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FACTORS AFFECTING THE PERFORMANCE IN MATHEMATICS OF SELECTED ELEMENTARY SCHOOLS IN SARIAYA, QUEZON

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ABSTRACT

This study determined the factors affecting the performance in Mathematics of selected elementary schools in Sariaya, Quezon. The method that was used in this research was Descriptive Method. It was utilized to gather information about the present condition of the study. It also deals with the process of identifying and examining the performance and distinguishing the factors that affect the learning of pupils in Mathematics. The goal of descriptive research is to accurately and thoroughly describe a population, situation, or phenomenon (McCombes, 2020). Based on the findings of the study, learning interventions was proposed to improve the academic performance in Mathematics 3. Based on the result of the study, the researcher recommended that schools should create learning interventions to improve the academic performance of the learners in Mathematics. Teachers should always take into consideration the factors that may affect the performance of the learners during the teaching-learning process.

Keywords: Factors, Performance in Mathematics, Learner-related and Teacher-related Factors

INTRODUCTION

Mathematics is considered as one of the most essential subjects that a learner has to take within the school curriculum. It is known as the science of structure, order, and relation that has evolved from elemental practices of counting, measuring, and describing the shapes of objects (Berggren et. al, 2020). No one can deny the fact that Mathematics plays a crucial significance in our daily lives. Mathematics is all around us, almost in everything we do. It is the building block of everything (Gordon & Hom, 2021), which includes the use of our computers and mobile devices in the fields of education, business, engineering, medicine, architecture, art, and even sports.

Since Mathematics can be a challenging, difficult, and subject that requires time and energy, every student must study it in some form. Because Mathematics provides fundamental knowledge linked with other school subjects and disciplines, it is best to address the issue affecting every learner's performance. According to the study conducted by the Trends in International Mathematics and Science Study (TIMMS) in 2019, the Philippines obtained an average achievement of 297 in Mathematics, which is significantly lower than the TIMSS Scale Center Point (500) and had the lowest average achievement (297) among 58 participating countries and six benchmarking countries. The performance of the Philippines in the International Large-Scale Assessments, such as the TIMMS, prompted the response of Sulong Edukalidad, which addresses the need for major reforms to be undertaken to improve the quality of education outcomes. Sulong EduKalidad, which has the Filipino learner at its center, is built on four pillars, which are known collectively as KITE: K to 12 Curriculum, Delivery, and Instruction, Improvement of Learning Environment, Teachers' Upskilling and Reskilling and Engagement of Stakeholders for Support and Collaboration. The DepEd Order No. 24, s.2022 also adopted the Basic Education Development Plan (BEDP) for 2030. One of its objectives is to address the immediate impacts of a pandemic on learning and participation, addressing learning loss while deepening learning gains, close the remaining access gaps, confront the issue of education quality, anticipate the future of education, and introduce innovations in fostering resiliency and embedding the rights of children and the youth in education.

In accordance with this, the school from which the researcher is teaching conducted initiatives aimed at enhancing the quality of education. One of these initiatives is the I – PROMISE U (Implementing Pro-

gram and Monitoring Initiative for Struggling Learners through ULBOK) which intends to decrease the number of struggling learners in different subject areas by implementing diverse intervention and utilizing the use of ULBOK localized learning material. Another intervention that was made was the Project I - TEACH (Integrating Technological Access Towards Cascading Home Education Scheme) which targeted to increase the MPS in Quarterly Assessment (English, Math and Science) results 75% and above through providing innovations and utilize materials and strategies which can help the learners' performance.

As a result, the researcher started to figure out the underlying problems and factors that influence the performance of the struggling pupils. By considering Walberg's Theory of Educational Productivity which mainly focuses on the variables about the psychological characteristics and the immediate environment of the individual, understanding and dealing the issues will result in mastering the fundamental mathematical skills and concepts which are needed for their respective grades. It will also aid in improving the overall academic performance of the struggling learners.

Based on the concept offered, the researcher opted to conduct study into the factors that affect the performance in Mathematics of grade 3 learners in selected elementary schools in Sariaya, Quezon. It was observed that among the 60 pupils of grade 3 learners, thirty-two (32) of them are non-numerates. This could also be because of the distance learning brought by pandemic. Since their teacher might not be present to teach them properly about the Mathematics subject and the instructional resources may not also be available, the pupils could not be able to learn effectively at home.

Learning interventions will be suggested in order to solve the issues in learning the Mathematics subject. These may include the provision of sources to engage pupils in learning that will cater their needs; having an active collaboration teaching scheme between teachers, parents, and learners to monitor the progress of the children; enhancing pupils' competence in solving mathematical equations by developing teaching devices for the learners to have a mastery of the four fundamental operations; using video lessons to familiarize and learn the competency; and promoting teacher's creativity in crafting videos and other teaching means through the use of offline and online platforms in support to the learning of the pupils.

This research attempted to know the level of performance of grade 3 learners, the factors affecting the performance in Mathematics of the learners, the significant difference and relationship between the learner-related factors and teacher-related factors, which would be beneficial to the pupil, teachers, parents, and future researchers. The result of this study will eventually help the learners participate in the discussion and may accomplish the learning objectives in an interesting and effective manner. It will be useful in providing data about the factors that affect the students' performance in Mathematics, specifically in determining where the problems in learning Mathematics typically occur. Furthermore, this research could also serve as the foundation for the intervention that will aid in the improvement of Math proficiency in the coming years.

Statement of the Problem
This study aimed to determine the factors affecting the performance in Mathematics of selected elementary schools in Sariaya, Quezon.

Specifically, it sought to answer the following questions:
1. What is the level of performance of Grade 3 learners in Mathematics in selected schools in Sariaya, Quezon?
2. What are the factors affecting the performance of Grade 3 learners in Mathematics 3 in selected schools in Sariaya, Quezon in the following areas:
    2.1 learner- related factors
        2.1.1 motivation
        2.1.2 study habits
        2.1.3 parental support
    2.2 teacher-related factors
        2.2.1 personality traits
        2.2.2 teaching skills
        2.2.3 instructional materials
        2.2.4 parental support?
3. Is there a significant relationship between:

     3.1 learner-related factors and teacher-related factors

     3.2 academic performance and learner and teacher-related factors?

4. What learning interventions can be proposed to improve the academic performance in Mathematics 3 based from the findings of the study?

METHODOLOGY

This section contains the method of research, population, sample size, and sampling technique, description of the respondents, research instrument, data gathering procedure, and the statistical treatment of data.

Research Design

The method that was used in this research was Descriptive Method. It was utilized to gather information about the present condition of the study. It also deals with the process of identifying and examining the performance and distinguishing the factors that affect the learning of pupils in Mathematics. Also, it is a good way to gather data that may be used to create hypotheses about the factors affecting the performance in Mathematics and suggest associations or interventions that will help the academic performance of the pupils.

Population, Sample Size and Sampling Technique

The respondents of the study were fifty-two (52) Grade 3 pupils from Lutucan I Elementary School and Lutucan Central School.

The purposive sampling method was used by the researcher to select the respondents who filled out the survey questionnaire.

Participants

The respondents were the learners from selected elementary schools in Sariaya, Quezon taking grade 3 Mathematics and who had been enrolled for the Academic Year 2022-2023. The pupils were the ones who were struggling on the Mathematics subject and some of them had been on the list of non-numerates. They were chosen purposively since the study gives emphasis on the factors that affect the performance in Mathematics for learners. This was due to the fact that they were the only ones who can shed light on the factors that contribute to pupils' performance in Mathematics.

Instrumentation

The researcher utilized survey questionnaire. It was divided into two main sections: 1) the profile, and 2) the survey proper. The profile was made up of the socio-demographic characteristics of the respondents such as name, age, and gender. The survey is classified into two, the learner-related factors and teacher-related factors. Furthermore, the researcher gathered information and ideas by searching various resources such as books and the internet.

Research Procedure

The researcher ensured that the necessary permits are obtained first. To allow the researcher to conduct the study, a letter of approval from the principal was requested. The administration of the assessment, which provided the necessary information for the study, was scheduled. The study was carried out with the assistance of the pupils' teachers and parents. The researcher aided in the flow of the study and provided instructions to the respondents. Following that, the quantitative method was used to analyze the data. It was followed by an analysis and interpretation of the collected data.

RESULTS AND DISCUSSIONS

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

Academic Performance of the Students in Mathematics 3

Table 1. Academic Performance of the Students in Mathematics 3

Variables	Frequency	Percentage	Rank
Fairly Satisfactory (75 - 79)	52	100	1
Total	52	100	
Highest Grade	77 (Fairly Satisfactory)		
Lowest Grade	75 (Fairly Satisfactory)		
Mean Grade	75.88 (Fairly Satisfactory)		

Table 1 presents the academic performance of the students in Mathematics. As seen in the table, all the 52 total-student-respondents or 100% at rank 1 came from the grades of 75 - 79. The highest was 77, the lowest was 75, and the mean grade was 75.88 all were rated as fairly satisfactory. These proved that Mathematics is a very difficult subject.

The result on this study confirmed the other earlier findings that the learners are still working towards mastering fundamental mathematical skills; learners had great difficulty writing an answer (constructed response) compared to needing to select an answer from given options (multiple choice) (SEA-PLM, 2019). This could also be supported by the outcome in TIMMS 2019 that Philippines had the lowest average achievement (297) among 58 participating countries and 6 benchmarking countries.

In light of the findings considering the learners' performance in Mathematics, there is obviously an ongoing problem. To enhance academic performance and achieve the competences and skills required by the curriculum, which hinders the children from successfully learning the Mathematics subject, this issue must be addressed.

Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon

Table 2. Weighted Mean Distribution of Learner-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in terms of Motivation

Items	Weighted Mean	Int.	Rank
1. I make myself prepared for the math subject.	4.04	Often	4
2. I listen attentively to the lecture of my math teacher.	4.52	Always	2
3. I actively participate on classes' discussion, answering exercises and/or clarifying things I did not understand.	3.75	Often	5
4. I want to get good grades in test, quizzes, written works and performance.	4.60	Always	1
5. I get frustrated when the discussion is interrupt or the teacher is absent.	4.27	Always	3
Composite Mean	**4.24**	**Always**	

Table 2 indicates the Weighted Mean Distribution of Learner-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in terms of Motivation affirmed that they always want to get good grades in test, quizzes, written works, and performance as shown by the highest obtained mean of 4.60 and the highest rank of 1. Meanwhile, the said group of respondents often actively participate on classes' discussion, answering exercises and/or clarifying things they did not understand which made the least weighted mean of 3.75 and least rank of 5.

The composite mean of 4.24 implied that motivation always affects the performance of the respondents in Mathematics 3. This may lead to the conclusion that the learner's attitudes towards Mathematics

are considered as a crucial element in describing how Mathematics is learned which is characterized by the emotions of learners and consider what they value including their prior experiences (Fuqoha et al., 2018). This also suggests that one of the educators' primary areas of focus should be to learn how to inspire the pupils because motivation help a person direct his attention toward tasks that need to be done (Siiva 2020).

Since highly motivated students perform better academically than the lowly motivated students (Silao, 2018), helping the learners to become highly motivated will increase their engagement and eventually overcome the difficulties in Mathematics.

As shown in Table 3 on the following page, the Grade 3 Learner-respondents answered that they often have specific place of study at home which they keep clean and orderly as given by the highest obtained mean of 3.94 and the highest rank of 1. On the other hand, the said group of respondents sometimes prefer finish their studying and their assignments before watching any television program which gained the least weighted mean of 3.38 and least rank of 10.

The composite mean of 3.67 signified that study habits often affects the performance of the respondents in Mathematics 3. This implies that being successful in school also heavily depends on one's study habits. Study habits and academic achievement are possibly correlated (Landicho, 2021; Zadoo and Rana 2016). This was also supported by the result of the study of Bassey & Edoho (2018) which concluded that students who possess good study habits performed significantly better than students with bad study habits in terms of Mathematics achievement.

Table 3. Learner-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Study Habits

Items	Weighted Mean	Int.	Rank
1. I do my assignments regularly	3.87	Often	3.5
2. I exert more effort when I do difficult assignments.	3.88	Often	2
3. I spend my vacant time in doing my assignments or studying my lessons.	3.42	Often	9
4. I study the lessons I missed if I was absent from the class.	3.52	Often	8
5. I study and prepare for quizzes and tests.	3.87	Often	3.5
6. I study harder to improve my performance when I get low grades.	3.60	Often	6
7. I spend less time with my friends during school days to concentrate more on my studies.	3.56	Often	7
8. I prefer finish my studying and my assignments before watching any television program.	3.38	Sometimes	10
9. I see to it that extracurricular activities do not hamper my studies.	3.62	Often	5
10. I have specific place of study at home which I keep clean and orderly.	3.94	Often	1
Composite Mean	**3.67**	**Often**	

In relation to this, when it comes to study orientation, high achiever and low achiever students greatly differ from one another, and the high achievers also have superior study orientation than the low achievers (Biswas, 2015; cited in Guinocor, et al, 2020). The learners should be able to develop their own study habits that will be effective for them, this may include plan/place, a definite time schedule and taking brief, well-organized notes (Crow and Crow, 2002; cited in Olatunji, 2019). Learners should devise appropriate and efficient study techniques to prevent developing a weak foundation in Mathematics.

