simply as an exercise, but as essential to the inquiry.	3.08	Agree	1
disregarding traditional teaching since it works, and there are students who can learn in a traditional environment and sometimes prefer it.	2.52	Agree	3
filling the gap between the vision of delivering personalized, differentiated instruction and the technologies available.	2.43	Disagree	5
sing virtual and remote laboratories to fill in the gaps with less costly alternatives, allowing students to engage in experimentation, even if that experimentation isn't direct.	2.44	Disagree	4
structuring the time available so that students are able to engage even in extended investigations.	2.30	Disagree	7.5
making the available science tools, materials, media, and technological resources accessible to students.	2.34	Disagree	6
taking advantage of open resources to expand curricula with media-rich tools and texts that can be used and adapted to specific lessons,	2.24	Disagree	9
accessing in specific Internet connectivity options and improved in electrification (ex. back - up generator).	2.30	Disagree	7.5
participating fully in planning and implementing professional growth and development strategies for themselves and their colleagues.	2.20	Disagree	10
Composite Mean	**2.49**	**Disagree**	

As discussed in Table 5, the respondents agreed that in the utilization of innovative activities in teaching science, the teachers encountered difficulties in designing many of the activities for learning science to require individual or group work, not simply as an exercise, but as essential to the inquiry which yielded the highest weighted mean of 3.08 and the highest rank of 1.

3. Relationships Between the Variables of the Study

3.1. In Terms of Difficulties Encountered by Teachers in the Utilization of Innovative Applications in Teaching Science Versus Extent of Utilization.

Table 6.1. Relationship Between the Difficulties Encountered by Teachers in the Utilization of Innovative Application in Teaching Science Versus Extent of Utilization

Variables	r-value	p-value	Decision	Interpretation
Difficulties Encountered versus:				
ICT Application	0.01	0.92134	Failed to Reject Ho	Not Significant
Content	0.03	0.76000	Failed to Reject Ho	Not Significant
Pedagogy	0.01	0.92134	Failed to Reject Ho	Not Significant
Assessment	0.03	0.76000	Failed to Reject Ho	Not Significant

As discussed in the above results presented in Table 6.1, when the responses of the respondents on the difficulties they encountered in the utilization of innovative application in teaching Science were compared to their extent of utilization, the computed r-values of 0.01 for both ICT application and pedagogy, and 0.03 for both content and assessment have corresponding p-values of more than 0.05, thus, failing to reject the hypothesis.

3.2. In Terms of Profile of the Respondents and the Utilization of Innovative Application in Teaching Science, as well as the Difficulties they Encountered.

Table 6.2. Relationship Between the Profile of the Respondents and the Utilization of Innovative Application in Teaching Science, as well as the Difficulties They Encountered

Variables	r-value	p-value	Decision	Interpretation
Area of Specialization:				
ICT Application	0.30	0.00243	Reject Ho	Highly Significant
Content	0.30	0.00243	Reject Ho	Highly Significant
Pedagogy	0.22	0.02785	Reject Ho	Significant
Assessment	0.30	0.00243	Reject Ho	Highly Significant
Difficulties	0.05	0.62129	Failed to Reject Ho	Not Significant
Number of Years in Teaching:				
ICT Application	0.22	0.02785	Reject Ho	Significant
Content	0.21	0.03599	Reject Ho	Significant
Pedagogy	0.20	0.04604	Reject Ho	Significant
Assessment	0.32	0.00117	Reject Ho	Highly Significant
Difficulties	0.01	0.92134	Failed to Reject Ho	Not Significant
Seminars/Trainings Attended:				
ICT Application	0.31	0.00170	Reject Ho	Highly Significant
Content	0.21	0.03599	Reject Ho	Significant
Pedagogy	0.18	0.07313	Failed to Reject Ho	Not Significant
Assessment	0.23	0.02133	Reject Ho	Significant
Difficulties	0.0	0.48891	Failed to Reject Ho	Not Significant

As given in Table 6.2, when the responses of the respondents on the extent of utilization of innovative application in teaching Science, and the difficulties encountered were compared to their area of specialization, the computed r-values of 0.30 for for ICT application, content and assessment, have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

4. Based from the findings, what enhancement activities can be proposed to maximize the use of innovative applications in teaching Science?

Virtual Simulation Worksheet: Exploring Products and Reactants (Grade 10)

Student Name: _____ **Date:** _____

Learning Competency: Apply the principles of conservation of mass to chemical reactions (S10MT-IVc-d-22)

Virtual Simulation Link: https://phet.colorado.edu/en/simulations/reactants-products-and-leftovers

Instructions:

1. Access the provided virtual simulation or website link.
2. Follow the instructions on the simulation to complete the tasks and answer the questions.
3. Record your observations, findings, and responses in the spaces provided.
4. Feel free to explore additional features or aspects of the simulation to enhance your understanding.

Task 1: Introduction to the Simulation

1. Describe the virtual environment you are exploring. What chemistry concept related to products and reactants does the simulation cover?

Task 2: Interactive Exploration

2. Follow the instructions provided in the simulation to interact with the chemical reactions. What actions did you take to manipulate the products and reactants?

Describe any changes you observed in the products and reactants as you manipulated the simulation. How did these changes relate to the concept of products and reactants?

Task 3: Data Analysis

4. If applicable, analyze any data provided by the simulation regarding the products and reactants. What patterns or relationships do you observe in the data?

Task 4: Reflection

5. Reflect on your experience with the virtual simulation. How did the simulation deepen your understanding of products and reactants in chemical reactions? What aspects of the concept were clarified through the simulation?

Task 5: Extension

6. Identify one real-world scenario where understanding products and reactants in chemical reactions is crucial (e.g., combustion reactions, photosynthesis). How could you use the concepts learned from the simulation to analyze

Hands-On Worksheet Activity: Exploring Homeostasis (Grade 10)

Student Name: _____ **Date:** _____

Learning Competency: Describe how the nervous system coordinates and regulates these feedback mechanisms to maintain homeostasis. (S10LT-IIIc-36)

Objective: To investigate the concept of homeostasis and understand how the body maintains internal balance.

Materials Needed:

- Thermometer Water Ice
- Timer or clock Heat source (e.g., heating pad)

Procedure:

1. **Baseline Temperature Measurement:**
   - Measure and record your baseline body temperature using the thermometer. Record this initial temperature in the table below.
2. **Heat Stress Experiment:**
   - Place the heating pad on a low setting or expose yourself to a warm environment for a predetermined amount of time (e.g., 5 minutes).
   - After the specified time, measure and record your body temperature again. Record this temperature in the table below.
3. **Cold Stress Experiment:**
   - Place ice cubes in a bowl of water and immerse your hand or foot in the cold water for a predetermined amount of time (e.g., 2 minutes).
   - After the specified time, measure and record your body temperature once more. Record this temperature in the table below.
4. **Data Analysis:**
   - Analyze the temperature measurements recorded during each experiment.
   - Compare the baseline temperature with the temperatures recorded after exposure to heat stress and cold stress.
   - Note any changes in body temperature and discuss how they relate to the concept of homeostasis.

Worksheet:

Experiment	Baseline Temperature (°C)	Temperature After Stress (°C)	Change in Temperature (°C)
Baseline Measurement			
Heat Stress			
Cold Stress			

Questions:

1. What is homeostasis, and why is it important for maintaining health and survival?

2. Describe the changes in body temperature observed during the heat stress and cold stress experiments. How did your body respond to each stressor?

3. How does the body regulate temperature to maintain homeostasis in response to external stressors?

4. Discuss any similarities or differences between your experimental results and what you know about homeostasis from biology lessons or textbooks.

Conclusion: Reflect on what you learned from this hands-on activity about homeostasis and its role in maintaining internal balance within the body.

Worksheet Activity: Inquiry-Based Exploration of Climate Change (Grade 9)

Student Name: _____ **Date:** _____

Learning Competency: Describe certain climatic phenomena that occur on a global level. (S9ES -IIIe – 31)

Objective: To engage students in investigating climate change through inquiry-based learning.

Instructions:

1. Divide the class into small groups of 3-4 students.
2. Provide each group with a copy of the worksheet and access to resources such as textbooks, articles, and the internet.
3. Encourage students to collaboratively research and discuss the questions on the worksheet.
4. After completing the worksheet, reconvene as a class to share findings and insights.

Materials Needed:

- Worksheet (included below)
- Access to resources on climate change (textbooks, articles, internet, etc.)

Worksheet:

Group Name: _____

Question 1: What is Climate Change?

- Research and define climate change in your own words.
- Provide examples of natural and human-caused factors contributing to climate change.

Question 2: Evidence of Climate Change

- Identify and describe at least three pieces of evidence supporting the existence of climate change.

Question 3: Impacts of Climate Change

- Investigate and list at least three impacts of climate change on the environment, ecosystems, and human societies.
- Provide specific examples or case studies to illustrate these impacts.

Question 4: Causes of Climate Change

- Explore the main human activities that contribute to climate change, such as deforestation, burning fossil fuels, and industrial processes.
- Discuss how these activities influence the Earth's climate system.

Question 5: Mitigation and Adaptation Strategies

- Research and discuss at least three strategies for mitigating or adapting to climate change.
- Evaluate the effectiveness and feasibility of each strategy.

Question 6: Personal Action Plan

- Based on your research and understanding of climate change, brainstorm at least three actions that individuals or communities can take to address climate change.
- Describe how each action can contribute to mitigating or adapting to climate change.

Conclusion: Reflect on your group's inquiry-based exploration of climate change. Discuss any new insights gained and the importance of taking action to address climate change at both individual and societal levels.

Inquiry and Game-Based Activity: Exploring Microorganisms

Student Name: _____ **Date:** _____

Objective: To engage students in inquiry-based exploration of microorganisms through a game-based activity.

Materials Needed:

- Microscope (optional)
- Prepared slides of various microorganisms (if using microscope)
- Whiteboard or flipchart
- Markers
- Timer
- Index cards or small pieces of paper
- Game board or game pieces (optional)

Activity Steps:

1. **Introduction to Microorganisms (15 minutes):**
    - Begin with a brief introduction to microorganisms, explaining what they are and their significance in various aspects of life, such as health, environment, and industry.
    - Discuss different types of microorganisms, including bacteria, viruses, fungi, and protozoa.
2. **Inquiry-Based Exploration (30 minutes):**
    - Divide the class into small groups and assign each group a specific type of microorganism to focus on (e.g., bacteria, viruses, fungi).
    - Provide resources such as textbooks, articles, and internet access for research.
    - Instruct each group to generate inquiry questions about their assigned microorganism, such as its structure, function, habitat, and impact on human life.
    - Allow time for groups to research and discuss their questions, using the whiteboard or flipchart to record key findings and insights.
3. **Game Development (20 minutes):**
    - After the research phase, reconvene as a class and explain that students will develop a game based on the information they've learned about microorganisms.
    - Instruct each group to design a game that educates players about their assigned microorganism and its characteristics.
    - Encourage creativity and innovation in game design, such as creating trivia questions, puzzles, or interactive challenges related to microorganisms.
4. **Game Presentation and Play (30 minutes):**
    - Each group presents their game to the class, explaining the rules, objectives, and educational content.
    - After the presentations, allow time for students to play each other's games in small groups or as a class.
    - Rotate through the games, ensuring that every group has the opportunity to play and learn from each other's creations.
5. **Discussion and Reflection (15 minutes):**
    - Facilitate a class-wide discussion about the games played, focusing on what students learned about microorganisms and how the games enhanced their understanding.
    - Encourage students to reflect on the effectiveness of game-based learning in engaging and educating about scientific concepts.
    - Discuss any remaining questions or areas of interest related to microorganisms.

Conclusion: Conclude the activity by emphasizing the importance of understanding microorganisms and their impact on the world around us. Encourage students to continue exploring microbiology and its relevance to everyday life.

Debate and Discussion Activity: Exploring Evolution

Student Name: _____ **Date:** _____

Objective: To engage students in critical thinking and scientific discourse regarding the theory of evolution.