Table 4. Learner-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Parental Support

Items	Weighted Mean	Int.	Rank
My parents …			
1. assist me in keeping myself motivated when I am working with math.	4.15	Often	1
2. encourage my learning at home, particularly when I find it difficult to complete the work or activity at hand.	3.48	Often	4
3. help me with my homework, especially to ease the challenge over math.	3.63	Often	2
4. keep in touch with my teacher so they are aware of both my successes and my difficulties.	3.56	Often	3
5. create a rich and varied learning environment at home in which will motivate me to develop my abilities and skills in Mathematics.	3.42	Often	5
Composite Mean	**3.65**	**Often**	

Table 4 discussed, the Grade 3 Learner-responded in term of parental support that their parents often assist them in keeping themselves motivated when they are working with math as stated by the highest obtained mean of 4.15 and the highest rank of 1. Meanwhile, the said group of respondents responded that their parents often create a rich and varied learning environment at home in which will motivate them to develop their abilities and skills in Mathematics which obtained the least weighted mean of 3.42 and least rank of 5.

The composite mean of 3.65 concluded that parental support often affects the performance of the respondents in Mathematics 3. It was perceived that parental support was related to increased task persistence during homework (Silinskas & Kikas, 2019). This means that the learners benefit from being motivated by obtaining parental assistance while studying on math.

The result of the study of Huang, F. Huang, Z.; Li, Z.; Zhang (2021) also explains that parents who are more involved in their children's school performance may also place greater importance on their children's school progress, which contributes to improving their child's Mathematics achievement. Relatively, those family with fewer monetary investments in children's math stimulating materials and less time spent with children's math practices at home were directly and significantly associated with lower math score (Uddin 2022).

The statements that were mentioned only indicate that parental support has a significant impact on the child's achievement in Mathematics. When a parent or other member of the family is involved in their education, learners feel considerably more engaged and perform better at school.

As presented in the table 5 in the next page, in terms of teacher-related factors, the respondents assessed that their Mathematics teacher always shows smartness, confidence and firmness in making decisions with the highest weighted mean of 4.85 and the highest rank of 1. On the contrary, the said group of respondents also replied that their math teacher always has a good relationship to students and teachers with the least mean of 4.58 and least rank of 5.

Table 5. Teacher-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Personality Traits

Items	Weighted Mean	Int.	Rank
My Mathematics teacher…			
1. has a good relationship to students and teachers	4.58	Always	5
2. shows smartness, confidence and firmness in making decisions	4.85	Always	1
3. imposes proper discipline and is not lenient in following the prescribed rules	4.65	Always	3
4. has an appealing personality with good sense of humor	4.60	Always	4
5. is open to suggestions and opinions and is worthy of praise	4.83	Always	2
Composite Mean	**4.70**	**Always**	

The composite mean of 4.70 generalized that teachers personality traits always affects the performance in Mathematics of Grade 3 learners. Based on the research by Cascio (2013), as cited by Mabena, Mokgosi, & Ramapela (2021), educators play a significant role in learners' school performance. High achievement in learners was substantially correlated with a positive teacher's attitude toward Mathematics (Ayebale et al, 2020). Because pupils work closely with their teachers every day, the characteristics of their teachers also have an impact on how well the learners succeed academically.

Teachers' attitude contributed to students' academic performance and behavior (Kele, 2018). According to Chen, et al. (2017) strong evidence exists showing that teacher diligence, dedication, and adherence to basic educational policies and processes can lead to good teaching and learning. Because it can increase pupils' drive to learn, educators should be polite, upbeat, provide constructive criticism, and encourage students. Therefore, teachers should show positive attitude towards their learners if they wanted to boost their willingness to learn Mathematics.

Table 6. Teacher-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Teaching Skills

Items	Weighted Mean	Int.	Rank
My Mathematics teacher…			
1. explains the objectives of the lesson clearly at the start of each period	4.77	Always	2
2. Has the mastery of the subject matter	4.48	Always	4
3. is organized in presenting subject matters by systematically following course outline	4.46	Always	5
4. is updated with present trends, relevant to the subject matter	4.56	Always	3
5. uses various strategies, teaching aids/devices and techniques in presenting the lessons	4.79	Always	1
Composite Mean	**4.61**	**Always**	

As given in the table 6, the respondents answered that their Mathematics teacher always uses various strategies, teaching aids/devices and techniques in presenting the lessons which made the highest mean of 4.79 and the highest rank of 1. Meanwhile, the said group of respondents responded that their Mathematics teacher is always organized in presenting subject matters by systematically following course outline which yielded the least mean of 4.46 and least rank of 5.

The composite mean of 4.61 concluded that teachers teaching skills always affects the performance in Mathematics of Grade 3 learners. This shows that it is important that Mathematics teachers should possessed skills that allow them to evaluate their interactions with students, the strategies they employ to teach them, the ways in which they explain topics to them, and their attitude toward them. According to Pachina (2020), teachers should have skills that will emotionally support classroom organization and instructional support aspects of teacher-student interaction. Furthermore, teacher should continue to adopt different teaching strategies that can highly motivate students to learn (Selim, 2019).

In accordance with the statements mentioned above, teachers should keep going to training sessions, seminars, and workshops designed to restock their arsenal of instructional strategies. A teacher who has received proper training in teaching learning skills and is always up to date on information on classroom management, emerging technology tools, new curriculum resources, and more could become a success factor in their schools (Pachina, 2020). The classroom setting may inhibit beneficial class discussions and collaborative learning from learners if the teacher has excellent classroom management abilities and is organize when presenting the subject matter.

As gleaned in the table 7, the respondents affirmed that their mathematics teacher always uses workbooks/textbooks which got the highest mean of 4.83 and the highest rank of 1. Furthermore, the said group of respondents replied that their mathematics teacher always uses power point presentations which got the least mean of 4.33 and least rank of 5.

The composite mean of 4.60 generalized that instructional materials always affects the performance in Mathematics of Grade 3 learners. This suggests that like any other subjects included in the school curriculum, Mathematics can be learned with the aid of instructional resources. Since it was established,

that instructional materials influenced acquisition of Mathematics competencies (Mueni, 2019), it is recommended that teachers and other key stakeholders invest more resources to ensure that adequate instructional materials are available for learners. These include the print and non-print items that are designed to impact information to students in the educational process (Faize and Dahan, 2011; cited in Bukoye, 2019).

Table 7. Teacher-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Instructional Materials

Items	Weighted Mean	Int.	Rank
My Mathematics teacher uses…			
1. marker and whiteboard in explaining the lessons	4.60	Always	3
2. workbooks/textbooks	4.83	Always	1
3. PowerPoint presentations	4.33	Always	5
4. visual aids	4.65	Always	2
5. Mathematics materials, tools and equipment	4.58	Always	4
Composite Mean	**4.60**	**Always**	

Instructional materials such as whiteboard and marker, workbook/textbooks, PowerPoint presentations, visual aids and other Mathematics material tools and equipment could contribute to making learning more fun and interesting for the pupils. It enables students to collaborate and use resources, which increased student interaction. It also gives students the opportunity to engage in practical experience that will help them to expand their knowledge of various topics and abilities.

Table 8. Teacher-Related Factors Affecting the Performance of Grade 3 Learners in Mathematics in Selected Schools in Sariaya, Quezon in Terms of Parental Support

Items	Weighted Mean	Int.	Rank
My Mathematics teacher…			
1. suggests ways to parents on how I can participate into activities at home that are educationally enriching.	4.56	Always	2
2. asks parents to attend parent/teacher conferences.	4.40	Always	3
3. has a regular contact or communication with parents.	4.37	Always	4.5
4. sends home suggestions for games or activities to parent, related to my homework that can be played by us	4.87	Always	1
5. helps students to improve the pupils' social skills considerably.	4.37	Always	4.5
Composite Mean	**4.51**	**Always**	

As written in the table 8, the respondents answered that their Mathematics teacher always sends home suggestions for games or activities to parent, related to their homework that can be played by them which got the highest mean of 4.87 and the highest rank of 1. Lastly, the said group of respondents replied that their Mathematics teacher always has a regular contact or communication with parents, and always helps pupils to improve their social skills considerably which gained the least equal means of 4.37 and least ranks of 4.5.

The composite mean of 4.51 inferred that parental support always affects the performance in Mathematics of Grade 3 learners. Considering the result, it is important that teacher take the time to speak with parents to help them understand more about their child's home learning environment and needs. According to the project examined by Deutscher & lbe's (2004) which was cited by Siao (2019), it was indicated that those parents who did the self-report survey, went to the parent class, or were involved in more home-type involvement (such as checking child's planner, talking to child at home about school-related topics, or engaging in educational activities outside of school) had children that performed better in various areas of the test or had better grades.

In addition to that, teachers must learn how to communicate and collaborate with each student's family to help create positive, productive, and beneficial professional relationships (O'Neil, 2022). Continuous communication with the teacher and parent enables them to modify their approach and use the best tactics to meet the learner's needs and enhance their academic progress. Consequently, educators must provide parents opportunities in order to have positive connections with regards to their children's academic performance at school.

Relationship Between Learner-Related and Teacher-Related Factors, and Academic Performance and Learner and Teacher-Related Factors.

Tables 9 - 10 reveal the relationships of the variables in this study.

As gleaned in the table 9, when the responses of the respondents on motivation as learner-related factor was compared to the teacher-related factors, the correlation coefficients of 0.13, - 0.15, - 0.12 and 0.04 for personality traits, teaching skills, instructional materials and parental support, respectively have corresponding p- values of more than 0.05, thus failing to reject the null hypothesis.

These safely implied that the responses of the respondents on motivation as learner-related factor have no significant relationships to the teacher-related factors in terms of personality traits, teaching skills, instructional materials, and parental support.

Table 9. Relationship Between Learner-Related and Teacher-Related Factors

Variables Compared	r-value	p-value	Decision	Interpretation
Learner-Related versus Teacher-Related Factors				
Motivation versus:				
Personality Traits	0.13	0.35833	p>0.05, Failed to Reject Ho	Not Significant
Teaching Skills	-0.15	0.28851	p>0.05, Failed to Reject Ho	Not Significant
Instructional materials	-0.12	0.39679	p>0.05, Failed to Reject Ho	Not Significant
Parental Support	0.04	0.77829	p>0.05, Failed to Reject Ho	Not Significant
Study Habits versus:				
Personality Traits	-0.01	0.94391	p>0.05, Failed to Reject Ho	Not Significant
Teaching Skills	-0.08	0.57291	p>0.05, Failed to Reject Ho	Not Significant
Instructional materials	-0.03	0.83279	p>0.05, Failed to Reject Ho	Not Significant
Parental Support	0.03	0.83279	p>0.05, Failed to Reject Ho	Not Significant
Parental Support versus:				
Personality Traits	-0.07	0.62193	p>0.05, Failed to Reject Ho	Not Significant
Teaching Skills	-0.04	0.77829	p>0.05, Failed to Reject Ho	Not Significant
Instructional materials	0.14	0.32222	p>0.05, Failed to Reject Ho	Not Significant
Parental Support	0.10	0.48059	p>0.05, Failed to Reject Ho	Not Significant

In addition, when the responses of the respondents on study habits as learner-related factor was compared to the teacher-related factors, the correlation coefficients of -0.01, - 0.08, - 0.03 and 0.03 for personality traits, teaching skills, instructional materials, and parental support, respectively have corresponding p- values of more than 0.05, thus failing to reject the null hypothesis.

These safely generalized that the responses of the respondents on study habits as learner-related factor have no significant relationships to the teacher-related factors such as personality traits, teaching skills, instructional materials and parental support.

Furthermore, when the responses of the respondents on parental support as learner-related factor was compared to the teacher-related factors, the correlation coefficients of -0.07, - 0.04, 0.14 and 0.10 for personality traits, teaching skills, instructional materials and parental support, respectively have corresponding p- values of more than 0.05, thus failing to reject the null hypothesis.

These safely inferred that the responses of the respondents on parental support as learner-related factor have no significant relationships to the teacher-related factors such as personality traits, teaching skills, instructional materials and parental support.

The result in table 9 shows that the relationship between learner-related factor and teacher-related factors are not significant. This is contrary to the statement that educators play a significant role in learners' school performance (Mabena, Mokgosi, & Ramapela, 2021; Cascio, 2013). Moreover, it was stated

that constructivists teaching method and teacher-student variables significantly influenced students' interest in Mathematics (Arthur 2021). In relation to this, the factor that could motivate students to show up for class could be the lecturer's use of active learning techniques (Arora and Singh, 2017; Clay and Breslow 2006).

**Table 10. Relationship Between Academic Performance and
Learner-Related and Teacher-Related Factors**

Variables Compared	r-value	p-value	Decision	Interpretation
Academic Performance Versus Learner-Related Factors				
Motivation	0.33	0.01689	p<0.05, Reject Ho	Significant
Study Habits	0.28	0.04438	p<0.05, Reject Ho	Significant
Parental Support	0.30	0.03071	p<0.05, Reject Ho	Significant
Academic Performance Versus Teacher-Related Factors				
Personality Traits	0.48	0.00032	p<0.01, Reject Ho	Highly Significant
Teaching Skills	0.67	6.0E-8	p<0.01, Reject Ho	Highly Significant
Instructional materials	0.47	0.00044	p<0.01, Reject Ho	Highly Significant
Parental Support	0.53	0.00005	p<0.01, Reject Ho	Highly Significant

As discussed in the table, when the academic performance of the student-respondents were compared to learner-related factors, the computed r-values of 0.33, 0.28, and 0.30 for motivation, study habits and parental support. respectively have corresponding p-values of less than 0.05, thus rejecting the hypothesis.

These safely concluded that the academic performance of the respondents have significant relationships to the learner-related factors in terms of motivation, study habits and parental support.

The research of Silao (2018) regarding the factors affecting the Mathematics problem solving skills of Filipino pupils supported the result shown above. The researcher stated that highly motivated students perform better academically than the lowly motivated students. According to Bassey & Edoho (2018), students who possess good study habits performed significantly better than students with bad study habits in terms of Mathematics achievement. Moreover, Parents who are more involved in their children's school performance may also place greater importance on their children's school progress, which contributes to improving their child's Mathematics achievement (Huang, F. Huang, Z.; Li, Z.; Zhang, 2021). These learner-related factors must be dealt with as soon as possible in the pupils' academic careers in order for the learner to be able to perform well at school and achieve their full potential when it comes to the Mathematics subject.

Lastly, when the academic performance of the student-respondents was compared to teacher-related factors, the computed r-values of 0.48, 0.67, 0.47 and 0.53 for personality traits, teaching skills, instructional materials and parental support. respectively have corresponding p-values of less than 0.05, thus rejecting the hypothesis.

These safely inferred that the academic performance of the respondents has high significant relationships to the teacher-related factors in terms of personality traits, teaching skills, instructional materials and parental support. This may be confirmed by the study of Ayebale et al. from 2020 about the factors affecting student's achievement in Mathematics in secondary schools in developing countries, which found a significant correlation between high achievement learners and a positive teacher's attitude toward Mathematics. The research of Kele (2018) on the factors impacting on students' beliefs and attitudes toward learning Mathematics also found out that teachers' attitude contributed to students' academic performance and behavior.

It has been stated that a teacher who has received proper training in teaching learning skills and is always up to date on information on classroom management, emerging technology tools, new curriculum resources, and more could become a success factor in their schools (Pachina, 2020). In relation to this, it was also established that instructional materials influenced acquisition of Mathematics competencies (Mueni, 2019). These shows that the teacher-related factors are highly significant when it comes to the academic performance of a learner. It is important that it should be given emphasis and consideration when teaching Mathematics to the learners.

Learning interventions were suggested to help pupils in Mathematics 3 do better academically. It was based on the outcomes of learner's performance in Mathematics as well as learner-related and teacher-related factors that influence their performance. Through games, singing, and dance, its main objective is to instill a love of engaging with numbers and the four fundamental operations. Additionally, it aims to help students become familiar with and proficient in the four fundamental processes, to enhance their mathematical reasoning and independent word problem solving skills, to provide them with a variety of learning materials that are suitable for their interests and learning preferences, and to use a variety of strategies to increase the numeracy rate.

CONCLUSIONS

In order to improve the academic performance of the grade 3 learners in Mathematics, students should be highly motivated in learning Math. Teachers should in class discussions and pay attention during lectures. They can also try to establish a stimulating learning environment that will inspire students to advance their knowledge and skills.

The result indicated that the level of performance of grade 3 learners is fairly satisfactory. Therefore, educators must concentrate on the factors that affect pupils' performance. It comprises placing a strong emphasis on learner-related factors like motivation, study habits, and parental support as well as the teacher-related factors like personality traits, teaching skills, instructional materials, and parental support.

The character and abilities of the teacher should also be highlighted because they have a big impact on the academic performance of the students. When it comes to teaching the mathematics subject, they must have the sound knowledge in Mathematics, engaging, an effective motivator, always learning, compassionate, creative, and imaginative.

RECOMMENDATIONS

In light of the findings and conclusions, the following are recommended:
1. Based on the given data, schools should create learning interventions to improve the academic performance of the learners in Mathematics.
2. The learning intervention that was proposed may be used to test its effectiveness.
3. Teachers should always take into consideration the factors that may affect the performance of the learners during the teaching-learning process.
4. Further research may be conducted in other research locale and add more respondents.

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LEVEL OF READING SKILLS OF KINDERGARTEN LEARNERS IN SARIAYA WEST DISTRICT

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ABSTRACT

This study was conducted in order to identify the level of reading skills of Kindergarten students, particularly in Sariaya West District. To serve the purpose of the study, a descriptive method of research was used. It involves describing, analyzing, and interpreting data in order to determine the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District in terms of letter names and sound, recognizing words that rhymes, matching words by beginning or ending sound, CVC patterns, recognize some words by sight and the significant difference between the reading level of Kindergarten in Clusters 1 and 2. Based on the given results, the researcher developed a reading material that took considerations of the five variables that can help improve the reading skills of Kindergarten students. Lessons on words that rhymes should be reinforced among Cluster 2 students, while recognizing some words by sight need to be reinforced for both Clusters. Lastly, based on the findings of the study, the developed reading book that took into consideration the five variables are therefore recommended to address or improve the reading skills of kindergarten students in Sariaya West District. Kindergarten parents and teachers should also work together to reinforce the developed reading book and in order build and develop solid reading foundation skills. It was also suggested that reading skills assessments should be performed on a regular basis to determine students' reading level skills in order to address reading skills issues immediately and prevent further reading problems.

Keywords: Cluster 1 and 2, Kindergarten pupils, reading skills

INTRODUCTION

Reading is extremely important in everyone's life, from reading personal and basic information to reading instructions and directions. It is a fundamental building block for learning. There are numerous advantages to reading for everyone. It strengthens the brain, improves memory, and even concentration because reading requires a certain amount of focus. Reading also helps one to broaden one's vocabulary and understand words in their context. Most importantly, reading allows one to become a better reader and learner.

The Programme for International Student Assessment (PISA) is one of the most important international evaluations. The Philippines took part in PISA 2018 for the first time, providing the Philippines' Department of Education (DepEd) with baseline data on the country's educational quality. Among the 79 participating countries, the Philippines ranked lowest in reading and second lowest in science and math. The poor performance spurred the Philippine government to implement initiatives aimed at addressing "the urgent need to improve the quality of basic education in the Philippines (Hawk, King & Trinidad, 2021)." Furthermore, according to the World Bank (2022), the Philippines is at the bottom of the 2022 State of Global Learning Poverty report, with a rate of over 90%, 9 out of 10 children in the Philippines at late primary age are not proficient in reading. Although assessment reports on reading skills in the Philippines have been not good in recent years, the pandemic and distance learning have clearly had a negative impact and worsened the situation. Children's learning disparities have become more noticeable as a result of extended school closures. There is growing proof that kids from underprivileged backgrounds and other marginalized groups lose more academically. Prior to the closures, kids with the weakest foundational literacy were more likely to have experienced greater learning losses. Now that

face-to-face classes have begun, Kindergarten teachers in Sariaya West District have faced identical challenges, as some children have demonstrated a lack of foundational literacy that should be gained at home, where parents or guardians should be constructing.

The researcher was motivated to conduct this study in order to identify the level of reading skills of Kindergarten students, particularly in Sariaya West District, as this affects both parties directly and/or indirectly. This would help students improve their reading skills by allowing them to practice and assess their abilities. This would also help address the current issues and problems faced by Kindergarten students and teachers in Sariaya West District as a result of the effects of distance learning in the previous two years due to the pandemic, especially now that it has transitioned from distance learning to face-to-face learning. As a result, further and deeper problems that could lead to a lack of reading skills among Sariaya West District Kindergarten students will be avoided. Furthermore, this research would assist teachers in better addressing issues that have already been identified in Kindergarten students, as well as families in fostering foundational literacy at home and creating more meaningful literacy opportunities, benefiting both parties.

Statement of the Problem

This study attempted to identify level of reading skills of kindergarten learners in Sariaya West District

Specifically, it sought to answer the following:
1. What is the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District in terms of:
    1.1 Letter names and sound;
    1.2 Recognize words that rhymes;
    1.3 Matching words by beginning or ending sound;
    1.4 CVC patterns; and,
    1.5 Recognize some words by sight?
2. Is there a significant difference between the reading level of Kindergarten in Clusters 1 and 2?
3. Based from the results in this study, the material can be developed to enhance the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District?

METHODOLOGY

This section contains the method of research population, sample size, and sampling technique, description of the respondents, research instrument, data gathering procedure, and the statistical treatment of data.

Research Design

This study used the descriptive survey method to determine the level of reading skills of kindergarten learners in Sariaya West District. As stated by Aggarwal and Ranganathan (2019), a descriptive study is one that is designed to describe the distribution of one or more variables without regard to any causal or other hypothesis. The researcher produced a survey questionnaire as an instrument to identify the level of reading skills of kindergarten learners in Sariaya West District. Based on the result, the researcher will be able to identify the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District in terms of letter names and sound, recognize words that rhyme, matching words by beginning or ending sound, CVC patterns, recognize some words by sight; the significant difference between the reading level of Kindergarten in Clusters 1 and 2; and develop a material to enhance the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District.

Participants

Fifty (50) Kindergarten pupils in each of the two different Clusters of Sariaya West District were the respondents of the study. The respondents were selected through simple random sampling. Gravetter and Forzano (2022) stated that, in simple random sampling, each member of the population has an equal chance of being chosen as part of the sample. According to them, the logic behind simple random sampling is that it removes bias from the selection procedure and should result in representative samples.

Furthermore, the two different Clusters of Sariaya West District are namely: Cluster 1, which is the Gov. Natalio and Susana Enriquez Elementary School, and Cluster 2, which is Lutucan 1 Elementary School.

Research Instrument

The researcher utilized a survey questionnaire to determine the level of reading skills of kindergarten learners in Sariaya West District in terms of letter names and sound, recognizing words that rhymes, matching words by beginning or ending sound, CVC patterns, and recognize some words by sight. Each variable would be composed of 5 words for the respondents to read with a totality of 25 items.

In addition, the researcher acquired material and ideas from a variety of sources, including books and the Internet.

To measure the learning level of Kindergarten pupils in terms of letter names and sound, recognize words that rhymes, matching words by beginning or ending sound, CVC patterns, recognize some words by sight, the following scale and descriptive rating was used to interpret the weighted mean:

Score	Descriptive Rating
4.01 – 5.00	Outstanding
3.01 – 4.00	Very Satisfactory
2.01 - 3.00	Satisfactory
1.01 - 2.00	Poor
0 – 1.00	Did Not Meet Expectation

Procedure

The researcher secured the school's Division Superintendent's permission through a letter to conduct the study at Sariaya West District. As soon as permission was granted, the questionnaire was personally administered to the respondents while observing health protocols to avoid any unfortunate events. The distribution of questionnaire copies came with detailed instructions as to content to avoid misinterpretation. After thorough explanation, the researcher requested the respondents to answer the questionnaire honestly and sincerely. The researcher entertained questions and clarifications regarding the contents.

Data Analysis

Data that was gathered was subjected to the following statistical treatment:
1. The frequency count was used to determine the category of the the reading level of Kindergarten pupils in Clusters 1 and 2 in Sariaya West District where the scores fell;
   Percentage was used to determine the percentage of the equivalent of the students' scores;
   Ranking was used to determine the rank of the students' scores;
   Mean was used to determine the average scores of the students;
   Standard deviation was used to determine the compression or dispersion of data analyzed.
2. In determining the significant difference between the reading level of Kindergarten in Clusters 1 and 2, t-test was used.

RESULTS AND DISCUSSIONS

This chapter presents the discussion and analysis of the gathered data which is interpreted to reveal the reading level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District in terms of letter names and sound, recognize words that rhymes, matching words by beginning or ending sound, CVC pattern, recognize some words by sight and the significant difference of the reading level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District.