Materials Needed:

- Whiteboard or flipchart Markers Timer

Activity Steps:

1. **Introduction to Evolution (15 minutes):**
    - Begin with a brief overview of the theory of evolution by natural selection, highlighting key concepts such as variation, adaptation, and common descent.
    - Discuss the historical context of evolutionary theory, including the contributions of scientists like Charles Darwin and Alfred Russel Wallace.
2. **Debate Preparation (20 minutes):**
    - Divide the class into two groups: Pro-Evolution and Anti-Evolution.
    - Assign each group specific viewpoints to defend in the debate. For example, Pro-Evolution group may argue in favor of the validity and evidence supporting evolutionary theory, while Anti-Evolution group may present arguments against evolution based on religious beliefs or alternative theories.
    - Provide time for each group to research and prepare their arguments using reputable sources and evidence-based reasoning.
3. **Debate Session (30 minutes):**
    - Conduct the debate session, with each group presenting their arguments and counterarguments.
    - Encourage respectful discourse and adherence to debate rules (e.g., time limits for speeches, rebuttals, and cross-examinations).
    - Use the whiteboard or flipchart to record key points raised by each group.
4. **Discussion and Reflection (20 minutes):**
    - Facilitate a class-wide discussion following the debate, allowing students to express their thoughts and opinions on the arguments presented.
    - Encourage students to critically analyze the evidence and reasoning presented by both sides.
    - Address any misconceptions or questions that arise during the discussion.
    - Emphasize the importance of evidence-based reasoning and critical thinking in scientific inquiry.
5. **Conclusion and Summary (15 minutes):**
    - Summarize the main points discussed during the debate and subsequent discussion.
    - Reiterate the scientific consensus on evolution as a well-supported theory based on extensive evidence from multiple fields of study.
    - Encourage students to continue exploring evolutionary concepts and engage in further scientific inquiry.

Hands-On Activity: Extracting DNA from Strawberries

Student Name: _____ **Date:** _____

Objective: To demonstrate the process of DNA extraction and understand the basic structure of DNA.

Materials Needed:

- Ripe strawberries (1 per student/group)
- Ziplock bags (1 per student/group)
- Dish soap (approximately 10 mL per student/group)
- Water (approximately 50 mL per student/group)
- Salt (approximately 1 teaspoon per student/group)
- Coffee filter or cheesecloth (1 per student/group)
- Rubbing alcohol (approximately 50 mL per student/group)
- Small cups or beakers (1 per student/group)
- Wooden sticks or spoons (for mashing)
- Test tubes or small clear containers (1 per student/group)
- Pipettes or droppers (1 per student/group)
- Safety goggles (1 per student)
- Gloves (optional)

Instructions:

1. **Preparation:**
   - Ensure all students wear safety goggles to protect their eyes.
   - If desired, students can wear gloves to protect their hands.
2. **Mashing the Strawberries:**
   - Place a ripe strawberry in a ziplock bag and seal it.
   - Using a wooden stick or spoon, mash the strawberry inside the bag until it becomes a pulp.
3. **Extracting DNA:**
   - Transfer the mashed strawberry pulp from the ziplock bag into a clean cup or beaker.
   - Add approximately 10 mL of the prepared extraction solution to the cup containing the mashed strawberries.
   - Gently stir the mixture to ensure thorough mixing of the extraction solution with the strawberry pulp.
4. **Filtering the Mixture:**
   - Place a coffee filter or cheesecloth over the mouth of a test tube or small clear container.
   - Carefully pour the strawberry mixture through the filter to strain out the solid pulp, leaving behind a liquid extract in the container.
5. **Precipitating DNA:**
   - Slowly add rubbing alcohol to the filtered strawberry extract by gently pouring it down the side of the container.
   - Observe the formation of white, stringy strands of DNA rising to the surface of the alcohol layer.
6. **Observation and Discussion:**
   - Use a pipette or dropper to carefully extract some of the DNA strands from the alcohol layer and transfer them to a clean test tube or container for observation.
   - Observe the extracted DNA strands using a magnifying glass or microscope if available.
   - Discuss the appearance and properties of DNA, its role in living organisms, and the significance of DNA extraction.

Conclusion: Reflect on the hands-on DNA extraction activity. Discuss the importance of DNA in biology, genetics, and biotechnology, and how understanding DNA structure and function contributes to scientific knowledge and advancements.

Worksheet Activity: Inquiry-Based Exploration of DNA

Objective: To engage students in investigating the structure and function of DNA through inquiry-based learning.

Instructions:

1. Divide the class into small groups of 3-4 students.
2. Provide each group with a copy of the worksheet and access to resources such as textbooks, articles, and the internet.
3. Encourage students to collaboratively research and discuss the questions on the worksheet.
4. After completing the worksheet, reconvene as a class to share findings and insights.

Materials Needed:

- Worksheet (included below)
- Access to resources on DNA (textbooks, articles, internet, etc.)

Worksheet:

Group Name: _____

Question 1: What is DNA?

- Research and define DNA (deoxyribonucleic acid) in your own words.
- Describe its structure and composition.

Question 2: DNA Discovery

- Investigate the discovery of DNA and the scientists involved (e.g., James Watson, Francis Crick, Rosalind Franklin).
- Describe the key experiments and contributions that led to the understanding of DNA's structure.

Question 3: Structure of DNA

- Explore the structure of DNA, including its double helix shape, nucleotide composition, and base pairing rules.
- Provide a diagram or illustration to explain the structure of DNA.

Question 4: Function of DNA

- Research the functions of DNA, including storing genetic information, replication, and protein synthesis.
- Explain how DNA carries out these functions within cells.

Question 5: DNA Replication

- Investigate the process of DNA replication, including the roles of enzymes such as DNA polymerase and helicase.
- Describe the steps involved in DNA replication and its significance in cell division and genetic inheritance.

Question 6: Impact of Mutations

- Explore the concept of mutations and their effects on DNA.
- Discuss how mutations can lead to genetic variation, inherited disorders, or changes in protein function.

Conclusion: Reflect on your group's inquiry-based exploration of DNA. Discuss any new insights gained and the importance of understanding DNA in the context of genetics and biology.

CONCLUSIONS

This section plays a crucial role in synthesizing the research findings, highlighting their significance, and guiding future research directions. Based on the findings of this research, it is significant to highlight the following conclusions.

1. Most of the educators in the selected private high schools, responsible for teaching science subjects, possess specialized knowledge in the sciences, which significantly enhances their ability to effectively convey lesson materials.
2. Innovative applications in teaching science in terms of ICT application, content, pedagogy and assessment, is utilized extensively by the majority of the teachers.
3. Teachers encounter challenges when incorporating innovative applications into their science teaching practices.
4. The degree to which innovative applications are utilized in teaching science exhibits a strong and significant relationship with assessment practices.
5. When considering the challenges encountered, particularly in relation to the number of years teaching, there appears to be no significant relationship with assessment practices.

RECOMMENDATIONS

Based on the data collected and the conclusions drawn, this section presents a set of recommendations aimed at addressing the issues identified and maximizing the potential for positive outcomes.

1. Educational institutions should carefully consider the educators who should handle specific subjects.
2. Educators should carefully consider the alignment of ICT application, content, pedagogy, and assessment in every lesson planning crafting own enhancement activities to maximize the innovative applications in the long run that will not consume too much time to prepare.
3. Both educational institutions and educators should ensure learners for equitable access to technology resources and innovative applications across all socio-economic backgrounds.

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KNOWLEDGE IN EDUCATIONAL TECHNOLOGY INTEGRATION OF TEACHERS IN SELECTED ELEMENTARY SCHOOLS IN LIAN DISTRICT: BASIS FOR AN ACTION PLAN

Greizyl B. Manguerra
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

The study aimed to delve into the knowledge of teachers regarding the integration of educational technology within elementary schools in Lian District. In the rapidly evolving educational landscape, where technology played an increasingly crucial role, understanding teachers' proficiency in leveraging these tools was imperative. The research sought to comprehensively explore various aspects, including teachers' profiles, their proficiency in educational technology integration, and potential disparities based on demographic characteristics. The study utilized descriptive correlational research methods and a quantitative approach to examine the relationships between variables related to teachers' knowledge levels and perceptions of technology integration. Employing a survey tool, researchers gathered quantitative data to understand teachers' familiarity with educational technology. The study focused on educators in selected elementary schools in Lian, Batangas, aiming for a representative sample. Rigorous testing procedures, including test-retest reliability assessment, ensured the reliability and validity of the survey instrument, yielding consistent results. The study revealed that teachers favored collaborative decision-making in technology integration but faced challenges with compatibility issues among educational software. They were adept at using student performance data for tailored instruction but showed less proficiency in decision trees and risk analysis techniques. Demographic analysis showed correlations between certain variables like sex and devices used in teaching with technology integration knowledge, while others like age, civil status, educational attainment, and EdTech-related training did not exhibit significant differences, highlighting the multifaceted nature of factors influencing teachers' proficiency. The findings emphasized the need for targeted training programs and support mechanisms to enhance teachers' proficiency in leveraging technology effectively, thereby fostering equitable access to quality education for all students.

Keywords: educational technology integration, elementary schools

INTRODUCTION

In the rapidly evolving landscape of education, the integration of technology has emerged as a transformative force, reshaping traditional teaching paradigms and redefining the learning experience. Globally, the infusion of educational technology has become a pivotal component in preparing students for the demands of the 21st century.

In an era characterized by unprecedented technological advancements, the global educational landscape has witnessed a paradigm shift. The integration of educational technology has become imperative to equip students with the skills and competencies necessary for success in an increasingly digital world. Across continents, educators were leveraging digital tools and platforms to enhance the teaching and learning process (Wilson et al., 2020). The global discourse on educational technology underscores its potential to foster innovation, personalized learning, and global connectivity. As technology continues to evolve, educators worldwide face the shared responsibility of harnessing its power to cultivate a generation capable of navigating the complexities of the modern world.

Transitioning from a global perspective to the specific context of the Philippines, the integration of educational technology has gained recognition as a crucial element in the country's educational reform

agenda. The Department of Education (DepEd) has underscored the importance of technology in enhancing the quality of education and preparing Filipino students for a technology-driven future (Hero, 2019). Despite these aspirations, challenges persist, including limited resources, uneven access to technology, and varying levels of technological proficiency among educators. The Philippines, comprising a diverse archipelago, faces the task of ensuring that the benefits of educational technology were equitably distributed and effectively harnessed across different regions (Santos & Castro, 2021).

The study focused on Lian district, a locality situated in the province of Batangas. Here, the dynamics of educational technology integration in elementary schools take on a unique character shaped by local circumstances. Lian District stands at the intersection of traditional educational practices and the burgeoning potential of technology. The study aimed to investigate the current state of knowledge in educational technology integration among teachers in selected elementary schools within the district.

As educational institutions in Lian District grapple with the challenge of preparing students for a future dominated by technology, the role of teachers becomes paramount. The study recognized that teachers serve as the linchpin in the effective integration of educational technology into the classroom. Their knowledge, skills, and attitudes toward technology profoundly influence its impact on student learning outcomes.

The integration of educational technology in elementary schools within Lian District confronts a myriad of challenges that span local, contextual, and systemic dimensions. One primary challenge lies in the limited access to technology infrastructure and devices. Lian District, like many other rural areas, grapples with uneven distribution of technological resources, hindering the seamless integration of digital tools into the teaching and learning environment. This digital divide exacerbates disparities among schools and teachers, creating an environment where some educators may be more adept at leveraging technology while others struggle due to limited access.

Another critical issue was the varying levels of technological proficiency among teachers. The readiness and capability of educators to effectively use educational technology influences its impact on student learning outcomes (Tondeur, 2019). Many teachers may lack the requisite skills and training to harness the full potential of digital tools, resulting in suboptimal integration and missed opportunities for enhancing pedagogical practices.

Furthermore, institutional factors contribute to the challenges faced in the integration of educational technology. Limited budgetary allocations for technology infrastructure, coupled with the absence of a comprehensive framework for technology integration in the education system, present obstacles to the seamless adoption of digital tools (Backfisch et al., 2020). The absence of a clear policy direction and strategic plan hampers the systematic and uniform implementation of educational technology initiatives across elementary schools in Lian District.

Moreover, resistance to change and a traditional mindset toward teaching methodologies pose formidable challenges. Embracing educational technology requires a paradigm shift in teaching approaches, and some educators may be hesitant or resistant to depart from conventional methods. Overcoming this resistance necessitates targeted professional development programs and a supportive educational culture that encourages experimentation and innovation.

This study stems from the recognition that a comprehensive understanding of the existing knowledge, challenges, and opportunities related to educational technology integration among teachers in Lian District was essential. By identifying the gaps and barriers, the study aimed to provide a basis for the development of an action plan that was contextually relevant and strategically aligned with the needs of local educators and students.

This study was guided by the belief that an informed action plan can serve as a catalyst for transformative change. Through targeted interventions, capacity-building initiatives, and strategic resource allocation, Lian District can pave the way for a more robust and effective integration of educational technology. Ultimately, the outcomes of this study aim to contribute not only to the local educational landscape but also to the broader discourse on educational technology integration within the Philippine context and, by extension, the global educational community.

Statement of the Problem

` The study aimed to determine the knowledge of the teachers in educational technology integration within the context of selected elementary schools in Lian District. Specifically, this study pursued to

answer the following questions:

1. What is the profile of the respondents in terms of:
   1.1 age;
   1.2 sex;
   1.3 civil status;
   1.4 highest educational attainment;
   1.5 devices used in teaching; and
   1.6 attended edtech related trainings?
2. What is the level of knowledge of the respondents in educational technology integration in terms of:
   2.1 decision making; and
   2.2 data utilization?
3. Is there any significant difference between the level of knowledge of teachers in edtech when grouped according to their profile?
   4. What teachers' training program should be proposed to attain equity in education?

METHODOLOGY

This chapter elucidates the methodological approach employed in this study, encompassing the research design, data sources, study population, instrumentation and its validation, procedure for data collection, ethical considerations, treatment of data, and data analysis techniques employed.

Research Design

In this study, the researcher employed descriptive correlational research methods and employed a survey tool to evaluate the knowledge of the teachers in terms of educational technology integration in chosen elementary schools within Lian district. The primary goal of this research was to systematically capture the connections and relationships among the main variables, thus providing a comprehensive understanding of how these elements interact within the educational context under investigation.

Participants

The research focused its examination on the currently employed teachers within the chosen elementary schools in Lian, Batangas. Utilizing Raosoft's formula, with a confidence level of 95% and 5% margin of error, the study has successfully determined an appropriate sample size of 126 teachers from the estimated population of 190 primary school teachers in the selected elementary schools in Lian, Batangas.

Research Instrument

The study utilized a researcher-made survey questionnaire carefully constructed to assess educational technology integration of the teachers from the selected institutions in Lian, Batangas.

Procedure

The researcher initiate dthe data collection process where the respondents were required to answer the demographic profile questions. It was important to underscore the invitation for participants to seek clarification during the survey process, fostering engagement and ensuring a thorough understanding—an integral aspect of our methodology. Following the completion of questionnaires, data collection promptly commences. The rationale behind this immediacy was to capture participants' responses while their thoughts were fresh, facilitating a seamless transition from the survey phase. By personally administering surveys, the researcher can provide guidance, creating an efficient and participatory environment. This hands-on approach addresses potential issues or uncertainties, enhancing the overall quality and reliability of the collected data.

Data Analysis

To analyze the data to be gathered efficiently, the researcher employed the following statistical treatments. The frequency, percentage, weighted mean, ranking, and Pearson's r were utilized to interpret the data.

RESULTS AND DISCUSSIONS

This chapter shows the presentation of the data gathered from the questionnaires answered by the respondents. Such presentation is in accordance with the specific questions posited on the objectives of the study.

1. Level of Knowledge of the Respondents in Educational Technology Integration

In Terms of Decision Making

Table 1. Level of Knowledge of the Respondents in Educational Technology Integration in Terms of Decision Making

Items	Weighted Mean	Interpretation	Rank
1. I am familiar with various decision-making models, such as the ADDIE (Analysis, Design, Development, Implementation, Evaluation) framework, and can effectively apply them in planning and implementing educational technology initiatives.	3.74	Agree	9
I have a deep understanding of pedagogical theories and aligned them with suitable educational technologies, ensuring that decisions are grounded in sound educational principles.	3.86	Agree	6
I have encountered and successfully resolved issues related to compatibility between different educational software applications, demonstrating my ability to troubleshoot and make informed decisions.	3.63	Agree	10
I articulated the principles of constructivist learning theory and apply them when deciding on the integration of collaborative online tools to enhance student engagement.	4.06	Agree	4
I have demonstrated flexibility in decision-making by adopting a personalized learning approach, leveraging adaptive learning platforms to cater to individual student needs.	4.09	Agree	3
I regularly conducted needs assessments to identify gaps in technology use, ensuring that decisions align with the specific requirements of students and educators.	3.99	Agree	5
I successfully managed budget constraints by prioritizing technology investments based on their impact on student engagement and learning outcomes.	3.85	Agree	7
I actively considered privacy and security concerns when selecting and implementing educational technology tools to ensure responsible and ethical decision-making.	4.33	Strongly Agree	2
I was engaged in collaborative decision-making with teachers, administrators, and IT specialists to ensure a holistic approach to the integration of educational technology in the curriculum.	4.44	Strongly Agree	1
I assessed the scalability of new technologies to accommodate future growth and technological advancements, ensuring decisions have a lasting positive impact.	3.79	Agree	8
Composite Mean	**3.59**	**Agree**	

As reflected in Table 1, the respondents strongly agreed that they were engaged in collaborative decision-making with teachers, administrators, and IT specialists to ensure a holistic approach to the integration of educational technology in the curriculum with the highest weighted mean of 4.44 and the highest rank of 1. This indicated that they actively participate in discussions and decision-making processes alongside various stakeholders to ensure that technology integration aligns with the overall goals and objectives of the curriculum.

2.2. In Terms of Data Utilization

As revealed in Table 2, the respondents strongly agreed that they routinely used student performance data to tailor instruction, adjusting content and delivery methods to meet the diverse needs of learners with the highest weighted mean of 4.25 and the highest rank of 1. This indicated a proactive approach to teaching that is responsive to the individual strengths, weaknesses, and learning styles of students.

Table 2. Level of Knowledge of the Respondents in Educational Technology Integration in Terms of Data Utilization

Items	Weighted Mean	Interpretation	Rank
1. I used standardized test scores and assessment data to identify areas for improvement in the integration of educational technologies and adjust strategies accordingly.	3.92	Agree	8
I incorporated qualitative data, such as student surveys and observations, to complement quantitative metrics, providing a comprehensive understanding of the impact of educational technology on learning experiences.	4.09	Agree	6
I collected feedback from teachers and students on the effectiveness of implemented technologies, using this information to iterate and enhance integration methods continually.	4.13	Agree	4
I stay informed about advancements in data analytics, integrating new techniques and tools to gain deeper insights into student learning patterns and preferences.	4.11	Agree	5
I used data to implement targeted professional development programs, ensuring that educators are well-equipped to integrate new technologies effectively.	4.15	Agree	3
I can proficiently interpret and used data from learning management systems to assess the effectiveness of online learning modules and make informed decisions for instructional improvements.	3.75	Agree	9
I employed data visualization tools, such as charts and graphs, to communicate complex information about student performance and engagement to stakeholders, facilitating evidence-based decision-making.	3.98	Agree	7
I routinely used student performance data to tailor instruction, adjusting content and delivery methods to meet the diverse needs of learners.	4.25	Strongly Agree	1
I used learning analytics to identify trends in student performance, leading to targeted interventions and improvements in overall learning outcomes.	4.18	Agree	2
I utilized decision trees and risk analysis techniques to navigate challenges related to integrating new educational technologies into the curriculum.	3.74	Agree	10
Composite Mean	**4.03**	**Agree**	

2. Relationship Between the Profile of the Respondents and their Level of Knowledge of Teachers in EdTech.

Table 3. Relationship Between the Profile of the Respondents and their Level of Knowledge of Teachers in EdTech

Variable	r-value	p-value	Decision	Interpretation
Age:				
Decision Making	0.12	0.18076	Failed to Reject Ho	Not Significant
Data Utilization	0.09	0.31624	Failed to Reject Ho	Not Significant
Sex:				
Decision Making	0.18	0.04371	Reject Ho	Significant
Data Utilization	0.23	0.00957	Reject Ho	Highly Significant
Civil Status:				
Decision Making	0.08	0.37321	Failed to Reject Ho	Not Significant
Data Utilization	0.01	0.91151	Failed to Reject Ho	Not Significant
Highest Educational Attainment:				
Decision Making	0.11	0.22014	Failed to Reject Ho	Not Significant
Data Utilization	0.05	0.57821	Failed to Reject Ho	Not Significant
Data Used in Teaching:				
Decision Making	0.21	0.01827	Reject Ho	Significant
Data Utilization	0.20	0.02475	Reject Ho	Significant
Attended EdTech Related Training:				
Decision Making	0.03	0.73878	Failed to Reject Ho	Not Significant
Data Utilization	0.07	0.43605	Failed to Reject Ho	Not Significant

As seen in Table 3, when the responses of the respondents on the level of knowledge of teachers in technology integration were compared to their age, the computed r-values of 0.12 for decision making and 0.09 for data utilization have corresponding p-values of more than 0.05, thus failing to reject the hypothesis.

These safely inferred that the responses of the respondents on the level of knowledge of teachers in technology integration have no significant relationships in terms of decision making and data utilization when compared based on their ages. This implied that regardless of age, respondents held similar views regarding teachers' proficiency in these areas. While age often correlates with varying levels of technological fluency, the findings indicated that respondents did not perceive age to be a significant factor in teachers' abilities to make informed decisions or utilize student performance data effectively.

3. Proposed Training Program to Attain Equity in Education

Table 4. Proposed Action Plan

Action Plan	Description	Objectives	Output
Professional Development Workshops	Organize workshops focusing on technological proficiency, decision-making skills, and data utilization strategies for educators. Sessions include hands-on training, collaborative learning, and practical applications.	- Enhance educators' technological proficiency - Improve decision-making skills - Enhance data utilization strategies	Educators equipped with enhanced skills and knowledge to integrate technology effectively into teaching practices.
Collaborative Decision-Making Forums	Establish regular forums for educators, administrators, and stakeholders to discuss technology integration initiatives. Encourage sharing of best practices, problem-solving, and collaborative decision-making.	- Foster collaboration among stakeholders - Align technology integration efforts with educational goals - Develop strategies for addressing challenges	Collaboratively developed action plans and strategies for integrating technology into the curriculum.
Technology Resource Provision	Ensure equitable access to technological resources and tools for all educators. Provide laptops, tablets, and other essential devices. Offer access to educational technology-related training sessions and workshops.	- Ensure equal access to resources - Empower educators with necessary tools for technology integration - Provide opportunities for professional development	Improved access to technological resources and enhanced capacity for technology integration among educators.
Data-Driven Decision-Making Training	Conduct training sessions on utilizing student performance data to personalize instruction effectively. Educators learn to analyze data, identify trends, and tailor instructional interventions.	- Enhance educators' data analysis skills - Enable personalized instruction based on student performance data - Improve student learning outcomes	Educators equipped with skills to leverage student performance data for informed decision-making and improved instructional practices.
Evaluation Mechanism Establishment	Establish mechanisms for ongoing evaluation and feedback to assess the effectiveness of technology integration initiatives. Gather input from educators, students, and stakeholders.	- Assess the impact of technology integration efforts - Identify areas for improvement - Refine strategies based on feedback	Regular evaluation reports providing insights into the effectiveness of technology integration initiatives and areas for improvement.
Continuous Improvement Initiatives	Implement continuous improvement initiatives based on evaluation findings and feedback. Develop strategies to address identified areas for improvement and refine technology integration approaches.	- Implement changes to enhance technology integration - Address identified challenges and gaps - Optimize technology integration strategies	Enhanced technology integration practices resulting in improved teaching and learning experiences for educators and students.

Based on the results, Table 4 presented the proposed action plan. The table outlines a comprehensive action plan for enhancing technology integration in educational settings. It encompasses six key initiatives: Professional Development Workshops, Collaborative Decision-Making Forums, Technology Resource Provision, Data-Driven Decision-Making Training, Evaluation Mechanism Establishment, and Continuous Improvement Initiatives. Each action plan includes a description, objectives, and expected outputs. Together, these initiatives aim to empower educators with enhanced skills and knowledge, foster collaboration among stakeholders, ensure equitable access to resources, leverage data for informed decision-making, establish evaluation mechanisms, and drive continuous improvement in technology integration practices. Ultimately, these efforts aim to enhance teaching and learning experiences and improve student outcomes.