Reading Level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District

Table 1 on the succeeding page shows the frequency, percentage distribution and rank of reading level of kindergarten pupils in terms of recognizing words that rhymes in Clusters 1 and 2 of Sariaya West District. As shown, 16 pupils or 32% at rank 1 from Cluster 1 made poor score whereas six or 12% at rank 5 did not meet the expected reading level of kindergarten pupils in terms of recognizing

words that rhymes. With a mean score of 2.92, the Cluster 1 had a satisfactory reading level in terms of recognizing words that rhymes. On the other hand, kindergarten pupils from Cluster 2 received a satisfactory reading level with the highest frequency count of 17 or 34% at rank 1. Meanwhile, the outstanding reading level obtained the least frequency count of one or 2% at rank 5. With a poor reading level, the Cluster 2 received a mean score of 2.38. Comparing the results, Cluster 1 Pupils have outperformed in recognizing words that rhymes compared to Cluster 2 Pupils as given by the mean difference of 0.54.

Table 1. Reading Level of Kindergarten Pupils in Terms of Recognizing Words that Rhymes

Recognizing Words that Rhymes	Cluster 1			Cluster 2		
	F	*P*	*R*	*F*	*P*	*R*
5 (Outstanding)	9	18	3	1	2	5
4 (Very Satisfactory)	7	14	4	8	16	4
3 (Satisfactory)	12	24	2	17	34	1
2 (Poor)	16	32	1	13	26	2
0-1(Did not Meet Expectation)	6	12	5	11	22	3
Mean Score	**2.92 (Satisfactory)**			**2.38 (Poor)**		

F = Frequency, P = Percentage, R = Rank

According to research entitled Developing Spoken Fluency Of Young Learners With The Help Of Rhymes conducted by Shoniyozovna (2022), 'reading' simple rhymes that young learners already know by heart is an important step in learning to read fluently. Children enjoy dictating a well-known rhyme while pointing to the written words in the text because it teaches them that they can read in English. At this stage, young learners can only read language that they already know orally in rhymed phrases. This 'reading' leads them to recognize the shapes of recurring words and, eventually, to build their own banks of words that they can recognize and 'read.' Around the same time, they start analyzing the sounds of words they recognize. Collecting rhyming words is a popular game to encourage. Young readers who can read rhymes will naturally progress to simple poems. Children's ability to memorize rhymes and poems, if fostered beyond the age of eight, appears to be a lifelong skill, similar to language acquisition.

Table 2. Reading Level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District in Terms of Letter Names and Sounds

Recognizing Words that Rhymes	Cluster 1			Cluster 2		
	F	*P*	*R*	*F*	*P*	*R*
5 (Outstanding)	1	2	5	7	14	5
4 (Very Satisfactory)	17	34	1	11	22	2.5
3 (Satisfactory)	12	24	2.5	8	16	4
2 (Poor)	12	24	2.5	13	26	1
0-1(Did not Meet Expectation)	8	16	4	11	22	2.5
Mean Score	**2.80 (Satisfactory)**			**2.72 (Poor)**		
Mean Score	**2.92 (Satisfactory)**			**2.38 (Poor)**		

F = Frequency, P = Percentage, R = Rank

Presented on Table 2 are the frequency, percentage distribution and rank of reading level of kindergarten pupils in terms of letter names and sounds in Clusters 1 and 2 of Sariaya West District. Out of 50 total pupil-respondents in Cluster 1, 17 of them or 34% at rank 1 got very satisfactory score while one or 2% made an outstanding reading level of of kindergarten pupils in terms of letter names and sound. With the mean score was 2.80, Cluster 1 received a satisfactory reading level of kindergarten pupils in terms of letter names and sounds in Sariaya West District. On the part of the pupil-respondents from Cluster 2, the poor score gained the highest frequency count of 13 or 26% at rank 1 whereas the outstanding score gained the least frequency count of seven or 14% at rank 5. The mean score of Cluster 2 was 2.72 or satisfactory reading level in terms of letter names and sounds. In comparison, Cluster 1 Pupils of Sariaya

West District have better performances in reading letter names and sounds as compared to Cluster 2 Pupils as evidenced by a mean difference of 0.08.

Conforming to the above results, learning letters can be difficult for young children, according to Dougherty as cited by Isgett and Mann (2018). In his article, Using Ipads To Increase Students' Letters And Letter Sounds Knowledge, he discussed how some letters are more difficult than others and how teachers must keep this in mind when teaching young children. Given that letters are an abstract, unimportant concept for the majority of children, it is critical to use appropriate strategies to teach letter sounds so that students can be successful in letter/letter sound recognition.

Table 3 on the succeeding page made known the frequency, percentage distribution and rank of reading level of kindergarten pupils in terms of matching words by ending or beginning sound in Clusters 1 and 2 of Sariaya West District. As stated in the table, out of 50 total-pupil-respondents from Cluster 1, 21 of them or 42% at rank 1 gained poor scores in matching words by beginning or ending sound. On the contrary, three or 6% at rank 5 got very satisfactory score. Cluster 1 received a mean score of 2.62 or satisfactory in matching words by beginning or ending sound. With respect t to the scores of the pupil-respondents from Cluster 2, the satisfactory score garnered the highest frequency count of 13 or 26% at rank 1 while, the very satisfactory score of gained the least frequency count of seven or 14% at rank 5. With a mean score of 2.80, Cluster 2 received a satisfactory score in matching words by beginning or ending sound. Based from the results, Cluster 2 Pupils of Sariaya West District outperformed Cluster 1 in matching words in beginning or ending sound with the mean difference of 0.18.

Table 3. Reading Level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District in Terms of Matching Words by Beginning or Ending Sound

Matching Words by Beginning or Ending Sound	Cluster 1			Cluster 2		
	F	*P*	*R*	*F*	*P*	*R*
5 (Outstanding)	17	34	2	9	18	4
4 (Very Satisfactory)	3	6	5	7	14	5
3 (Satisfactory)	4	8	4	13	26	1
2 (Poor)	5	10	3	11	22	2
0-1(Did not Meet Expectation)	21	42	1	10	20	3
Mean Score	2.62 (Satisfactory)			2.80 (Satisfactory)		

F = Frequency, P = Percentage, R = Rank

Phonemic Awareness, according to Akib, Syatriana, and Ebrahimi (2020), Principle for the Evaluation of Reading Assessment Tools, are sound units that provide spoken words to develop the ability to focus on and manipulate phonemes in spoken words. Phonemic awareness is concerned with realistic reading performance, and it is important for students to improve their capacity. Some of the skills involved in phonemic awareness include identifying specific sounds at the beginning, middle, and end of words. For instance, join /s/ and /it/ to form sit. It is not, however, always consistent. Learning phonics will help students read and spell more accurately. Students should develop these early reading skills because they introduce them to the relationship between letters and sounds. The idea that printed text represents the sounds of spoken words is important for children to grasp.

Table 4. Reading Level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District in Terms of CVC Pattern

CVC Pattern	Cluster 1			Cluster 2		
	F	*P*	*R*	*F*	*P*	*R*
5 (Outstanding)	5	10	4	2	4	5
4 (Very Satisfactory)	3	6	5	7	14	4
3 (Satisfactory)	21	42	1	12	24	3
2 (Poor)	6	12	3	16	32	1
0-1(Did not Meet Expectation)	15	30	2	13	26	2
Mean Score	2.50 (Satisfactory)			2.26 (Satisfactory)		

As revealed on Table 4 are the frequency, percentage distribution and rank of reading level of kindergarten pupils in terms of CVC pattern in Clusters 1 and 2 of Sariaya West DistrictAs discussed in Table 4, out of 50 total-pupil-respondents from Cluster 1, 21 of them or 42% at rank 1 made satisfactory score of 3. Furthermore, three or 6% at rank 5 got very satisfactory score in reading words in CVC pattern. With the mean score was 2.50, Cluster 1 had a satisfactory reading in terms of CVC pattern. On the part of the scores of the pupil-respondents from Cluster 2, the poor score got the highest frequency count of 16 or 32% at rank 1 while, the outstanding score made the least frequency count of two or 4% at rank 5. The mean score was 2.26 which means that Cluster 2 received a poor reading level in terms of CVC pattern. Weighing-up the results, Cluster 1 Pupils have better performances in CVC patterns compared to Cluster 2 Pupils as stated by the mean difference of 0.24.

According to the findings of Mojares' (2019) study entitled Development of Reading Activities on Word Recognition Skills in CVC Word Pattern among Grade 1 Pupils at Florencia A. Masilungan MES, students who struggled with letter-sound relationships were less likely to read and recognize CVC words. As a result, common errors were made, most notably mispronunciation and refusal to read. The suggested reading activities can be of great assistance in the enhancement and enrichment of grade one readers.

The table on the succeeding page presented the frequency, percentage distribution and rank of reading level of kindergarten pupils in terms of rhymes recognizing some words by sight in Clusters 1 and 2 of Sariaya West District. As see in Table 5, out of 50 total-pupil-respondents from Cluster 1, 28 of them or 56% at rank 1 did not meet expectation of reading level of kindergarten pupils in terms of recognizing some words by sight. Moreover, none or 0% at rank 5 got very satisfactory score. The Cluster 1 received a poor reading level of kindergarten pupils in terms of recognizing some words by sight with the mean score was 1.50. On the other hand, pupil-respondents from Cluster 2, received a poor score and got the highest frequency count of 26 or 52% at rank 1 while, the outstanding score made the least frequency count of one or 2% at rank 5. The mean score was 1.58 or poor reading level of kindergarten pupils in terms of recognizing some words by sight was what Cluster 2 had received. Comparing the results, Cluster 2 kindergarten pupils of Sariaya West District have better performances in recognizing some words by sight compared to Cluster 1 Pupils as given by the mean difference of 0.08

Table 5. Reading Level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya West District in Terms of Recognizing Some Words by Sight

Recognizing Some Words by Sight	Cluster 1			Cluster 2		
	F	*P*	*R*	*F*	*P*	*R*
5 (Outstanding)	2	4	4	1	2	5
4 (Very Satisfactory)	0	0	5	2	4	4
3 (Satisfactory)	6	12	3	6	12	3
2 (Poor)	14	28	2	15	30	2
0-1(Did not Meet Expectation)	28	56	1	26	52	1
Mean Score	**1.50 (Poor)**			**1.58 (Poor)**		

F = Frequency, P = Percentage, R = Rank

The indicated above coincided with what Celik (2019) stated in his study, A Study on The Factors Affecting Reading And Reading Habits Of Preschool Children, that if children are exposed to written materials frequently in their environment, they begin to make a connection between spoken and written language, even if they do not know how to read. Posters, pictures, books, letters, signs, newspapers, and other written materials with inscriptions teach children that written language corresponds to verbal language and that this happens through reading.

Significant Difference Between the Reading Level of Kindergarten Pupils in Sariaya West District

As gleaned in the succeeding table, the computed t-value of 2.07 for recognizing words that rhymes have a corresponding p-value of less than 0.05, thus "rejecting" the null hypothesis that "there is no significant difference between the reading level of Kindergarten in Clusters 1 and 2 in terms of recognizing

words that rhymes." This generalized that a significant difference on the reading level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya Quezon in terms of recognizing words that rhymes exist.

Table 6. Detailed Table Of The Significant Difference Between the Reading Level of Kindergarten Pupils in Terms of Letter Names And Sounds, Recognizing Words That Rhymes, Matching Words By Beginning Or Ending Sounds, CVC Pattern, And Recognizing Words By Sight

Variables	t-value	p-value	Decision	Interpretation
Letter Names and Sounds	0.30	0.76481	p>0.05, Failed to Reject Ho	**Not Significant**
Recognizing Words that Rhymes	2.07	0.04108	p<0.05, Reject Ho	**Significant**
Matching Words by Beginning or Ending Sounds	0.51	0.61120	p>0.05, Failed to Reject Ho	**Not Significant**
CVC Pattern	0.91	0.36506	p>0.05, Failed to Reject Ho	**Not Significant**
Recognizing Some Words by Sight	0.35	0.72709	p>0.05, Failed to Reject Ho	**Not Significant**

On the other hand, the computed t-values of 0.30 for letter names and sounds, 0.51 for matching words by beginning or ending sounds, 0.91 for CVC pattern, and 0.35 for recognizing some words by sight have corresponding p-values of more than 0.05, thus "accepting" the null hypothesis stating that "there is no significant difference between the reading level of Kindergarten in Clusters 1 and 2 in terms of letter names and sounds, matching words by beginning or ending sounds, CVC pattern, and recognizing some words by sight." These concluded that the reading level of Kindergarten Pupils in Clusters 1 and 2 in Sariaya, Quezon have no significant differences in terms of letter names and sounds, matching words by beginning or ending sounds, CVC pattern, and recognizing some words by sight.