CONCLUSIONS

Derived from the results of this study, the findings underscored the complexity of factors influencing teachers' proficiency in technology integration, emphasizing the need for inclusive professional development initiatives and equitable access to resources. The study contributes valuable insights into effective decision-making and data utilization practices, paving the way for enhanced technology integration in educational settings.

The study encompassed an extensive examination of 126 respondents to explore the intricate relationship between demographic profiles, educational technology integration knowledge, and decision-making abilities among teachers. Among the respondents, the age distribution revealed a substantial representation of individuals aged 31-40, with a stark decline observed in older age brackets, indicating a potential generational trend in engagement with technology integration. Notably, females comprised the majority, reflecting a gender imbalance within the teaching profession. The marital status of respondents indicated a predominance of married individuals, hinting at potential implications for work-life balance and career engagement. Educationally, respondents predominantly held bachelor's degrees, suggesting a foundational level of academic attainment among the cohort.

Device usage analysis revealed a strong preference for laptops over tablets in teaching practices, emphasizing the importance of portable computing devices in facilitating instructional delivery. Encouragingly, a significant majority of respondents had attended educational technology-related training sessions, indicating a proactive approach to professional development and technology integration within the teaching community.

In terms of decision-making regarding technology integration, the study unveiled a collaborative and problem-solving-oriented approach among respondents. Actively engaging in discussions and decision-making endeavors highlighted a collective effort to ensure alignment with broader educational objectives. Respondents demonstrated adeptness in troubleshooting technological challenges and making informed decisions to overcome compatibility issues, indicative of a proactive stance towards addressing obstacles in technology integration.

Regarding data utilization, respondents displayed a commitment to data-driven decision-making, leveraging evidence of student progress and achievement to personalize instruction effectively. Employing decision trees and risk analysis techniques underscored a systematic approach to problem-solving and decision-making, emphasizing proactive planning and strategic thinking to optimize technology adoption and enhance the learning experience for students.

While the study extensively examined teachers' demographic profiles, their technology usage, decision-making abilities, and perceptions of technology integration skills, the weakest finding of the study might have been the lack of analysis or discussion on the actual impact or effectiveness of the professional development initiatives and technology integration practices implemented by the teachers, in which it did not provide evidence or data on how these factors translated into improved teaching practices or enhanced student learning outcomes. Without empirical evidence linking teachers' knowledge in educational technology integration to tangible improvements in teaching effectiveness or student achievement, the strength of this finding may have been limited.

The study also investigated the relationship between respondents' profiles and their perceptions of teachers' technology integration skills. Interestingly, demographic factors such as age, gender, marital status, and educational background did not significantly influence these perceptions, highlighting the importance of equitable support and training opportunities for all educators.

RECOMMENDATIONS

Based on the conclusions derived from the study, several actionable recommendations can be proposed to enhance technology integration in educational settings.

Firstly, school administration, with the assistance of the Department of Education (Dep Ed) must develop diverse professional development programs tailored to the varied needs of educators, focusing on enhancing technological proficiency, decision-making skills, and data utilization strategies. These programs should encompass hands-on training, workshops, and collaborative learning opportunities to empower teachers with the necessary knowledge and skills for effective technology integration.

Secondly, the Department of Education must foster a collaborative decision-making culture among educators, administrators, and stakeholders which was essential to ensure alignment with educational objectives. Regular discussions and forums should be encouraged where teachers can share best practices, troubleshoot challenges, and collectively develop strategies for integrating technology into the curriculum.

Additionally, equitable access to technological resources and tools should be provided for all educators, irrespective of demographic factors such as age, gender, or educational background. Investing in

laptops, tablets, and other essential devices, along with access to educational technology-related training sessions and workshops, is crucial.

Furthermore, promoting data-driven decision-making in education is vital by providing training and resources on utilizing student performance data to personalize instruction effectively. Educators should be equipped with the necessary skills to analyze data, identify trends, and tailor instructional interventions to meet the diverse needs of learners.

Lastly, establishing mechanisms for ongoing evaluation and feedback is essential to assess the effectiveness of technology integration initiatives. Regular input from educators, students, and stakeholders can help identify areas for improvement and refine strategies for enhancing technology integration in educational settings.

By implementing these recommendations, educational institutions can foster a culture of innovation, collaboration, and continuous improvement in technology integration, ultimately enhancing teaching and learning experiences and improving student outcomes.

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CORRELATION BETWEEN READING HABITS AND READING PERFORMANCE IN GRADE 1 PUPILS IN SELECTED ELEMENTARY SCHOOLS IN LIAN BATANGAS

Jennylyn G. Jonsson
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

The mastery of reading skills was crucial for academic achievement and lifelong learning, serving as the cornerstone upon which students built their comprehension and engagement with various subjects. The study aimed to investigate the impact of reading habits on reading performance among Grade 1 pupils in selected elementary schools in Lian District. Key objectives included assessing reading performance levels using the Functional Literacy Assessment Tool and examining the influence of reading habits, specifically focusing on frequency of reading engagement and reading environment at home. The study adopted a descriptive correlational research approach, employing a survey tool to examine the relationship between reading habits and reading performance among Grade 1 teachers in selected elementary schools in Lian, Batangas. The research, focusing on eight Grade 1 teachers, utilized a quantitative methodology to systematically explore these variables and their interconnectedness within the educational context. A test-retest reliability procedure was conducted to ensure the survey instrument's reliability, yielding a Cronbach alpha score of 0.787, signifying a high level of internal consistency and validating the questionnaire's effectiveness in capturing pertinent data for analysis. The study uncovered a notably high reading performance among Grade 1 pupils, with most achieving scores between 85 and 100 on the Functional Literacy Assessment Tool. While pupils frequently engaged in independent reading activities, participation in other aspects of reading habits varied, such as class reading sessions and extracurricular programs. Respondents noted that parents often provided additional reading materials, but consistency in other home reading practices fluctuated. Statistical analysis revealed significant associations between reading performance and both reading engagement frequency and home reading environment, highlighting their importance in shaping pupils' comprehension .

Keywords: reading habits, reading performance, grade 1 pupils, elementary schools

INTRODUCTION

The development of reading performance skills was fundamental for academic success and lifelong learning. It serves as the global foundation upon which students build their understanding of various subjects and engage with written information throughout their lives. Reading performance was not merely about decoding words but involves the ability to understand, interpret, and critically analyze texts (Balan et al., 2019). For young students, particularly those in Grade 1, the process of developing these skills was vital for their educational journey. In this context, the influence of reading habits and the home literacy environment plays a crucial role in shaping a child's reading performance abilities.

On a global scale, the emphasis on early literacy has gained prominence as nations recognize the pivotal role literacy plays in shaping future generations. Across continents, educators and researchers alike were delving into the intricate dynamics of reading habits and their impact on the reading performance of young learners (Baba & Affendi, 2020). This global perspective underscores the interconnected nature of education, emphasizing the need for evidence-based insights to inform educational practices and policies that transcend cultural and geographical borders.

Grade 1 was a crucial stage in a child's reading development because it marks the transition from learning to read to reading to learn. It was during this period that students were expected to shift from

basic decoding skills to more advanced comprehension abilities (Mirza et al., 2021). The skills they acquire in Grade 1 serve as the building blocks for their future academic success. Therefore, understanding the factors that influence reading performance at this stage, particularly reading habits and the home literacy environment, was essential for educators, parents, and researchers.

The Philippines, a country with a rich cultural heritage and a diverse educational landscape, the correlation between reading habits and reading performance resonates deeply within the local context. As the Philippines strives for educational excellence, particularly in the foundational years, understanding the nuances of reading habits among elementary pupils becomes imperative (Francisco & Madrazo, 2019). The Philippine education system, with its emphasis on holistic development, was navigating the challenges of adapting to modern pedagogical approaches while preserving the cultural fabric that defines its unique educational identity.

The development of reading performance skills in Grade 1 pupils was a pivotal stage in their educational journey, laying the foundation for future academic success and a lifelong love of reading. Reading performance goes beyond mere decoding of words; it involves the ability to understand, interpret, and critically analyze texts (Santos & De Vera, 2020). Two key factors that significantly impact a child's reading performance abilities were reading habits and the home literacy environment. Understanding the influence of these factors in the context of Grade 1 pupils in selected elementary schools in Lian, Batangas, was the central focus of this study.

Within the localized context of selected elementary schools in Lian, Batangas, the exploration of the correlation between reading habits and reading performance takes on a distinctly community-oriented dimension. Lian, Batangas, situated amidst the rich natural landscapes of the Philippines, was emblematic of the broader aspirations for quality education at the grassroots level. This localized perspective recognizes the unique cultural and socio-economic factors that may influence reading habits among Grade 1 pupils in the region. By homing in on the local context, this study seeks to contribute not only to the global discourse on early literacy but also to the tailored efforts aimed at enhancing reading outcomes within the specific community of Lian.

Students faced challenges with foundational skills like phonemic awareness, letter recognition, and decoding, hindering reading progress. Limited access to books compounded issues, particularly among socioeconomically disadvantaged pupils (Baba & Affendi, 2020). They lacked resources at home and in schools, restricting exposure to diverse texts. Remedial measures included implementing evidence-based literacy instruction and providing level libraries. Efforts also involved collaboration with families and communities to foster literacy-rich environments (Dukare, 2023). Overtime, interventions aimed to address these issues, enhancing pupils' reading skills and fostering a love for reading in classrooms.

This study sought to investigate the impact of reading habits and the home literacy environment on the reading performance abilities of Grade 1 pupils in selected elementary schools in Lian, Batangas. By examining the frequency of reading, types of reading materials available at home, and the extent of parental involvement in reading activities, the research aims to provide insights into how these factors shape students' reading performance skills in this specific educational context. Understanding the dynamics of these influences was essential for educators, parents, and policymakers to tailor effective strategies for enhancing reading performance in Grade 1 pupils in Lian, Batangas, and beyond.

Statement of the Problem

The study aimed to determine the influence of reading habits on reading performance within the context of selected elementary schools in Lian District. Specifically, this study pursued to answer the following questions:

1. What was the level of reading performance in Functional Literacy Assessment Tool for the Grade 1 pupils?
2. What was the level of influence of reading habits to the reading comprehension of the Grade 1 pupils in terms of:
   2.1 Frequency of Reading Engagement; and
   2.2 Reading Environment at Home?
3. Is there any significant relationship between the level of reading performance in Functional Literacy Assessment Tool and the influence of reading habits on the reading comprehension of Grade 1 pupils?

4. Establish plans and programs to be implemented to pursue reading performance through reading habits and home literacy environment in the selected elementary schools in Lian District.

METHODOLOGY

In this chapter, the study provided a detailed explanation of the methodology utilized in this study. This encompasses the research design, data sources, the target population, the validation of instruments, the data collection process, ethical considerations, data handling, and the analytical methods applied.

Research Design

This research made use of descriptive correlational research approach, incorporating a survey tool to assess the influence of reading habits and home literacy environment on reading performance in selected elementary schools in Lian district.

Participants

The study focused its analysis on Grade 1 teachers currently employed in selected elementary schools in Lian, Batangas. Utilizing Slovin's formula, the research has determined eight (8) Grade 1 teachers derived from total population of Grade 1 teachers in the specified area. This sample size aligns with the research objectives. Sampling employed a straightforward total population sampling method to ensure unbiased representation across designated locations.

Research Instrument

The research utilized a tailor-made survey to assess the impact of strategies promoting student engagement and reading assessment practices on the enhancement of reading skills.

Data Analysis

To interpret and analyze the gathered data effectively, the researcher employed the following statistical treatments. The frequency count, percentage, weighted mean, ranking, and Pearson's r were utilized to interpret the data.

RESULTS AND DISCUSSIONS

This chapter states the presentation, analysis, and interpretation of the gathered data from the questionnaires answered by the respondents. Such presentation was in accordance with the specific questions posited on the objectives of the study.

1. Level of Reading Performance in Functional Literacy Assessment Tool for the Grade 1 Pupils

Table 1. Reading Performance in Functional Literacy Assessment Tool for the Grade 1 Pupils

Profile	Frequency	Percentage	Rank
Reading Performance			
90 - 100 (Outstanding)	1	12.50	3
85 - 89 (Very Satisfactory)	4	50.00	1
80 - 84 (Satisfactory)	3	37.50	2
Total	**8**	**100**	
Mean	**84.88 (Very Satisfactory)**		

As given in Table 1, the very satisfactory reading performance of 85 - in Functional Literacy Assessment Tool for Grade 1 made the highest frequency count of four or 50% at rank 1 while the outstanding reading performance of 9- - 100 gained the least frequency count of one or 12.50% at rank 3. The mean reading performance of 84.88 implied that the Grade 1 School respondents' reading performance in Functional Literacy Assessment Tool was very satisfactory.