In the study of by Teksan and Yilmaz-Alkan (2020) entitled "The Effects of Nursery Rhymes on Improving Reading Fluency of Fourth-Grade Primary School Students," students expand their vocabulary by reciting nursery rhymes, which adds numerous words to their vocabulary. Nursery rhymes can be used in the first step to work on sounds that children have difficulty pronouncing. Nursery rhymes help children pronounce sounds and words more accurately. Nursery rhymes, which contain both meaningful and meaningless words, ensure that students learn how to pronounce a word correctly in an entertaining and unusual way. Students' desire to read grows as they learn new words and improve their pronunciation. This desire, in turn, helps them improve their reading skills. Students cannot comprehend the relationship between symbols and sounds, confuse words or letters, have difficulty spelling, change the order of, add to, or remove letters in a sentence, and change or repeat words because they do not read words they do not recognize.

It was also cited in their study that reading and reciting nursery rhymes contribute significantly to the development of reading and speaking skills such as pronunciation, intonation, emphasis, and articulation. Nursery rhymes with repetitions, tautophony, and associations are difficult to recite. With nursery rhymes, students learn proper sound and word articulation as well as fluent speaking. Students' word recognition abilities are related to phonetics. Nursery rhymes play an important role in correct word pronunciation. As they recite nursery rhymes, students learn how to articulate vocals and pronounce words quickly.

CONCLUSIONS

From the results of the study, the following conclusions were drawn:
1. Both Clusters rated poor on recognizing some words by sight. Therefore, lessons on recognizing some words by sight need to be reinforced for both Clusters.
2. Recognizing words that rhymes have significant difference. Therefore, lessons on words that rhymes should be reinforced among Cluster 2 students.

RECOMMENDATIONS

Based on the conclusion, the recommendations below were offered:

1. The developed reading book that took into consideration the five variables is therefore recommended to address or improve the reading skills of kindergarten students in Sariaya West District.
2. Kindergarten parents and teachers should work together to reinforce the developed reading book and in order build and develop solid reading foundation skills.
3. Reading skills assessments should be performed on a regular basis to determine students' reading level skills in order to address reading skills issues immediately and prevent further reading problems.
4. Further research may be conducted in other locale and add more variables and participants.

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SALOOBIN AT MGA SALIK SA PAGKATUTO NG MGA OBRA MAESTRA SA FILIPINO NG MGA MAG-AARAL SA JUNIOR HIGH SCHOOL: BATAYAN SA IMPLIKASYONG PEDAGOHIKAL

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ABSTRACT

Ang pag-aaral na ito ay nakatuon sa saloobin at mga salik sa pagkatuto ng mga obra maestra sa Filipino ng mga mag-aaral. Palarawan, Koreleysyunal, at Komparatib ang pamamaraang gina-mit dito. Ang mga naging tugon sa pananaliksik na ito ay ang mga mag-aaral mula Las Piñas North National High School na nasa Junior High School. Isinagawa ang pananaliksik mula Mayo 2023-Enero 2024. Nilayon ng pag-aaral na ito na suriin ang saloobin at mga salik sa pagkatuto ng mga obra maestra sa Filipino ng mga mag-aaral. Ginamit ang stratified random sampling upang makuha ang bilang ng sample sa bawat antas ng tagatugon. Gumamit ng talatanungan at Grade Sheet sa pagkalap ng mga datos. Ginamit ang mga instrumentong pang-estadistika na frequency count/percentage, mean, chi square, analysis of variance, o ANOVA at t-test, pearson product-moment correlation. Lumalabas sa konklusyon ng pag-aaral na nakahihigit ang bilang ng mga babaeng mag-aaral kaysa sa mga lalake. Pinakamarami ang Baitang 10. Karamihan sa mga mag-aaral ay nakakuha ng markang napakahusay, samantala kakaunti ang kasiya-siya at medyo kasiya-siya. Sumang-ayon ang mga mag-aaral sa mga sa-loobin at salik sa pagkatuto ng mga obra maestra sa Filipino. May makabuluhang pagkakaiba sa saloobin at mga salik sa pagkatuto ng mga mag-aaral ng obra kapag pinangkat batay sa ka-nilang kasarian at baitang. Walang pagkakaiba sa saloobin at mga salik sa pagkatuto ng obra kapag pinangkat batay sa uri ng babasahin. May makabuluhang ugnayan ang akademikong performans ng mga mag-aaral sa kanilang saloobin at mga salik sa pagkatuto ng mga obra partikular sa kategoryang kapaligirang pampagkatuto lamang.

Keywords: obra maestra, saloobin, salik, pagkatuto, akademikong performans

PANIMULA

Masasalamin sa panitikan ang mayamang kultura ng mga Pilipino. Isang patunay na tayo ay may sariling pagkakakilanlan bilang isang lahi. Ito rin ang naging daan upang magising ang diwang maka-bayan at makamit ang kalayaan mula sa mga mananakop. Tunay ngang makapangyarihan ang panitikan sapagkat maaari itong makaimpluwensiya, makahikayat at magbigay-aral sa mambabasa.

Ang panitikan ay salamin ng ating kultura (Almario 2010). Bagaman mabilis ang pagbabagong dala ng pag-usbong ng makabagong teknolohiya, nananatili pa rin hanggang sa kasalukuyang sistema ng edukasyon ang pag-aaral sa mga pangunahing obra maestra sa Filipino sa Junior High School.

Ang panitikan ay isang paraan ng pagkuwento at paglalarawan ng iba't ibang realidad at karanasan, nagbubukas sa mata ng mambabasa sa iba't ibang perspektiba (Adichie 2006). Ang tunay na panitikan ay walang kamatayang nagpapahayag ng damdamin ng tao bilang ganti niya sa kanyang pang-araw-araw na pagsusumikap upang mabuhay at lumigaya sa kanyang kapaligiran (Atienza et al. 2001).

Ayon kay (Apuntan 2013), ang pag-aaral ng sariling panitikan ay napakahalaga. Sa pamamagitan nito ay malalaman, madarama, at masusumpungan natin kung paano nag-ugat at namuhay ang ating mga ninuno.

Samantala, ayon kay (Hamid 2017), ang panitikan ay isang porma ng pag-aaral at pagsusuri sa kahulugan ng pagiging tao at pagkilala sa sarili. Ginagawa ito ng isang tao sa pamamagitan ng malikhaing pamamaraan. Hindi nga maikukubli na naging bahagi na ng buhay ng mga mag-aaral ang panitikan sila'y nakasasabay sa daloy ng kwento lalong-lalo na kung naiuugnay ito sa kanilang sariling karanasan.

Naisabatas noong 2013 ang Batas Republika Blg. 10533 na naglalayong mapabuti ang sistema ng batayang edukasyon sa Pilipinas na mas kilala bilang K to 12 Basic Education Program. Ayon dito, inilaan ang ikaapat na markahan sa Filipino sa junior high school para sa mga obra maestra. Para sa Ikapitong baitang, pag-aaralan ang awit na Ibong Adarna isang akdang hindi tukoy kung sino ang sumulat. Sa Ikawalong baitang naman ay ang koridong Florante at Laura na isinulat ni Francisco Balagtas. Samantalala para sa Ikasiyam na baitang ay ang Noli Me Tangere at sa Ikasampung baitang ay ang El Filibusterismo na mga nobelang akda ni Dr. Jose Rizal. Noon pa man ay malaki ang bahaging inilalaan sa panitikan sa kurikulum ng Filipino sapagkat mahalaga ito sa paghubog ng kaisipan ng mga kabataan.

Subalit naisasakripisyo ang tunay na diwa at gamit ng mga obra maestra sa Filipino lalong-lalo na at mabilis ang pagbabagong nagaganap dala ng makabagong teknolohiya. Naitutuon ang interes ng mga mag-aaral sa paglalaro ng mga mobile games sa computer at cellphone, naglalaan din sila ng mas maraming oras sa mga social media applications at panonood ng mga video sa internet at pagtangkilik sa Kdrama. Nagiging palaasa na sa pakikinig at panonood ang mga mag-aaral sa mga nakahandang video patungkol sa panitikang pinag-aaralan kaya't hindi na napalalalim ang kanilang pag-unawa sa binabasa. Nagbabago na rin ang hilig ng kabataan at naisasantabi na ang mga dapat maging prayoridad sa pagkatuto ng panitikan.

Ang interes ay makapangyarihang nakagaganyak na proseso na nagpapasigla sa pagkatuto, gumagabay sa pang-akademiko at larangang nais tunguhin na mahalaga upang magtatagumpay sa pag-aaral (Harackiewicz et. al 2018).

Sumakatuwid, mahalaga ang interes ng mga mag-aaral sa pag-aaral ng mga ipinagmamalaking obra maestra ng bansa. Bilang guro sa wika at panitikan, mahalagang malaman ang mga saloobin at mga salik sa pagkatuto ng mga obra maestra sa Filipino upang maiparating sa mga guro, mga paaralan at kagawaran ang resulta ng pagtataya na makatutulong upang mapabuti pa ang pagkatuto sa mga obra maestra sa Filipino.

LAYUNIN NG PAG-AARAL

Ang mga sumusunod na tiyak na layunin ay nabuo:
1. Tukuyin ang profayl ng mga mag-aaral batay sa kasarian, baitang at mga babasahin na binabasa sa tahanan?
2. Tukuyin ang saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino at mga salik sa kanilang pagkatuto.
3. Napaghahambing ang pagkakaiba ng saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino kapag pinangkat ayon sa kanilang profayl.
4. Napaghahambing ang pagkakaiba sa mga salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat ayon sa kanilang profayl.
5. Tukuyin ang akademikong performans ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino at ang kaugnayan nito sa kanilang saloobin at salik sa pag-aaral ng obra maestra sa Filipino.

PAMARAAN

Gumamit ang mananaliksik ng *descriptive and correlational* na pagsusuri. *Descriptive* upang mailarawan ang profayl ng mga mag-aaral, saloobin ng mga mag-aaral sa pag-aaral at salik sa pagkatuto ng mga obra maestra sa Filipino, at akademikong performans ng mga mag-aaral. Comparative upang masuri ang pagkakaiba ng saloobin ng mga mag-aaral sa pag-aaral at salik sa pagkatuto ng mga obra maestra sa Filipino kapag pinangkat batay sa kanilang profayl. Correlational upang makita ang ugnayan ng akademikong performans ng mga mag-aaral sa kanilang saloobin at salik sa pag-aaral ng obra maestra sa Filipino.

Ginamit bilang tagatugon ang mga mag-aaral sa junior high school ng Las Piñas North National High School Taong panuruan 2022-2023. Ang probability sampling na 95% confidence interval at 5%

margin errors ang ginamit sa pagtukoy ng mga tagatugon sa pag-aaral na ito. Gumamit ng talatanungan upang makuha ang profayl, saloobin at salik sa pagkatuto ng mga mag-aaral. Ang set ng talatanungan ay hinango sa dalawang pag-aaral, ang pag-aaral ni Pablo (2020) na pinamagatang Performans, Interes at Saloobin sa Pag-aaral ng mga Obra Maestra sa Filipino at ang pag-aaral nina Pascua (2023) na may pamagat na Mga Salik at Antas ng Pag-unawa ng mga Akdang Pampanitikan ng mga Mag-aaral sa Filipino. Ginamit ang mga instrumentong frequency count/percentage, mean, chi square, analysis of variance, o ANOVA at T-test, pearson product-moment correlation.

RESULTA

Profayl ng Mag-aaral

Talahanayan 1. Profayl ng mga mag-aaral

Variables	Frequency n=339	Percent %=100
Kasarian		
Lalaki	157	46.30
Babae	182	53.70
Antas		
Baitang 7	71	20.90
Baitang 8	86	25.40
Baitang 9	88	26.00
Baitang 10	94	27.70
Uri ng Babasahin		
Pocket book, dyaryo	45	13.30
magasin, komiks	96	28.30
wattpad (onlayn), e-book	134	39.50
diksyunaryo	64	18.90

Makikita sa Talahanayan 1 ang profayl ng mga mag-aaral. Batay sa kasarian, karamihan sa mga tagatugon ay mga babae 182 (53.70%) kaysa sa mga tagatugong lalaki 157 (46.30%).

Batay sa baitang, makikita na pinakamarami sa mga tagatugon ay Baitang 10 na may bilang na 94 (27.7%). Samantala, ang Baitang 9 ay may bilang na 88 (26.00%) na tagatugon, ang Baitang 8 ay may bilang na 86 (25.40%) na tagatugon at ang Baitang 7 na may bilang na 71 (20.90%) na tagatugon. Mapapansin na mababa ang bilang ng mga mag-aaral na nasa mababang baitang kung ikukumpara sa mas mataas na baitang.

Batay sa uri ng babasahin na taglay ng mga mag-aaral, karamihan sa mga tagatugon ang may *wattpad* (onlayn) at *e-book* 134 (39.50%). Habang katamtaman ang bilang mga tagatugon na may magasin at komiks 96 (28.30%). Samantala, kaunti lamang sa mga tagatugon ang may diksyunaryo 64 (18.90%) at bibihira ang may *pocket book* at dyaryo 45 (13.30%). Mapapansing malaki ang agwat ng bilang ng mayroong makabagong uri ng babasahin kung ikukumpara sa mayroong tradisyunal na uri ng babasahin.