2. Level of Influence of Reading Habits to the Reading Comprehension of the Grade 1 Pupils

2.1 In Terms of Frequency of Reading Engagement.

Table 2. Level of Influence of Reading Habits to the Reading Comprehension of the Grade 1 Pupils in Terms of Frequency of Reading Engagement

Items	Weighted Mean	Interpretation	Rank
The pupils do and engage independent reading activities during a typical school week.	4.25	Always	1
The pupils actively participate in daily class reading sessions.	4.00	Sometimes	7.5
I observe the pupil's expressing enthusiasm and interest in the reading materials provided.	4.00	Sometimes	7.5
Reading integrated into various subjects to encourage continuous engagement among the pupils.	4.00	Sometimes	7.5
The pupils voluntarily choose to read during their free or leisure time outside of school.	4.00	Sometimes	7.5
The pupils regularly do the pupils engage in reading-related activities, such as book discussions or literary projects, in the classroom.	4.13	Sometimes	3
The pupils participate in extracurricular reading programs or initiatives offered by the school.	4.00	Sometimes	7.5
Reading incentives or challenges were implemented to encourage consistent engagement among the pupils.	4.00	Sometimes	7.5
The effectively pupils manage their time to include reading activities in their daily routines.	4.13	Sometimes	3
How The pupils consistently collaborate with peers on reading -related projects or assignments.	4.13	Sometimes	3
Composite Mean	**4.06**	**Sometimes**	

As stated in Table 2, the respondents responded that the pupils always do and engage independent reading activities during a typical school week which made the highest weighted mean of 4.25 and the highest rank of 1. The responses indicated that pupils consistently participate in independent reading activities throughout a typical school week.

2.2 In Terms of Reading Environment at Home.

Table 3. Level of Influence of Reading Habits to the Reading Comprehension of the Grade 1 Pupils in Terms of Reading Environment at Home

Items	Weighted Mean	Interpretation	Rank
1. The pupils consistently have access to a variety of reading materials at home.	4.13	Sometimes	4.5
2. The parents actively encourage and support reading activities at home on a weekly basis.	4.13	Sometimes	4.5
3. There was a regular designated quiet space for reading activities in the homes of the pupils.	4.00	Sometimes	9
4. Parents read books to their Grade 1 children at home.	4.00	Sometimes	9
5. The home provides consistent positive atmosphere and environment for reading.	4.00	Sometimes	9
6. The parents engage in discussions with the pupils about the books they were reading at home.	4.13	Sometimes	4.5
7. The parents participate in school-led initiatives aimed at promoting reading at home.	4.13	Sometimes	4.5
8. The parents consistently set aside dedicated time for shared reading activities with their Grade 1 children.	4.13	Sometimes	4.5
9. The parents provide additional reading materials beyond what was assigned by the school.	4.38	Always	1
10. The parents effectively create a supportive environment that fosters the pupils' reading habits at home.	4.13	Sometimes	4.5
Composite Mean	**4.12**	**Sometimes**	

As stated in Table 3, the respondents replied that the parents always provide additional reading materials beyond what was assigned by the school which made the highest weighted mean of 4.38 and the highest rank of 1. The responses indicated that parents consistently go above and beyond by providing additional reading materials beyond what was assigned by the school.

3. Relationship Between the Level of Reading Performance in Functional Literacy Assessment Tool and the Influence of Reading Habits on the Reading Comprehension of the Grade 1 Pupils.

Table 4. Relationship Between the Level of Reading Performance in Functional Literacy Assessment Tool and the Influence of Reading Habits on the Reading Comprehension of the Grade 1 Pupils

Variables	r-value	p-value	Decision	Interpretation
Frequency of Reading Engagement	0.81	0.01480	Reject Ho	Significant
Reading Environment at Home	0.76	0.38105	Reject Ho	Significant

As shown in table 4, when the level of Reading Performance in Functional Literacy Assessment Tool was compared to the respondent's assessment on the influence of reading habits on the reading comprehension of the Grade 1 Pupils, the computed r-values of 0.81 for frequency of reading engagement, and 0.76 for reading environment at home have corresponding p-values of less than 0.05, thus rejecting the hypothesis.

4. Proposed Plans and Programs will be Implemented to Pursue Reading Performance through Reading Habits and Home Literacy Environment in the Selected Elementary Schools in Lian District

Table 5. Proposed Plans and Programs

PLANS AND PROGRAMS	DESCRIPTION	TARGET OUTPUT
Integrated Independent Reading Time	Implement dedicated time slots within the Grade 1 curriculum for silent reading sessions, providing access to a diverse range of reading materials in classrooms.	Increased reading engagement and comprehension skills among Grade 1 pupils through regular independent reading.
Teacher Training Workshops	Conduct workshops and seminars for educators focused on effective literacy instruction techniques, assessment strategies, and fostering a supportive reading environment.	Enhanced teaching skills and strategies among Grade 1 teachers, leading to improved reading instruction and outcomes.
Parental Engagement Initiatives	Organize workshops, distribute reading lists, and establish home reading programs to actively involve parents in promoting reading habits at home.	Increased parental involvement in supporting children's literacy development, leading to improved reading habits.
Community Reading Collaborations	Partner with local libraries and community organizations to supplement reading resources and provide exposure to diverse books through author visits and book fairs.	Expanded access to reading materials and enrichment opportunities, fostering excitement and interest in reading.
Technology Integration Initiative	Integrate technology-based reading resources such as educational apps and online libraries to enhance student engagement and provide access to a wider range of materials.	Improved digital literacy skills and increased access to diverse reading materials among Grade 1 pupils.

Table 5 depicted the implemented plans and programs aimed at enhancing reading habits and performance among Grade 1 pupils. These initiatives included Integrated Independent Reading Time, which provided dedicated silent reading sessions with diverse materials.

CONCLUSIONS

1. The findings of the study revealed significant insights into the reading performance and habits of Grade 1 students. Data obtained from the Functional Literacy Assessment Tool indicated a commendable level of proficiency in reading among most students, with a mean reading performance score of 84.88.
2. The study found the crucial role of promoting independent reading within the school curriculum. Educators were identified as key players in fostering positive reading habits by providing diverse reading materials tailored to individual interests.
3. The study shed light on the significant influence of the home environment on students' reading habits and behaviors. Parents' consistent efforts in providing supplementary reading materials and promoting literacy at home were recognized.
4. Lastly, the relationship between students' reading performance and reading habits underscored the importance of regular reading practices and a supportive home environment. While the impact may

have varied, these factors significantly contributed to students' overall reading performance and academic success. Therefore, fostering a culture of reading both at school and at home was essential for enhancing students' reading comprehension skills and promoting academic achievement.

5. Furthermore, it emphasized the crucial role of educators and parents in fostering positive reading habits. Ultimately, fostering a culture of reading both at school and at home emerged as vital for enhancing students' reading comprehension skills and academic success.

RECOMMENDATIONS

Based on the conclusion drawn from the study, several recommendations can be proposed to further enhance reading performance and habits among Grade 1 pupils.

Firstly, the Department of Education (Dep Ed) along with educational institutions should integrate and prioritize independent reading activities within the Grade 1 curriculum, allocating dedicated time for silent reading sessions and providing access to a diverse range of reading materials in classrooms and libraries.

Secondly, educators should undergo continuous training and professional development on effective literacy instruction techniques through workshops and seminars to assess students' reading abilities and foster a supportive reading environment.

Thirdly, schools, with the assistance of Dep Ed, should actively involve parents in promoting reading habits at home by providing resources and guidance, organizing workshops, distributing reading lists, and establishing home reading programs.

Additionally, collaboration with local libraries and community organizations can supplement reading resources, offering exposure to diverse books through initiatives like author visits and book fairs.

Lastly, integrating technology-based reading resources such as educational apps and online libraries can enhance engagement and provide access to a wider range of materials, catering to different learning styles and interests.

These recommendations aim to create a comprehensive approach to promoting reading habits and improving reading performance among Grade 1 pupils, setting a strong foundation for their academic success and lifelong learning.

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LEVEL OF JOB BURNOUT AND COPING STRATEGIES BY PUBLIC SECONDARY TEACHERS IN MABINI SUB-OFFICE

Leony Jane B. Magboo
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

Teachers in the teaching profession are facing different challenges and problems in their chosen field. This results to stress that lead to job burnout that the teachers especially those who are in the public secondary schools are experiencing, coping strategies emerge which believe can help them to carry on their work. This study determines the level of job burnout and coping strategies of public secondary teachers in Mabini Sub-Office. The research was done in public secondary schools in Mabini Sub-Office divided into two-groups: School A which is the large school (Anselmo A. Sandoval Memorial National High School) and School B is composed of the small schools. (Apolinario Mabini National High School, Mabini National High School, and Mainaga-San Francisco Integrated School) with 108 teacher-respondents. Mixed method is used as research design in this study. Survey-questionnaire and interview method served as the data gathering instruments in this study. Maslach Burnout Inventory- Educator's Survey (MBI-ES) is used to determine the levels of job burnout of the respondents while with respect to the coping strategies a questionnaire made by the researcher is used. Frequency, percentage, weighted mean, composite mean, Likert scale, t-value, p-value and r- value are used in data analysis. The researcher made an intervention plan which can help the teachers how to handle the job burnout that they are experiencing in a manner that their life as people and professionals will not be affected them negatively instead will help them to overcome.

Keywords: coping strategies, job burnout, teachers

INTRODUCTION

Teaching is known as the noblest profession and behind this is the large amount of effort, hard work and commitment of teachers are to give. Teaching profession is undeniably a rewarding career at the same time a demanding one, especially in the Philippines. Teachers are tending to be exposed to numerous jobs demands frequently observed as heavy tasks. This result for the teachers to experience work stress which mostly affects them negatively. This stress at work can also be referred as job burnout. Job burnout is identified by mental and emotional exhaustion due to the symptoms of stress from the huge pressure of the role, deadline pressure from the tasks to be completed on time as well as the lack of resources needed to accomplish the tasks efficiently (Savira et al., 2021).

As the years go by, many things have changed especially in the Philippine education system. The increase number of Filipino public teachers who are experiencing job burnout due to the demands on their profession which result on to negative effects into their performance as teachers and worse, many of them are leaving the profession permanently. This situation reflects the struggles of the teachers particularly for those who are working in public. This condition was never concealed to everyone but it also undeniably fact that teachers must prioritized truthfully.

Philippine education system has been facing a lot of problems that until today was never been resolve. In this case, public secondary teachers are one of the most affective, being known as having crucial role in the field of education. Numerous job demands, work environment and students' behaviors are some of the challenges that the aforementioned teachers are experiencing. These are highly affecting the teachers specially emotionally and mentally in negative ways.

Education has always been one of the top priorities in almost every country in the world. Education systems in these countries are also facing different challenges especially its teachers. A lot of teachers all

around the world are found out to have been dealing problems and challenges in the teaching profession such as being not fully equipped in delivering teaching-learning process along in the inevitable changes and progress of education and due to their workplace. It's been a very long-term goal that quality education must be promoted all over the world but with the challenges and problems that the teachers especially those who are working under the government are facing this long-term goal can be seen also as challenge that is not easy to overcome and succeed.

Workloads and responsibilities are given as part of the teachers' chosen profession, but it shouldn't sacrifice the whole being of the teachers. Due to the love and commitment of the teachers to teaching despite of the job burnout they are experiencing, coping strategies emerged. Coping strategies are what the teachers use to handle and manage the job burnout that they are experiencing.

This study will determine the level of job burnout that the public secondary teachers in Mabini Sub-Office are experiencing and the coping strategies that they use. In this study, public secondary teachers' condition will be more understand by many, and the proper ways in handling and facing the job burnout. Through suitable plan of intervention that will be made from the findings of this study, public secondary teachers can be helped how to handle the job burnout that they experiencing in a manner that their life as people and professionals will not be affected negatively instead will help them to overcome.