Saloobin ng mga Mag-aaral sa Pag-aaral ng Obra Mestra sa Filipino

Ang saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino ay lubos na sumasang-ayon na mas natuto ang mga mag-aaral dahil sa estratehiya ng guro sa pagtuturo (3.55). Samantala, sumasang-ayon na iniisip muna ng mag-aaral ang isasagot sa mga pasalitang pagsusulit bago sabihin (3.47) kinagigiliwan ang mga paksa sa obra maestra at masayang matuto ng obra maestra kahit pakonti-konti lang na may parehong mayroong mean na 3.43. Sumasang-ayon ito sa resulta ng pag-aaral ni Transona Jr., (2002) na nasa palad ng guro nakasalalay ang mga malilikhaing mga gawaing magagawa ng mag-aaral.

Sa kabilang dako, hindi naman sinasang-ayunan ng mga mag-aaral na hindi sila komportable sa pag-aaral ng obra maestra (1.78), natatakot silang pag-aralan ang obra maestra (1.70) ang pag-aaral ng obra ay pagsasayang lang ng oras at hindi interesadong matuto ng obra maestra na may parehong *mean* na 1.60.

Lumalabas sa pag-aaral na ang mga mag-aaral ay may positibong saloobin patungkol sa pag-aaral ng mga obra maestra tulad ng pakikinig sa guro, pag-unawa sa binasa at pagkakaroon ng interes sa mga obra maestra.

Pagkakaiba sa saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kasarian

Higit na sumasang-ayon ang mga babae kaysa mga lalaki na mas natututo sila dahil sa estratehiya ng guro sa pagtuturo (0.04), kinagigiliwan nila ang mga paksa sa obra maestra (0.01), nais nilang matutunan ang mga obra maestra dahil makatutulong ito sa pagpapahalagang pansarili (0.00), maglalaan ng oras para malaman pa ang nilalaman ng obra maestra (0.01), nais pag-aralan ang obra maestra dahil mayaman sa mga interesadong mga pagsasanay (0.02) at ninanais na ang mga libro ng obra maestra ay naglalaman pa ng mga gawain patungkol sa kultura (0.04).

Sumasang-ayon ito sa isinagawang pag-aaral nina Cebulla at Levin (2018) na pinamagatang "*Gender Differences in Attitudes and Perceptions of Literature*" na mayroong makabuluhang pagkakaiba ang babae at lalaki sa kanilang pag-uugali at pananaw tungkol sa panitikan. Napag-alamang ang mga babae ay may mas mataas na lebel ng kasiyahan at pagpapahalaga sa panitikan.

Sa kabilang dako, higit na sumasang-ayon ang mga lalaki kumpara sa mga babae na nais nilang makatapos ng obra maestra upang tumalino (0.00) makatutulong ito sa paghahanap ng mga kaibigan (0.03), mas alam ng iba ang paksa ng obra maestra kaysa sa kanila (0.00), mas gustong pag-aralan ang ibang panitikan (0.00) at higit na natutuwa ang guro sa perpormans kaysa pasulat na gawain (0.00). Samantala, nakahihigit ang hindi sumasang-ayong mga lalaki kaysa mga babae na natatakot silang pag-aralan ang obra maestra (0.04), napilitan lamang silang pag-aralan ang obra maestra (0.00), ang obra maestra ay mahirap pag-aralan (0.00), ang pag-aaral ng obra ay pagsasayang lang ng oras (0.00), hindi sila komportable sa pag-aaral ng obra maestra (0.00), hindi komportable sa pagganap sa mga dula-dulaan (0.00) at hindi interesadong matuto ng obra maestra (0.00).

Sumasang-ayon ito sa resulta sa pag-aaral ni O'Connor et al (2013) na may pamagat na "Gender *Differences in Literature: A Systematic Review*" na mas mataas ang lebel ng pag-unawa sa binasa at pagpapahalaga sa panitikan at lebel ng pagkahilig sa tekstong pampanitikan ng mga babae kaysa sa mga lalaki. Mapapansing may magkaibang saloobin ang mga lalaki at babae sa pag-aaral ng obra maestra sa Filipino. Ito'y may implikasyong ang mga babae ay mas nakatuon sa nilalaman ng obra maestra samantalang ang mga lalaki ay mas nakatuon sa aplikasyon ng obra maestra sa totoong buhay at may mataas na tiwala sa sariling kakayahan.

Pagkakaiba sa saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa baitang

Ang Baitang 8 ay higit na sumasang-ayon kaysa sa baitang 9 at 10 na magiging magaling ang tingin ng iba sa kanila kung mahusay na maisasalaysay ang obra maestra (0.02), masayang matuto ng obra maestra kahit pakonti-konti lang (0.00), marami silang natutunan dahil sa pangkatang gawain (0.00), nais nilang pag-aralan ang obra maestra dahil mayaman ito sa mga interesadong mga pagsasanay (0.01) at iniisip muna nila ang isasagot sa mga pasalitang pagsusulit bago sabihin (0.00). Sumasang-ayon ito sa pag-aaral ni Perez (2015) na ang *achievement* lebel ng mga mag-aaral sa maunawang pagbasa ay tataas kapag ginamitan ng estratehiyang sama-samang pagkatuto.

Ang Baitang 8 ay lubos na sumasang-ayon kaysa Baitang 7 at 9 na mas natututo sila dahil sa estratehiya ng guro sa pagtuturo (0.00), kinagigiliwan nila ang mga paksa sa obra maestra (0.00), marami silang natutunan dahil sa aktibong partisipasyon sa klase (0.01) ninanais nila na ang mga libro ng obra maestra ay naglalaman pa ng mga gawain patungkol sa kultura (0.02), at naging interesado sila sa obra maestra dahil sa iba't ibang kagamitang pampagtuturong ginamit ng guro (0.01)

Ang Baitang 9 naman ay lubos na hindi sumasang-ayon kaysa Baitang 7 at 8 na sila'y napilitang pag-aralan ang obra maestra (0.00) hindi sila komportable sa pagganap sa mga dula-dulaan (0.00), ang obra maestra ay mahirap pag-aralan (0.10), natatakot silang pag-aralan ang obra maestra (0.00), hindi sila interesadong matuto ng obra maestra (0.00) at hindi sila komportable sa pag-aaral ng obra maestra (0.00).

Samantala, ang Baitang 10 ay hindi sumang-ayon kaysa sa Baitang 8 na ang pag-aaral ng obra ay pagsasayang lang ng oras (0.01).

Ang resulta ng pag-aaral ay sumasang-ayon sa pag-aaral ni Chapman (2017) na "Ang Kaugnayan ng Antas ng Grado at Kakayahang Pampanitikan", ang mga mag-aaral na nasa mas mataas na baitang ay nagpapakita ng higit na kakayahang pampanitikan kaysa sa mga mag-aaral na nasa mas mababang baitang, tulad ng higit na kasanayan sa talasalitaan, pagsulat at pag-unawa. Lumalabas na may pagkakaiba sa saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang baitang. Nangangahulugang ang mga mag-aaral na kabilang sa mas mababang baitang ay nagpakita ng higit na interes sa mga obra maestra. Samantala, ang mga mag-aaral sa mas mataas na baitang naman ay nagpakita ng mas mataas na pag-unawa sa mga obra maestra.

Pagkakaiba sa saloobin ng mga mag-aaral sa pag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa uri ng babasahin

Lumalabas sa pag-aaral na lubos na sumasang-ayon ang Baitang 8 kaysa Baitang 9 at 10 na naging interesado sila sa obra maestra dahil sa iba't ibang kagamitang pampagtuturong ginamit ng kanilang guro (0.01). Samantala, ang Baitang 10 ay higit na sumasang-ayon kaysa Baitang 7 at 9 na higit na natutuwa ang kanilang guro sa perpormans kaysa pasulat na gawain (0.04).

Mapapansing magkaiba ang saloobin ng mga mag-aaral sa pag-aaral ng obra maestra batay sa mga uri ng babasahin. Lumalabas sa pag-aaral na nakahihigit ang nagtitiwalang mag-aaral sa mga kagamitang ginagamit ng guro, naniniwala rin ang mga mag-aaral na higit na pagtuunan ang performans kumpara sa pasulat na gawain.

Salik sa Pagkatuto ng Obra Maestra sa Filipino

Sa kategorya ng paraan ng pagtuturo ng guro, sumasang-ayon ang mga mag-aaral na mas nauunawaan nila ang pagtuturo ng guro kung ito ay maraming ibinibigay na halimbawa na mayroong kinalaman sa kanilang aralin (2.90). Nakawiwiling unawain ang obra maestra sa pamamagitan ng paggamit ng guro sa mga pangkaraniwang mga salita kaysa sa matatalinghagang salita (2.89) at lubos nilang nauunawaan ang talakayan sa obra maestra kung nagtataglay ito nang maayos na pagkasunod-sunod ng mga hakbang (2.86).

Sumasang-ayon ang mga mag-aaral na nakaaapekto ang paraan ng pagtuturo ng mga mag-aaral. Nangangahulugan na naniniwala ang mga mag-aaral na malaki ang ginagampanan ng guro upang maging lubos ang kanilang pagkatuto. Nagiging madali rin ang pag-unawa ng mga mag-aaral kung gagamit ng mga simpleng mga salita sa halip na malalalim na mga salita kung saan hitik ang mga obra maestra.

Sa kategorya ng kapaligirang pampagkatuto, sumasang-ayon ang mga mag-aaral na mas nailalaan nila ang oras at atensiyon sa pag-aaral sa tahimik na lugar (3.53). Hindi sila makapag pokus sa pakikinig sa talakayan ng obra maestra kapag maingay ang paligid (3.40) at mas nauunawaan nila ang binabasa kapag maaliwalas ang kanilang kapaligiran (3.39). Nangangahulugan na mahalaga sa mga mag-aaral ang tahimik at maaliwalas na lugar upang matuto. Nakadaragdag rin ito sa lebel ng kanilang pag-unawa sa obra maestra.

Sa kategorya ng estilo ng pagpagkatuto ng mag-aaral, sumang-ayon ang mga mag-aaral na nagiging matibay ang kanilang pag-unawa sa obra maestra sa pamamagitan ng pagtuklas sa mga panibagong perspektibong hatid nito (3.22). Mas nauunawaan nila ang obra maestra sa pamamagitan ng pagbabasa ng buod nito at mga ilang pagsusuri ukol dito (3.19) at nakatutulong sa kanilang pag-unawa sa obra maestra ang pakikinig sa pananaw ng iba ukol dito (3.17). Lumalabas sa resulta ng pag-aaral na ang mga mag-aaral ay mas natututo sa pamamagitan ng mga estilo sa pagkatuto kung saan naiuugnay nila sa sarili ang obra maestra.

Sa kategorya ng mga akdang babasahin, sumasang-ayon ang mga mag-aaral na labis nilang nauunawaan ang obra maestra na may simpleng ayos ng mga salita at mas napagtitibay ang kanilang pag-unawa kapag mayroong mga nakalakip na mga litrato ng pangyayari (3.31) na parehong may pinakamataas na mean. Mas nauunawaan nila ang obra maestra na nagtataglay ng kultura, tradisyon, pananaw sa buhay at pamumuhay (3.27) at mas nakatutulong sa kanilang pag-unawa sa obra maestra kung nagtataglay ng mga idyoma sa pagpapahayag ng kaalamang nilalaman ng akda. Lumalabas sa pag-aaral na mas madaling maunawaan ng mga mag-aaral ang babasahin kung simple lamang ang mga pagpapahayag ngunit nakikita pa rin ang kahalagahan ng pagiging masining ng obra maestra tulad ng paggamit ng mga idyoma.

Pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kasarian

Sa kategorya ng paraan ng pagtuturo ng guro, higit na sinang-ayunan ng lalaki kaysa babae na lubos nilang nauunawaan ang obra maestra kapag isinasaalang-alang ng guro ang dating karanasan bilang isang mag-aaral (0.04).

Sumasang-ayon ito sa pag-aaral nina Kaplan at Miele (2017) na pinamagatang "Gender *Differences in Teaching Style Preferences among College Students*" na may pagkakaiba ang mga lalaki at babae sa estilo ng pagkatuto. Karamihan ng mga lalaki ay mas pinipili ang multimodal instruction, samantala, mas pinipili ng mga babae ang single-mode instruction.

Sa kategorya ng paraan ng pagtuturo ng guro, higit na naniniwala ang lalaki na mahalagang maiugnay ang dating karanasan upang maunawaan ang obra. Nangangahulugang nasa kamay pa rin ng guro ang angkop na paraan kung paano maghahanap ng tamang estratehiya na tutugon sa ang pagkakai-ba-iba ng mga mag-aaral.

May pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang kasarian. Sa kategoryang kapaligirang pampagkatuto, higit na sumang-ayon ang mga babae kaysa lalaki na nahihirapan silang unawain ang tinatalakay na panitikan kapag mayroong nag-uusap sa kanilang tabi (0.00).

Tumutugon ito sa resulta ng pag-aaral nina Yang at Quadir (2018) na may pamagat na "*Effects of Prior Knowledge on Learning Performance and Anxiety in an English Learning Online Role-Playing Game*" na ang lebel ng pagganap sa pag-aaral at pagkabalisa na dulot ng kanilang kapaligiran ay nag-iiba batay sa magkakaibang lebel ng dating kaalaman ng mag-aaral.

Sa kategoryang kapaligirang pampagkatuto, may pagkakaiba ang lalaki at babae sa salik sa pagkatu-to ng obra maestra. Lumalabas sa pag-aaral na higit na naaapektuhan ang mga babae sa ingay na nalilikha sa kaligirang pampagkatuto kumpara sa mga lalaki.

May pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang kasarian. Sa kategoryang estilo ng pagkatuto ng mag-aaral, higit na sumang-ayon ang mga lalaki kaysa babae na mas nauunawaan nila ang obra maestra kapag sinasabayan ang pagbabasa ng pakikinig ng melodiya habang nagbabasa (0.00), higit nilang nauunawaan ang obra maes-tra sa pamamagitan ng pakikinig sa mga recorded audio nito kaysa sa aktuwal na pagbabasa (0.00) at hirap nilang bigyan ng interaksyon ang obra maestra kaya't hindi nila nauunawaan ang mga akdang pampanitikan (0.00).

Sumasang-ayon ito sa pag-aaral ni Sarabi-Asiabar et al. (2014) "*The relationship between learning style preferences and gender, educational major and status in first year medical students: a survey study from Iran*". Mas pinipili ng mga lalaking mag-aaral na gumamit ng pisikal na estilo ng pag-aaral. Ha-bang, ang mga babaeng mag-aaral ay mas pinipili ang estilo ng pag-aaral na gumagamit ng pandinig.

Sa kategoryang estilo ng pagkatuto ng mag-aaral may magkaibang paraan ang babae at lalaki pag-dating sa pagkatuto ng obra maestra sa Filipino. Ito'y may implikasyong mas pinipili ng mga lalaki kaysa mga babae ang makabagong uri ng mga estilo sa pag-aaral na nakatutulong upang maging mas mahusay pa sa obra maestra.

May pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang kasarian. Sa kategoryang mga akdang babasahin, higit na sumang-ayon ang mga lalaki kaysa babae na mas nauunawaan nila ang mga modernong uri ng akda ngayon kaysa sa obra maestra (0.02).

Sumasang-ayon ito sa pag-aaral nina Lee at Patel (2019) na pinamagatang "*The Impact of Gender-Inclusive Teaching Materials on Student Learning Outcomes*" na ang mga mag-aaral na gumamit ng gender-inclusive na mga babasahin ay nagpakita ng mataas na pakikipag-ugnayan, mataas na akade-mikong performans at mas positibong pananaw sa pag-aaral kumpara sa mga gumagamit ng tradisyunal na mga babasahin. Sinang-ayunan din ito ng pag-aaral na isinagawa nina Wang at Davis (2020) na pinamagatang "*Examining the Role of Gender-Responsive Teaching Materials in STEM Education*" na ang paggamit ng *gender-responsive* na babasahin ay mayroong positibong impluwensiya sa kumpyansa at tagumpay ng lalaki at babae sa mga asignatura sa STEM.

Lumalabas sa pag-aaral na ang mga lalaki at babae ay may magkaibang preperensiya sa akdang ba-basahin. Nangangahulugang nagpakita ng higit na interes sa modernong ideya pagdating sa mga mga akdang babasahin ang mga lalaki kumpara sa mga babae.

Pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa baitang

Sa kategoryang paraan ng pagtuturo ng guro, ang Baitang 7 ay higit na sumasang-ayon kumpara sa Baitang 8 at 9 na lubos nilang nauunawaan ang talakayan sa obra maestra kung nagtataglay ito nang maayos na pagkasunod-sunod ng mga hakbang (0.00) sumasang-ayong mas nauunawaan nila ang pag-tuturo ng guro sa pamamagitan ng paggamit nito sa mga makabagong kagamitang pagtuturo, halimbawa ng mga presentasyon sa telebisyon (0.02), sumasang-ayon na mas nakatutuon ang kanilang atensyon sa pag-aaral ng obra maestra kung animated video ito ng guro kaysa sa mga babasahing akda (0.01). Ang Baitang 7 ay higit na sumasang-ayon kaysa Baitang 9 at 10 na mas nauunawaan ang paksang tina-tatalakay sa obra maestra kung nakaaakit at may aktibong partisipasyon ang pamamaraan ng pagtuturo nito (0.02), at mas nauunawaan ang pag-aaral sa obra maestra kung humahamon sa kakayahan nila bilang mag-aaral (0.01). Samantala, ang Baitang 8 ay higit na sumasang-ayon kumpara sa sa ibang baitang na mas nauunawaan ang mga akdang kanilang binabasa sa obra maestra kung ito ay inihahalin-tulad ng guro sa totoong buhay (0.00).

Sumasang-ayon ito sa resulta ng pag-aaral nina Anderson at Patel (2018) na pinamagatang "*Examining the Impact of Teaching Styles on Student Learning Across Grade Levels*" na ang paraan ng pagtuturo ng guro ay maaaring maging kapaki-pakinabang sa isang partikular na baitang. Sumakatuwid, mahalagang bigyang-diin ang pagiging angkop ng paraan ng pagtuturo ng guro sa nagbabagong pangan-gailangan ng mag-aaral.

Mapapansing ang Baitang 7 at 8 ay higit na naniniwalang nakatutulong ang paraan ng pagtuturo ng guro sa kanilang pagkatuto. Nangangahulugang ang mga mag-aaral na kabilang sa mas mababang baitang ay higit na naniniwala kumpara sa mga mag-aaral na nasa mas mataas na baitang na ang paraan ng pagtuturo ng guro lalong-lalo na kung gumagamit ng makabagong kagamitan ay may positibong epekto sa kanilang pagkatuto.

Sa kategoryang kapaligirang pampagkatuto, ang Baitang 8 ay higit na sumasang-ayon kumpara sa ibang baitang na mas nailalaan ang oras at atensiyon sa pag-aaral sa tahimik na lugar (0.00). Pinatutuna-yan ito ng pag-aaral nina Smith at Johnson (2019) na may pamagat na "*The Impact of Learning Environ-ment on Student Learning Across Grade Levels*" na ang ayos at espasyo ng silid-aralan ay may malaking ginagampanan sa paghubog at pagkatuto ng mga mag-aaral. Nangangahulugang kailangang bigyang-diin ang kapaligirang pampagkatuto na angkop sa baitang ng mga mag-aaral. Ganundin ang isinagawang pag-aaral nina Garcia at Davis (2021) na pinamagatang "*Exploring the Interaction Between Learning Envi-ronments and Academic Performance in Elementary and High School*" na ang mga pagbabagong isinasagawa sa kapaligirang pampagkatuto ng mga mag-aaral ay may positibong epekto sa mababa at mataas na paaralan.

Sa kategoryang estilo ng pagkatuto ng mga mag-aaral, ang Baitang 8 ay higit na sumasang-ayon kumpara sa ibang baitang na nakatutulong ang pag-unawa sa obra maestra sa pamamagitan ng pakikinig sa pananaw ng iba ukol dito (0.03), mas nakatutulong ang kanilang pag-unawa ng obra maestra ang pagbasa nito sa pamamagitan ng pisikal na libro kaysa pagbabasa gamit ang gadgets gaya ng cellphone, tablet at computer (0.01), mas nauunawaan ang obra maestra sa pamamagitan ng pagbabasa ng buod nito at mga ilang pagsusuri ukol dito (0.01) mas nauunawaan ang obra maestra sa pamamagitan ng pagkilala sa may-akda nito (0.00). Samantala, ang Baitang 9 ay hindi sumasang-ayon kumpara sa Baitang 7 at 10 na hirap silang bigyan ng interaksyon ang obra maestra kaya't hindi nila nauunawaan ang mga akdang pampanitikan (0.00), at nahihirapan silang unawain ang obra maestra sapagkat hindi nila maiugnay ang kanilang sarili sa mga tekstong binabasa (0.00). Habang ang Baitang 10 ay higit na sumasang-ayon kung ikukumpara sa Baitang 8 na higit na nauunawaan ang obra maestra sa pamamagitan ng pakikinig sa mga recorded audio nito kaysa sa aktuwal na pagbabasa (0.00). Sumasang-ayon ito sa pag-aaral nina Nguyen at Clark (2020) na pinamagatang "*Examining the Relationship Between Learning Styles and Student Success in Middle School and High School*" na ang pag-unawa at epektibong estilo sa pagkatuto ay nakapagpapataas ng akademikong performans partikular sa transisyong nagaganap sa kalagitnaan ng elementarya hanggang sekundarya.

Napag-alamang may pagkakaiba ang mga mag-aaral na kabilang sa mataas at mababang baitang sa pagkatuto ng obra maestra. Ito'y may implikasyong ang mga mag-aaral na kabilang sa mas mababang baitang ay mas nakatuon sa tradisyunal na estilo ng pagkatuto kumpara sa mga mag-aaral na nasa mas mataas na baitang.

Sa kategoryang akdang babasahin, ang Baitang 7 ay higit na sumasang-ayon kumpara sa Baitang 9 at10 na lubos na nauunawaan ang obra maestra kung mayroong lamang katamtamang haba at hindi rin naman ganoon kaikli (0.03), labis nilang nauunawaan ang obra maestrang may simpleng ayos ng mga salita (0.02), mas napagtitibay ang kanilang pag-unawa kapag sa obra maestra na babasahin ay may-roong mga nakalakip na mga litrato ng pangyayari (0.00), nakatutulong sa pag-unawa sa obra maestra na nagtataglay ng mga idyoma sa pagpapahayag ng kaalamang nilalaman ng akda (0.00), mas nakatutulong sa kanila ang pag-unawa sa obra maestra dahil naglalaman ng paksang kaugnay sa kanilang kinawiwili-han (0.00), at mas nauunawaan nila ang obra maestra na nagtataglay ng kultura, tradisyon, pananaw sa buhay at pamumuhay na katulad sa kanila (0.00). Samantala, ang Baitang 9 ay higit na sumasang-ayon kaysa Baitang 7 at 8 na mas nauunawaan ang mga modernong uri ng akda ngayon kaysa sa obra maestra (0.01) at nahihirapan silang unawain ang obra maestra na tumatalakay sa ilang pangyayaring malayo na sa kasalukuyan (0.00). Habang ang Baitang 10 ay higit na sumasang-ayon kumpara sa Baitang 8 na hirap silang unawain ang obra maestra na mayroong mga pangyayaring malayo sa totoong buhay (0.04).

Pinatutunayan ito ng pag-aaral nina Williams at Chen (2019) na pinamagtang "*Impact of Grade-Appropriate Teaching Materials on Student Learning Outcomes*" na ang paggamit ng mga babasahing nakadisenyo sa isang baitang ay may positibong epekto sa pakikilahok, pag-unawa at akademikong per-formans ng mga mag-aaral. Sinang-ayunan din ito ng pag-aaral na isinagawa nina Garcia at Patel (2020) na may pamagat na "*An Analysis of the Relationship Between Teaching Materials and Learning Prefer-ences Across Grade Levels*" na ang pagrebisa o pag-aangkop sa babasahin upang maitugma sa umuunlad na estilo sa pagkatuto ng mga mag-aaral ay may positibong epekto sa kanilang pakikilahok at pag-unawa sa nilalaman ng babasahin.

Lumalabas sa pag-aaral na may positibong epekto ang uri ng babasahin sa lebel ng pagkatuto ng mga mag-aaral. Ito'y may implikasyong mas natututo ang mga mag-aaral kung ang obra maestrang ka-nilang binabasa ay pinagaang bersiyon o naglalaman ng makabagong ideya kung saan mas madaling maiuugnay ng mga mag-aaral ang sarili sa obra maestra.

Pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa mga babasahin na binabasa sa tahanan.

Sa kategoryang paraan ng pagtuturo ng guro, walang makabuluhang pagkakaiba sa salik sa pagkatu-to ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang mga babasahin na binabasa sa tahanan.

Taliwas ito sa pag-aaral nina Smith at Chen (2019) na pinamagatang "*Impact of Teaching Style on Reading Comprehension Across Different Reading Materials*" na ang paraan sa pagtuturo ng guro na mabilis na nakaaangkop ay may positibong impluwensiya sa kakayahang umunawa sa iba't ibang uri ng babasahin ng mga mag-aaral.