Statement of the Problem

The purpose of the study was to determine the level of job burnout and coping strategies by public secondary teachers in Mabini Sub-Office and come up with a suitable plan of intervention that will help the public secondary teachers on how to handle and overcome the job burnout that they are experiencing. Specifically, this study had the following objectives:

1. What is the profile of the respondents in terms of the following:
   1.1 age,
   1.2 sex,
   1.3 religion,
   1.4 marital status,
   1.5 years in teaching profession,
   1.6 highest educational attainment?
2. What is the level of job burnout experienced by the two grouped of public secondary teachers in Mabini Sub-Office?
3. What are the coping strategies used by the two-grouped of public secondary teachers in Mabini Sub-Office?
4. Is there a significant difference between the job burnout experienced and coping strategies used by the two grouped of public secondary teachers in Mabini Sub-Office?
5. Is there a significant relationship on the levels of job burnout and coping strategies when grouped according to profile?
6. What intervention plan should be proposed to overcome job burnout of teachers?

METHODOLOGY

This section deals with the methods and materials that were used by the researcher. This included research design, participants, research instrument, procedure, ethical considerations and data analysis.

Research Design

This study determined the level of job burnout and coping strategies by public secondary teachers in Mabini Sub-Office by using the Mixed-method research design.

Participants

The participants of this study involved 108 respondents who are public secondary teachers from the two groups of public secondary schools in Mabini Sub-Office: School A which is the large school (Anselmo A. Sandoval Memorial National High School) and School B is composed of the small schools. (Apolinario Mabini National High School, Mabini National High School, and Mainaga-San Francisco Integrated School).

Research Instrument

The researcher used survey-questionnaire and conducted interviews in gathering or collecting data of the study which was composed of three parts.

Data Analysis

Frequency and percentage are used to present the population of the respondents, Weighted mean is used to determine the levels of job burnout and coping strategies of the public secondary teachers through the 7-point Likert Scale in MBI-ES and 4-point Likert Scale in coping strategies section of the questionnaire.

RESULTS AND DISCUSSION

This part displayed the presentation, analysis and interpretation of the gathered data from the questionnaires and interview answered by the respondents that are in accordance with the specific questions posited on the objectives of the study.

1. Level of Job Burnout Experienced by the Two Groups of Public Secondary Teachers in Mabini Sub-Office.

Table 1. Level of Job Burnout Experienced by the Two Groups of Public Secondary Teachers in Mabini Sub-Office (Emotional Exhaustion)

Items	School A			School B		
	WM	VI	R	WM	VI	R
I/ I am/have/feel/can/deal…						
emotionally drained from my work.	2.30	OM	8	3.64	OW	2.5
used up at the end of the workday	2.97	AFTM	2	3.64	OW	2.5
fatigued when I get up in the morning and have to face another day on the job	2.86	AFTM	3	3.18	AFTM	4
working with all people all day is a strain for me	2.57	OM	7	1.45	AFTY	8
burned out from my work	2.63	AFTM	5.5	2.77	AFTM	5
frustrated by my job	2.85	AFTM	4	2.00	OM	6
working too hard on my job	3.43	AFTM	1	3.82	OW	1
like I'm at the end of my rope	2.63	AFTM	5.5	1.82	OM	7
Composite Mean	**2.79**	**AFTM**		**2.70**	**AFTM**	

As shown in Table 1, the teacher-respondents from School A assessed that they are working too hard on their job a few times per month which made the highest weighted mean of 3.43 and the highest rank of 1. This show that public secondary teachers in the large school are facing a lot of challenges and problems in the teaching profession which result to job burnout with respect to emotional exhaustion. Increasing demands in the field of education affects the teachers not only physically but emotionally.

Table 2. Level of Job Burnout Experienced by the Two Groups of Public Secondary Teachers in Mabini Sub-Office (Depersonalization)

Items	School A			School B		
	WM	VI	R	WM	VI	R
I/ I am/have/feel/can/deal…						
1. treat some students as if they were impersonal objects	2.50	OM	3	1.00	AFTY	3
2. become more callous toward people since I took this job	2.74	AFTM	1	1.68	AFTY	2
3. worry that this job is hardening me emotionally	2.52	OM	2	2.14	OM	1
4. don't care what happens to some students	1.91	AFTY	5	0.86	AFTY	4
5. students blame me for their problems	2.27	OM	4	0.50	N	5
Composite Mean	**2.39**	**OM**		**1.24**	**AFTY**	

As reflected in Table 2, the teacher-respondents from School A affirmed that they feel worried that this job is hardening them emotionally a few times per month which made the highest weighted mean of 2.74 and the highest rank of 1. This implies that due to the challenges that the teachers are experiencing as they are in handling a large number of students and dealing a lot of paper works in the field cause them to worry that their job are affecting them negatively.

Table 3. Level of Job Burnout Experienced by the Two Groups of Public Secondary Teachers in Mabini Sub-Office (Personal Accomplishment)

Items	School A			School B		
	WM	VI	R	WM	VI	R
I/ I am/have/feel/can/deal…						
1. easily understand how my students feel about things	3.94	OW	1	4.64	AFTW	1
2. very effectively with the problems of my students	3.20	AFTM	8	4.00	OW	6
3. positively influencing other's people lives through my work	3.55	OW	5	4.05	OW	5
4. very energetic	3.83	OW	3	4.14	OW	4
5. working with people directly puts too much stress on me	2.70	AFTM	9	1.00	N	9
6. easily create a relaxed atmosphere with my students	3.64	OW	4	4.27	OW	2
7. exhilarated after working closely with my students	3.51	OW	6	3.18	AFTM	8
8. accomplished many worthwhile things on this job	3.93	OW	2	4.18	OW	3
with emotional problems very calmly	3.29	AFTM	7	3.73	OW	7
Composite Mean	**3.54**	**OW**		**3.73**	**OW**	

As gleaned in Table 3, the teacher-respondents from School A perceived that they can easily understand how their students feel about things once a week which got the highest weighted mean of 3.94 and the highest rank of 1. This group of teachers are those who are handling huge number of students into day-to-day teaching activity as the time goes on and being part of the profession, the students' welfare is always their priority.

2.Coping Strategies Used by the Two-groups of Public Secondary Teachers in Mabini Sub-Office.

As written in Table 4, the teacher-respondents from School A answered that they are always praying to God to give them wisdom to overcome their problems at work which yielded highest weighted mean of 3.85 and the highest rank of 1. Teachers never forgets that God is the center of all and at times of challenges and problems existence in their nature of work they keep going with the prayer that they can overcome those successfully.

Table 4. Coping Strategies Used by the Two-groups of Public Secondary Teachers in Mabini Sub-Office

Items	School A			School B		
	WM	VI	R	WM	VI	R
I am…						
praying to God to give me wisdom to overcome my problems at work	3.85	A	1	3.86	A	1
not accepting any problems within my work	2.44	S	10	1.73	N	10
practicing mindfulness	3.21	O	2	3.36	A	3
focusing on the challenges and problems in my work and try make actions to improve my situation.	3.16	O	3	3.32	A	4
voicing out my feelings to release my negative feelings	2.77	O	7	2.86	O	7.5
seeing the circumstances and challenges at work as things that can help me to grow	2.90	O	6	3.18	O	6
seeking support from colleagues	2.91	O	5	3.27	A	5
seeking support from family	3.15	O	4	3.45	A	2
spending time watching movies and series as wells browsing social media platforms	2.76	O	8	2.86	O	7.5
doing some exercise and sports	2.57	O	9	2.41	S	9
Composite Mean	**2.97**	**O**		**3.03**	**O**	

Moreover, the said group of respondents acknowledged that sometimes, they are not accepting any problems within their work which made the least weighted mean of 2.44 and least rank of 10.

3. Difference Between the Job Burnout Experienced and Coping Strategies Used by the Two Groups of Public Secondary Teachers in Mabini Sub-Office.

Table 5. Difference Between the Job Burnout Experienced and Coping Strategies Used by the Two Groups of Public Secondary Teachers in Mabini Sub-Office

Variables	t-value	p- value	Decision	Interpretation
Job Burn-out				
Emotional Exhaustion		0.70727	Failed to Reject Ho	Not Significant
Depersonalization		0.00030	Reject Ho	Highly Significant
Personal Accomplishment		0.23228	Failed to Reject Ho	Not Significant
Coping Strategies		0.55249	Failed to Reject Ho	Not Significant

As reflected in Table 5, when the assessment of the two-groups of respondents regarding their job burn out were compared, the computed t-value of for depersonalization has a corresponding p-value of less than 0.01, thus rejecting the hypothesis. On the other hand, the computed t-values of for emotional exhaustion, and for personal accomplishment have corresponding p-values of more than 0.05, thus failing to reject the hypothesis.

4. Relationship Between the Profile of the Two-Groups of Respondents and their Levels of Job Burnout and Coping Strategies

Table 6.1. Relationship Between the Profile of the Two-Groups of Respondents and their Levels of Job Burnout and Coping Strategies

Variables	r-value	p- value	Decision	Interpretation
Age				
Emotional Exhaustion	0.08	0.41049	Failed to Reject Ho	Not Significant
Depersonalization	0.14	0.14842	Failed to Reject Ho	Not Significant
Personal Accomplishment	0.02	0.83722	Failed to Reject Ho	Not Significant
Coping Strategies	0.03	0.75792	Failed to Reject Ho	Not Significant
Sex				
Emotional Exhaustion	0.02	0.83722	Failed to Reject Ho	Not Significant
Depersonalization	0.12	0.21607	Failed to Reject Ho	Not Significant
Personal Accomplishment	0.20	0.03796	Reject Ho	Significant
Coping Strategies	0.36	0.00013	Reject Ho	Highly Significant
Religion				
Emotional Exhaustion	0.03	0.75792	Failed to Reject Ho	Not Significant
Depersonalization	0.19	0.04889	Reject Ho	Significant
Personal Accomplishment	0.01	0.91819	Failed to Reject Ho	Not Significant
Coping Strategies	0.03	0.75792	Failed to Reject Ho	Not Significant

As written in Table 6.1, when the assessment of the two-groups of respondents regarding their job burnout were compared to their ages, the computed r-values of 0.08 for emotional exhaustion, 0.14 for depersonalization, and 0.02 for personal accomplishment have corresponding p-values of more than 0.05, thus failing to reject the hypothesis.

Table 6.2. Relationship Between the Profile of the Two-Groups of Respondents and their Levels of Job Burnout and Coping Strategies

Marital Status				
Emotional Exhaustion	0.13	0.17993	Failed to Reject Ho	Not Significant
Depersonalization	0.03	0.75792	Failed to Reject Ho	Not Significant
Personal Accomplishment	0.01	0.91819	Failed to Reject Ho	Not Significant
Coping Strategies	0.04	0.68106	Failed to Reject Ho	Not Significant
Years in Teaching				
Emotional Exhaustion	0.09	0.35429	Failed to Reject Ho	Not Significant
Depersonalization	0.20	0.03796	Reject Ho	Significant
Personal Accomplishment	0.19	0.04889	Reject Ho	Significant
Coping Strategies	0.20	0.03796	Reject Ho	Significant
Highest Educational Attainment				
Emotional Exhaustion	0.13	0.17993	Failed to Reject Ho	Not Significant
Depersonalization	0.17	0.07858	Failed to Reject Ho	Not Significant
Personal Accomplishment	0.08	0.41049	Failed to Reject Ho	Not Significant
Coping Strategies	0.09	0.35429	Failed to Reject Ho	Not Significant

As gleaned in Table 6.2, when the assessment of the two-groups of respondents regarding their job burn out were compared to their marital statuses, the computed r-values of 0.13 for emotional exhaustion, 0.03 for depersonalization, and 0.01 for personal accomplishment have corresponding p-values of more than 0.05, thus failing to reject the hypothesis.

5.Intervention Plan Proposed to Overcome Job Burnout of Teachers

Based on the analysis of the findings, the researcher made an intervention plan which can help the teachers how to handle the job burnout that they are experiencing in a manner that their life as people and professionals will not be affected them negatively instead will help them to overcome.

CONSIDER AND CARE FOR OUR TEACHERS (CONCARTEA)
(Intervention Plan for Public Secondary Teachers to Overcome Job Burnout)

Objective	Interventions/Activities	Time Frame	Funding Requirement	People Involved	Success Indicators
To manage and overcome the job burnout of public teachers.	A. DepEd Order No. 003, s.2024 (must be fully materialized (No voluntary or mandatory tasks or activities shall be assigned to teachers.))	June1-30,2024	None	• Education Authorities • School Administrators • School Heads • Teachers	• Reduces stress in relation to their work. • Boosts work engagement.
	B. Free Lunch	During school days	National Budget for Education	• Education Authorities • School Administrators • School Heads • Nutritionists	• Increases productivity and motivation in their job.
	C. Medical Expenses (Check-ups, hospital bills and medicines must be free for the public teachers and their dependents)	During their years of service	Government	• Education Authorities • Teachers • Health Authorities • Teachers' Dependents	• Enhances job satisfaction
	D. Psychological Tests/Assessments	Before and after the school year	Government	• Education Authorities • Teachers • Health Authorities	• Monitors the teachers' mental and emotional health

CONCLUSIONS

Relative to the foregoing findings the following conclusions are made.

In School A, majority of the respondents were 25-29 years old and 30-34 years old, female, Roman Catholic, married, have been in the teaching profession for 10-14 years and Master's Degree graduates. On the other hand, in School B majority of respondents were 25-29 years old and 30-34 years old, female, Roman Catholic, single, have been in the teaching profession for 5-9 years and have units in Master Degree. Based from the findings, public secondary teachers in School A have a higher level of job burnout in terms of emotional exhaustion and depersonalization compared to respondents from School B while with regards to the personal accomplishment respondents from School B have a higher level compare to respondents from School A. Both groups of public secondary teachers were using positive coping strategies in managing job burnout. There was a high significant difference between the two groups of respondents when it comes job burnout in terms of depersonalization and no significant differences in the coping strategies they used. Based on the results, there was a significant relationship in the levels of job burnout with regards to personal accomplishment of the two groups of respondents when grouped according to their sexes, levels of job burnout in terms of depersonalization when grouped according to their religions, and high significant relationships in the coping strategies they used when grouped according to their sexes. The proposed intervention plan may help the teachers most especially those on the public secondary level to overcome the job burnout that they are experiencing in the teaching profession.

RECOMMENDATIONS

Based on the results of the study, the following recommendations are made by the researcher.

1. The proposed intervention plan may utilize to help the teachers overcome the job burnout that they are experiencing.
2. Education authorities must prioritize the teachers especially when it comes to their mental health.
3. School administrators must provide supports to the teachers which can help them to be effective without sacrificing their mental health.
4. Students must help and support the teachers in positive ways possible which can help if not avoid then lessen the stress which result to burnout their teachers are facing in the teaching profession.
5. Future researchers should conduct comparative study between public and private secondary teachers can be conducted to gain more knowledge and understanding about their perceptive levels of job burnout and the coping strategies they use.

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AWARENESS OF PARENT AND TEACHERS ON CHILD PROTECTION POLICIES AND DISCIPLINE STRATEGIES FOR LEARNERS IN TAN-AG ELEMENTARY SCHOOL: BASIS FOR HANDBOOK FORMULATION

Ma. Sarah A. Destreza
Lipa City Colleges
Lipa City, Batangas

ABSTRACT

The study investigated the efficacy of child protection policies and discipline strategies within Tan-ag Elementary School, recognizing their pivotal role in ensuring a safe and nurturing educational environment. Employing descriptive-correlational research methods, the study surveyed parents and teachers to assess their awareness levels regarding these policies and strategies. The research utilized a quantitative approach, allowing for the systematic analysis of participants' responses and the exploration of relationships between different variables. Through rigorous sampling techniques, the study gathered insights from 96 parents and nine teachers, ensuring a comprehensive representation of stakeholders within the school community. The findings revealed a strong awareness among both parents and teachers regarding their roles and responsibilities in upholding child protection policies. However, variations emerged in their understanding of preventive measures, rules, procedures, and referral processes. Similarly, while both groups exhibited a solid grasp of discipline strategies, disparities were noted in their perception of certain aspects, such as follow-up actions and the recognition of positive behavior. Despite these discrepancies, the study highlighted significant relationships between awareness levels of child protection policies and discipline strategies among parents and teachers, emphasizing the interconnectedness of these domains. The research outcomes underscored the importance of comprehensive approaches in safeguarding the well-being of students, advocating for enhanced collaboration between parents and teachers. Based on these findings, the study proposed recommendations aimed at refining existing child protection policies and bolstering discipline strategies within Tan-ag Elementary School. These suggestions aimed to address identified gaps and promote a cohesive approach to child safety and behavior management .

Keywords: child protection policies, discipline strategies, elementary school

INTRODUCTION

In the intricate tapestry of education, the awareness of parents and teachers on child protection policies and discipline strategies for learners was a crucial thread that weaves together the global, national, and local perspectives. As societies evolve in the 21st century, collective consciousness regarding the well-being and development of children has become an imperative consideration. On a global scale, international organizations and educational bodies advocate for comprehensive child protection policies, recognizing the fundamental rights of children to a safe and nurturing environment for learning. The global discourse emphasizes the need for a harmonious partnership between parents, teachers, and educational institutions to create a conducive atmosphere that fosters not only academic growth but also the holistic development of the child (Briggs, 2020).

In the Philippines, a nation characterized by its rich cultural diversity and a strong emphasis on family values, the awareness of child protection policies and effective discipline strategies resonates deeply. The Philippines has made significant strides in aligning its educational framework with international standards, integrating child protection measures into the core of its educational policies (Bartolome et al., 2020). The Department of Education (DepEd) in the Philippines has been actively involved in formulating and implementing guidelines to safeguard children within the educational system. However,

effectiveness of these policies relies heavily on the awareness and understanding of parents and teachers, who were the primary stakeholders in a child's educational journey (Agaton & Cueto, 2021).

At the local level, the focus narrows to selected public elementary schools in Lian, a community where the nuances of culture, socio-economic factors, and geographical specifics play a pivotal role in shaping the educational landscape. Lian becomes a microcosm reflecting the broader dynamics at play in the Philippines. Here, the awareness of parents and teachers on child protection policies and discipline strategies takes on a nuanced significance, influenced by the unique context of the community.

In examining the global perspective, it becomes evident that the challenges and opportunities related to child protection and discipline strategies were universal. Issues such as cyberbullying, peer pressure, and mental health concerns were not confined by borders but were shared by societies worldwide. The global community grapples with the task of equipping parents and teachers with the knowledge and skills necessary to address these contemporary challenges effectively. International collaborations and information exchange have become essential in shaping a global framework for child protection that transcends cultural and geographical boundaries (Bayucca, 2020). As awareness spreads globally, the shared commitment to nurturing the next generation becomes a unifying force, emphasizing the interconnectedness of the world in safeguarding the well-being of children.

Transitioning to the national context, the Philippines stands as a testament to the commitment to child protection within its educational system. The Philippine government, through the DepEd, has implemented policies and guidelines that emphasize a child-centered approach to education (Madrid et al., 2020). However, the effectiveness of these policies hinges on their assimilation into the consciousness of parents and teachers. It requires a concerted effort to bridge the gap between policy formulation and on-the-ground implementation, recognizing the pivotal role that parents and teachers play in translating policies into meaningful actions that impact the lives of learners.

In Lian, Batangas, the interplay of socio-economic factors, cultural nuances, and community dynamics shapes the awareness and understanding of child protection policies and discipline strategies. The community's unique characteristics demand tailored approaches that resonate with the lived experiences of its residents. Engaging parents and teachers in an open dialogue, considering their perspectives, and involving them in the decision-making process were essential components of ensuring the successful implementation of child protection measures at the local level. In this microcosm, the challenges and triumphs of awareness and implementation become intimately entwined with the community's identity, underlining the need for a localized and contextualized approach to child protection.

Navigating child protection policies and discipline strategies in selected public elementary schools in Lian, Batangas, presents a unique set of challenges and opportunities. Resource constraints, particularly in socio-economically disadvantaged areas, hinder the effective implementation of protective measures. Cultural nuances shape the community's perception of education and discipline, necessitating a delicate balance between tradition and modern approaches. Geographical factors pose logistical hurdles, requiring innovative solutions to ensure equitable access to information and training programs (Baginsky et al., 2019). Linguistic diversity adds another layer of complexity, emphasizing the need for culturally sensitive communication to bridge language barriers. Engaging parents and teachers in collaborative efforts was crucial, with community involvement seen as a catalyst for fostering a collective commitment to child well-being.

Despite these challenges, Lian offers opportunities for innovative solutions. The tight-knit community can serve as a supportive network, and collaborative initiatives involving local leaders, educators, and parents can leverage existing structures to disseminate information effectively. Acknowledging and embracing the uniqueness of Lian, stakeholders can work collaboratively to build a resilient and supportive educational environment that nurtures the well-being of every child in this vibrant Batangueño community. In essence, addressing the local intricacies of Lian requires a tailored, community-driven approach to ensure the successful implementation of child protection policies and discipline strategies.

Statement of the Problem

The study aimed to determine the impact of child protection policies and discipline strategies for learners in Tan-ag elementary school. Specifically, this study pursued to answer the following questions:

1. What is the level of awareness of parents and teachers on child protection policies in terms of:
   1.1 duties and responsibilities;
   1.2 preventive measures;

1.3 rules and procedures; and
1.4 referral and assessment?
2. What is the level of awareness of parents and teachers on discipline strategies?
3. Is there any significant difference between the level of awareness of parents and teachers on child protection policies and the level of awareness of parents and teachers on discipline strategies?
4. Is there any significant relationship between the level of awareness of parents and teachers on child protection policies and the level of awareness of parents and teachers on discipline strategies?
5. Based on the findings of the study, what child protection policies should be formulated?

METHODOLOGY

This chapter offers an exposition of the research methodologies applied in this study. It encompasses information regarding the research design, data sources, participant demographics, data collection methods, ethical considerations, data management, and the analytical approaches employed. The research methodology in this study was expounded upon, encompassing the selected research approach for conducting the study and the dissemination of research findings to a wider audience.

Research Design

The study employed descriptive-correlational research techniques and utilized a survey to assess the child protection policies and discipline strategies in Tan-ag Elementary School. The choice of a quantitative approach was motivated by the intention to quantify and visually represent the responses collected from the participants in an organized format.

Participants

The research focused its analysis on the parents of currently enrolled pupils and currently employed teachers of kinder to grade 6 in Tan-ag Elementary School. The study maximized the total population of nine (9) kinder to grade 6 teachers from chosen institution.

Research Instrument

The research employed a survey designed specifically by the researcher to examine the influence of child protection policies on learner discipline strategies. This questionnaire was indispensable for gaining a profound insight into how the integration of child protection policies can positively affect discipline strategies within a specific context.

Data Analysis

To analyze the gathered data effectively, the researcher employed the following statistical treatments. The weighted mean, ranking, t-test and Pearson's r were utilized to interpret the data.

RESULTS AND DISCUSSIONS

This part displayed the presentation, analysis, and interpretation of the gathered data from the questionnaires answered by the respondents that are in accordance with the specific questions posited on the objectives of the study.

1. Level of Awareness of Parents and Teachers on Child Protection policies.

1.1 In terms of Duties and Responsibilities.

Table 1. Level of Awareness of Parents and Teachers on Child Protection Policies in Terms of Duties and Responsibilities

Items	Parents			Teachers		
	WM	VI	R	WM	VI	R
1. I am aware of my responsibilities in ensuring the safety and well-being of children.	4.61	A	1	5.00	A	3

I understand the specific duties assigned to me (as a parent/teacher) regarding child protection policies.	4.53	A	2	5.00	A	3
I am familiar with the role I play in reporting any suspected cases of child abuse or neglect.	4.49	A	3	5.00	A	3
I know the procedures to follow when dealing with sensitive information related to child protection.	4.43	A	4	5.00	A	3
I am well-informed about the consequences of not fulfilling my duties concerning child protection.	4.27	A	5	5.00	A	3
Composite Mean	**4.47**	**A**		**5.00**	**A**	

As shown in Table 1, the parent-respondents assessed that they are always aware of their responsibilities in ensuring the safety and well-being of children which made the highest weighted mean of 4.61 and the highest rank of 1. This awareness suggested a proactive and vigilant approach towards safeguarding children, emphasizing the crucial role that parents play in ensuring their children's safety and welfare.

1.2. In Terms of Preventive Measures.

Table 2. Level of Awareness of Parents and Teachers on Child Protection Policies in Terms of Preventive Measures

Items	Parents			Teachers		
	WM	VI	R	WM	VI	R
1. I am aware of the measures in place to prevent child abuse within the school community.	4.26	A	2	5.00	A	1.5
2. I understand the importance of promoting a safe and supportive environment for children.	4.48	A	1	5.00	A	1.5
3. I know the strategies to identify and address potential risks to children's well-being.	4.09	O	5	4.78	A	3
4. I am familiar with the programs aimed at educating parents and teachers on preventive measures.	4.18	O	3	4.56	A	4
5. I actively participate in activities that contribute to the prevention of child abuse.	4.11	O	4	4.44	A	5
Composite Mean	**4.22**	**A**		**4.77**	**A**	

As reflected in Table 2, the parent-respondents affirmed that they always understand the importance of promoting a safe and supportive environment for children which made the highest weighted mean of 4.48 and the highest rank of 1. This underscored a deep recognition of the critical role such an environment plays in a child's well-being and development.

1.3. In Terms of Rules and Procedures

Table 3. Level of Awareness of Parents and Teachers on Child Protection Policies in Terms of Rules and Procedures

Items	Parents			Teachers		
	WM	VI	R	WM	VI	R
1. I am aware of the established rules and procedures related to child protection.	4.47	A	2	5.00	A	2.5
2. I follow the prescribed guidelines when dealing with disciplinary issues involving children.	4.52	A	1	5.00	A	2.5
3. I know the steps to take in case of a reported child protection concern.	4.14	O	5	5.00	A	2.5
4. I understand the consequences of not adhering to the child protection rules and procedures.	4.34	A	4	4.56	A	5
5. I actively support the implementation of child protection rules within the school community.	4.41	A	3	5.00	A	2.5
Composite Mean	**4.38**	**A**		**4.91**	**A**	

Legend: A = Always
O = Often
R = Rank
WM = Weighted Mean
VI = Verbal Interpretation

As gleaned in Table 4, the parent-respondents perceived that they always follow the prescribed guidelines when dealing with disciplinary issues involving children which got the highest weighted mean of 5.00 and the highest rank of 1. This suggested that parent-respondents are familiar with the dis-

ciplinary guidelines provided by institutions or authorities and prioritize their implementation when addressing disciplinary issues involving children.

1.4. In Terms of Referral and Assessment.

Table 4. Level of Awareness of Parents and Teachers on Child Protection Policies in Terms of Referral and Assessment

Items	Parents			Teachers		
	WM	VI	R	WM	VI	R
1. I am aware of the procedures for referring a child for further assessment in case of concerns.	4.16	O	5	5.00	A	1.5
2. I understand the criteria used to assess the severity of child protection concerns.	4.22	A	1	4.44	A	5
3. I am familiar with the support services available for children who undergo assessment.	4.07	O	4	4.56	A	4
4. I actively participate in the assessment process when required.	4.14	O	3	5.00	A	1.5
5. I am knowledgeable about the follow-up actions after a child has been referred and assessed.	3.93	O	5	4.67	A	3
Composite Mean	**4.10**	**O**		**4.73**	**A**	

Legend: A = Always
O = Often
R = Rank
WM = Weighted Mean
VI = Verbal Interpretation

As reflected in Table 4, the parent-respondents affirmed that they are always understand the criteria used to assess the severity of child protection concerns which made the highest weighted mean of 4.22 and the highest rank of 1. The results demonstrated a proactive approach to safeguarding children and responding effectively to potential risks or dangers. This level of understanding enabled them to make informed judgments and decisions regarding the appropriate course of action when faced with situations that may pose a threat to children's safety or welfare.

2. Level of Awareness of Parents and Teachers on Discipline Strategies.

Table 5. Level of Awareness of Parents and Teachers on Discipline Strategies

Items	Parents			Teachers		
	WM	VI	R	WM	VI	R
1. The school uses positive reinforcement techniques to encourage good behavior.	4.54	A	2.5	5.00	A	3
2. Learners are involved in setting classroom rules and consequences.	4.52	A	4	5.00	A	3
3. I believe that learners understand the consequences of their actions.	4.48	A	5	4.00	O	10
4. Restorative practices are applied effectively to address disciplinary issues.	4.29	A	8	4.22	A	8
5. The school provides resources and support for implementing restorative practices.	4.23	A	10	5.00	A	3
6. I feel that learners have a sense of responsibility for their actions.	4.26	A	9	4.22	A	8
7. The school recognizes and acknowledges positive behavior.	4.56	A	1	5.00	A	3
Restorative practices have led to positive changes in learner behavior.	4.44	A	6	4.56	A	6
The school's discipline strategies promote a sense of accountability.	4.38	A	7	4.22	A	8
10 I believe that restorative practices help learners learn from their mistakes.	4.54	A	2.5	5.00	A	3
Composite Mean	**4.42**	**A**		**4.62**	**A**	

Legend: A = Always
O = Often
R = Rank
WM = Weighted Mean
VI = Verbal Interpretation

As written in Table 5, the parent-respondents answered that the school always recognizes and acknowledges positive behavior which yielded highest weighted mean of 4.56 and the highest rank of 1. This implied that the school has established practices and mechanisms in place to regularly identify and commend instances of exemplary behavior exhibited by students. By consistently recognizing and acknowledging positive behavior, the school fostered a supportive and encouraging environment that reinforces desirable conduct and promotes a positive school culture.

3. Difference Between the Parents and Teachers Level of Awareness on Child Protection Policies, and Level of Discipline Strategies.

Table 6. Difference Between the Parents and Teachers Level of Awareness on Child Protection Policies, and Level of Discipline Strategies

Variables	t-value	p- value	Decision	Interpretation
Awareness on Child Protection Policies				
Duties and Responsibilities	9.37	1.38E-5	Reject Ho	Highly Significant
Preventive Measures	5.79	0.00409	Reject Ho	Highly Significant
Rules and Procedures	6.90	0.00125	Reject Ho	Highly Significant
Referrals and Assessment	5.05	0.00099	Reject Ho	Highly Significant
Discipline Strategies	1.42	0.17270	Failed to Reject Ho	Not Significant

As reflected in Table 6, when the assessment of the parents and teachers on their level of awareness on child protection policies were compared to their level of discipline strategies, the computed t-values of 9.37 for duties and responsibilities, 5.79 for preventive measures, 6.90 for rules and procedures, and 5.05 for referrals and assessment have corresponding p-values of less than 0.01, thus rejecting the hypothesis. On the other hand, the computed t-value of 1.42 for discipline strategies has a corresponding p-value of more than 0.05, thus failing to reject the hypothesis.

4. Relationship Between the Respondents Level of Awareness on Child Protection Policies and Discipline Strategies

Table 7. Relationship Between the Respondents Level of Awareness on Child Protection Policies and Discipline Strategies

Variables	r-value	p- value	Decision	Interpretation
Level of Awareness on Child Protection Policies Versus Discipline Strategies				
Duties and Responsibilities	0.78	0.00778	Reject Ho	Highly Significant
Preventive Measures	0.81	0.00450	Reject Ho	Highly Significant
Rules and Procedures	0.20	0.57958	Failed to Reject Ho	Not Significant
Referrals and Assessment	0.12	0.74125	Failed to Reject Ho	Not Significant

As written in Table 7, when the assessment of the parents and teacher respondents regarding on their level of awareness on child protection policies were compared to their discipline strategies, the computed r-values of 0.78 for duties and responsibilities, and 0.81 for referrals and assessment have corresponding p-values of less than 0.01, thus rejecting the hypothesis. On the contrary, the computed r-values of 0.20 for rules and procedures, and 0.12 for referrals and assessment have corresponding p-values of more than 0.05, thus failing to reject the hypothesis.

5. Proposed Child Protection Policies based on the Findings of the Study

Table 8. Proposed Child Protection Policies

CHILD PROTECTION POLICIES	DESCRIPTION
Parent Education Program	Implement a parent education program to provide workshops and informational sessions on recognizing signs of abuse, preventive measures, and referral procedures.
Teacher Training and Development	Provide comprehensive training and ongoing professional development opportunities for teachers on child protection policies, recognizing signs of abuse, and implementing positive discipline strategies.
Collaborative Partnerships	Foster collaborative partnerships between parents, teachers, and the community to share information, address concerns, and promote a shared understanding of child protection policies and procedures.
Comprehensive School Policies	Develop and implement comprehensive school policies that outline clear guidelines and procedures for child protection, including reporting mechanisms, investigation processes, and support services.
Student Empowerment Initiatives	Empower students to play an active role in promoting a safe and respectful school culture by educating them about their rights, responsibilities, and avenues for seeking support.

Derived from the results of the study, the proposed Child Protection Policies for Tan-Ag Elementary School were presented in Table 7. Each policy was accompanied by a brief description of its purpose and scope. These policies were designed to address various aspects of child protection, including parental education, teacher training, collaborative partnerships, comprehensive school policies, and student empowerment initiatives.

CONCLUSIONS

1. Parents exhibited not only a profound understanding of their pivotal role in safeguarding children but also a proactive commitment to preventive measures and a thorough awareness of referral procedures when necessary. This proactive stance demonstrated by parents underscored their unwavering dedication to ensuring the safety, well-being, and holistic development of their children, reflecting a deep-seated sense of responsibility and care.
2. Teachers demonstrated a robust grasp of their obligations regarding child protection, displaying a comprehensive understanding of policies and procedures designed to safeguard students' welfare. Their readiness to contribute significantly to the prevention of child abuse and the promotion of student well-being within the school environment highlighted their commitment to creating safe and supportive learning environments conducive to academic and personal growth.
3. The study underscored the significance of ongoing communication, collaboration, and mutual support between parents and teachers in promoting child protection and positive discipline practices. By working collaboratively, parents and teachers could cultivate a nurturing and supportive educational atmosphere where children felt valued, respected, and empowered to thrive both academically and emotionally.
4. The study's findings emphasized the essential partnership between parents and teachers in creating safe, supportive, and inclusive learning environments. By leveraging their collective expertise, dedication, and commitment to children's well-being, parents and teachers can continue to foster environments where every child feels safe, supported, and empowered to reach their full potential.

RECOMMENDATIONS

Based on the insights gained from the study, several recommendations are proposed to further enhance child protection and positive discipline practices within educational settings.

Firstly, it's crucial to strengthen parental education initiatives by developing and implementing educational programs that deepen parents' understanding of child protection policies, preventive measures, and referral procedures. These programs can be delivered through workshops, seminars, or informational sessions to empower parents with the knowledge and skills needed to effectively safeguard their children. Secondly, providing comprehensive training and ongoing professional development opportunities for teachers is essential. This training disclosures and recognizing signs of abuse, responding to disclosures, and implementing positive discipline strategies in the classroom.

Moreover, the school institution, in collaboration with the Department of Education (DepEd) must foster collaborative partnerships between parents and teachers which was vital. This can be achieved by establishing regular communication channels, such as parent-teacher meetings or newsletters, to share information about child protection policies, disciplinary approaches, and student well-being. Encouraging open dialogue and collaboration can help address concerns and promote a shared understanding of expectations. Additionally, developing and implementing comprehensive school policies that outline clear guidelines and procedures for child protection, reporting mechanisms, investigation processes, and support services for students and families is crucial. These policies should be communicated effectively to all stakeholders and regularly reviewed and updated as needed.

Furthermore, not only within Tan-Ag Elementary School, institutions must collaborate with Dep Ed in creating supportive and inclusive school environments that prioritize the safety, well-being, and dignity of all students which was essential. This can be achieved through the promotion of positive behavior reinforcement, implementation of restorative justice practices, and provision of support services for students in need. Empowering students to play an active role in promoting a safe and respectful school cul-

ture is also important. Educating them about their rights, responsibilities, and avenues for seeking support, as well as providing opportunities for student leadership and participation in initiatives aimed at fostering a positive school climate, can be beneficial. Lastly, collaborating with community organizations, agencies, and professionals to access resources, support services, and expertise in addressing child protection issues and promoting positive discipline practices is crucial. Building partnerships with local authorities, social services, and mental health professionals ensures a coordinated response to safeguarding children's well-being.

By implementing these recommendations, educational institutions can create safer, more supportive, and inclusive environments where children can thrive academically, emotionally, and socially. Additionally, fostering stronger partnerships between parents, teachers, and the broader community in promoting child protection and positive discipline practices becomes possible.

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