Ganundin ang resulta ng pag-aaral nina Garcia at Patel (2020) na may pamagat na "*Exploring the Alignment Between Teaching Style and Student Preferences in Reading Instruction*" na kapag ang paraan ng pagtuturo ng guro ay nakaayon sa hilig ng mag-aaral ay tataas ang pakikilahok, motibasyon at magkakaroon ng pangkalahatang tagumpay sa pagbasa ang mag-aaral.

Sa kategoryang kapaligirang pampagkatuto, ang Baitang 7 ay higit na sumasang-ayon kumpara sa Baitang 8 at 10 na hindi nila magawang maunawaan ang panitikang binabasa kapag maraming taong nakapaligid sa kanila (0.04).

Makikitang nakaaapekto ang kapaligirang pampagkatuto sa pagkatuto ng mga mag-aaral sa obra maestra. Ang mga mag-aaral na nasa mas mababang baitang ay higit na naaapektuhan kung ikukumpara sa mga mag-aaral sa mababang baitang. Nangangahulugang may mas maiksing lebel ng pokus sa bina-basang babasahin ang Baitang 7 kumpara sa ibang baitang.

Sa kategoryang estilo ng pagkatuto ng mag-aaral, makikitang ang Baitang 9 ay higit na sumasang-ayon kaysa Baitang 10 na higit na nauunawaan ng mag-aaral ang obra maestra sa pamamagitan ng paki-kinig sa mga *recorded audio* nito kaysa sa aktuwal na pagbabasa (0.00). Ito ay may implikasyong kara-mihan ng mga mag-aaral ay gumagamit ng alternatibo o makabagong paraang kaiba sa mga tradisyunal na uri ng babasahin upang matuto.

Walang pagkakaiba sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino kapag pinangkat batay sa kanilang mga babasahin na binabasa sa tahanan sa kategoryang mga akdang babasa-hin.

Lumabas sa pag-aaral na isinagawa ni Ambrose et al (2010) na pinamagtang "The *Impact of Course Material on Student Learning in Higher Education*" na ang mga guro ay kinakailangang maging maingat sa pagpili at pagdidisensyo ng mga kagamitang pampagtuturo upang mapataas ang pagkatuto ng mga mag-aaral.

Ayon naman sa pag-aaral nina Córdova at Lazzara (2017) na may pamagat na "*The Impact of Interactive Learning Materials on Student Performance: A Case Study in Higher Education*" Ang paggamit ng mga interaktibong kagamitan tulad ng simulasyon at *multimedia resources* ay may positibong impluwensiya sa pagkatuto ng mag-aaral.

**Talahanayan 2. Akademikong performans ng mga mag-aaral
sa pag-aaral ng obra maestra sa Filipino**

Variables	Frequency n=339	Percent %=100
GWA		
90-100 Napakahusay	101	31.8 %
85-89 Lubhang kasiya-siya	85	26.7 %
80-84 Kasiya-siya	76	23.9 %
75-79 Medyo kasiya-siya	56	17.6 %
Average Mean: 87.75 – Satisfactory		

Makikita sa Talahanayan 2 pinakamarami sa mga mag-aaral ay mayroong markang 90-100 (31.8 porsyento) na may bilang na 101. Katamtaman ang bilang ng mga mayroong markang 85-89 (26.7 porsyento) na may bilang na 86. Samantala, kakaunti lamang ang bilang nga mga mayroong markang 80-84 (23.9 porsyento) na may bilang na 76 ang pinakamababa ang bilang ng mga mayroong markang 75-79 (17.6 porsyento) na may bilang na 56.

Sa kabuuan, lubhang kasiya-siya ang ipinakitang akademikong performans ng mga mag-aaral sa ikaapat na markahan kung saan pinag-aaralan ang mga obra maestra sa Filipino ay may average mean na 87.75. Nangangahulugang nakararami sa mga mag-aaral ay nagkamit ng matataas na marka sa kanilang pag-aaral sa mga obra maestra sa Filipino.

**Talahanayan 3. Ugnayan ng akademikong performans ng mga mag-aaral
sa saloobin sa pag-aaral ng obra maestra sa Filipino**

Mga saloobin sa Pag-aaral ng Obra Maestra sa Filipino	r-value	p-value
1. Gagamitin ko ang mga natutunan ko sa obra maestra saan man ako magpunta	0.05^{ns}	0.39
2. Kinagigiliwan ko ang mga paksa sa obra maestra	-0.12^*	0.03
3. Nais kong makatapos ng obra maestra upang tumalino	0.13^*	0.02
4. Makatutulong ito sa paghahanap ko ng mga kaibigan	0.03^{ns}	0.56
5. Masayang pag-aaralan ang obra maestra dahil makatutulong ito sa aking karir	0.00^{ns}	1.00
6. Magiging magaling ang tingin ng iba sa akin kung mahusay kong maisasalaysay ang obra maestra	-0.05^{ns}	0.40
7. Gagamitin ko ang napag-aaralan ko sa obra maestra sa aking pang-araw-araw na buhay	-0.03^{ns}	0.63
8. Masayang matuto ng obra maestra kahit pakonti-konti lang	0.02^{ns}	0.76
9. Nais kong matutunan ang mga obra maestra dahil makakatulong ito sa aking pagpapahalagang pansarili	-0.04^{ns}	0.51
10. Maglalaan ako ng oras para malaman pa ang nilalaman ng obra maestra	0.02^{ns}	0.76
11. Mas natuto ako dahil sa estratehiya ng aking guro sa pagtuturo	0.03^{ns}	0.52
12. Naging interesado ako sa obra maestra dahil sa iba't ibang kagamitang pampagtuturong ginamit ng aking guro.	-0.10^{ns}	0.08
13. Marami akong natutunan dahil sa pangkatang gawain	0.07^{ns}	0.18
14. Marami akong natutunan dahil sa aktibong partisipasyon sa klase	-0.19^*	0.00
15. Nais kong pag-aralan ang obra maestra dahil mayaman ito sa mga interesadong mga pagsasanay	-0.07^{ns}	0.22

16. Iniisip ko muna ang isasagot sa mga pasalitang pagsusulit bago sabihin	-0.01 [ns]	0.85
17. Ninanais ko na ang mga libro ng obra maestra ay naglalaman pa ng mga gawain patungkol sa kultura	-0.07 [ns]	0.18
18. Natatakot akong pag-aralan ang obra maestra	0.08 [ns]	0.14
19. Ako ay napilitang pag-aralan ang obra maestra	0.01 [ns]	0.84
20. Ang obra maestra ay mahirap pag-aralan	0.01 [ns]	0.88
21. Ang pag-aaral ng obra ay pagsasayang lang ng oras	0.09 [ns]	0.10
22. Mas alam ng iba ang paksa ng obra maestra kaysa sa akin	-0.03 [ns]	0.61
23. Mas gusto kong pag-aralan ang ibang panitikan	0.16*	0.00
24. Higit na natutuwa ang aking guro sa perpormans kaysa pasulat na Gawain	0.04 [ns]	0.52
25. Hindi ako komportable sa pag-aaral ng obra maestra	0.08 [ns]	0.13
26. Hindi ako komportable sa pagganap sa mga dula-dulaan	-0.02 [ns]	0.76
27. Hindi ako interesadong matuto ng obra maestra	0.04 [ns]	0.42

*Note: * significant, ns not significant*

Ugnayan ng akademikong performans ng mga mag-aaral sa saloobin sa pag-aaral ng obra maestra sa Filipino

Ipinapakita sa Talahanayan 3 ang ugnayan ng akademikong performans ng mga mag-aaral sa kanilang saloobin sa pag-aaral ng obra maestra sa Filipino. Mula sa mga saloobin, dalawa rito ang nagpapakita ng makabuluhan at negatibong ugnayan sa akademikong performans ng mga mag-aaral sa kanilang saloobin sa pag-aaral ng obra maestra sa Filipino. Kung gayon, ipinakikita sa resultang ito na ang mga mag-aaral na mayroong mababang akademikong performans sa Filipino ay higit na naniniwala na kinagigiliwan nila ang mga paksa sa obra maestra (0.03) at marami silang natutunan dahil sa aktibong partisipasyon sa klase (0.00). Nangangahulugang hindi nasusukat sa pagkahilig sa paksa at aktibong pakikilahok lamang ng mga mag-aaral ang pagkakaroon ng mataas na akademikong performans.

Samantala, ang mga mag-aaral naman na may mataas na akademikong performans ay naniniwalang nais nilang makatapos ng obra maestra upang tumalino (0.02) at mas gusto nilang pag-aralan ang ibang panitikan (0.00).

Sumasang-ayon ito sa pag-aaral ni Palma (2019) na pinamagatang "Komprehensyon sa mga Piling Akdang Panitikan at Akademik Perpormans ng mga Mag-aaral" na kung mas mataas ang antas ng komprehensyon ay mas mataas din ang magiging akademik perpormans ng mga mag-aaral.

Lumalabas sa pag-aaral na naaapektuhan ang akademikong performans ng mga mag-aaral batay sa kanilang saloobin sa pag-aaral ng obra maestra sa Filipino. Nangangahulugang magkakaroon lamang ng mataas na akademik performans ang mag-aaral kung lubos ang pag-unawa sa binasang obra maestra.

Ugnayan ng akademikong performans at salik sa pagkatuto ng mga mag-aaral ng obra maestra sa kategoryang paraan ng pagtuturo ng guro

Walang ugnayan ang akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino sa kategoryang paraan ng pagtuturo ng guro.

Taliwas ito sa pag-aaral na isinagawa ni Marzano et al (2001) na pinamagatang "Teacher *Effectiveness and Student Achievement: Investigating a Multifaceted Mode*" May mga estilo at estratehiya sa pagtuturo na maiuugnay sa pagtatagumpay ng mag-aaral.

Ganundin ang isinagawang pag-aaral ni Perera et al (2018) na may pamagat na "*The Impact of Teaching Methods on Student Achievement: A Longitudinal Study in Educational Achievement*" na mahalaga ang epektibong paraan sa pagtuturo upang mapataas at mapanatili ang tagumpay ng mag-aaral.

Ugnayan ng akademikong performans at salik sa pagkatuto ng mga mag-aaral ng obra maestra sa kategoryang kapaligirang pampagkatuto

May ugnayan ang akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino. Sa kategoryang kapaligirang pampagkatuto makikitang may makabuluhan at negatibong ugnayan sa akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino. Kung gayon, ipinakikita sa resultang ito na ang mga mag-aaral na mayroong mababang akademikong performans sa Filipino ay higit na naniniwalang madali nilang maunawaan ang kanilang binabasa kapag sila ay mag-isa lamang sa lugar (-0.14), madali silang mawalan ng pokus at hindi nauunawaan ang binabasa dahil sa mga ingay na nagmumula sa labas ng silid

-aralan (-0.15), nawawalan sila ng pokus sa pag-unawa kapag mainit ang kanilang paligid at walang ihip ng hangin na dumadaloy (-0.13), nahihirapan silang unawain ang tinatalakay na panitikan kapag mayroong nag-uusap sa kanilang tabi (-0.16), mas nauunawaan nila ang binabasa kapag maaliwalas ang kanilang kapaligiran (-0.15), hindi nila nagawang maunawaan ang panitikang binabasa kapag maraming taong nakapaligid sa kanila (-0.17), hindi sila makapag pokus sa pakikinig sa talakayan ng obra maestra kapag maingay ang paligid (-0.13).

Pinatutunayan ito ng pag-aaral ni Faulconer et. al. (2016) na pinamagatang "*The Impact of Classroom Environment on Student Learning*" na may makabuluhang ugnayan sa pagitan ng positibong kapaligirang pampagkatuto at mataas na akademikong performans. Ganundin ang pag-aaral ni Abboud (2016) na may pamagat na "*The Relationship Between Learning Environments and Academic Achievement in High School Science Classrooms*" na ang positibong kapaligirang pampagkatuto at iba pang salik tulad ng ugnayang guro at mag-aaral sa silid-aralan ay maiuugnay sa mas mataas na akademikong performans.

Lumalabas sa resulta ng pag-aaral na ang mababang akademikong performans ay may kaugnayan sa maiksing lebel ng pokus. Nangangahulugang ang mababang akademikong performans ng mag-aaral ay nakasalalay sa mababang lebel ng kanilang pokus sa pag-aaral.

Ugnayan ng akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino sa kategoryang estilo ng pagpagkatuto ng mag-aaral

Ipinakikita sa Talahanayan 27 na pinamagatang ugnayan ng akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino. May makabuluhan at negatibong ugnayan sa akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino sa kategoryang estilo ng pagpagkatuto ng mag-aaral. Kung gayon, ipinakikita sa resultang ito na ang mga mag-aaral na may mababang akademikong performans sa Filipino ay mas nauunawaan ang obra maestra sa pamamagitan ng pagtatala ng mahahalagang punto ng mga ito (0.02).

Samantala, ang mga mag-aaral naman na mayroong mataas na akademikong performans sa Filipino ay higit na naniniwalang nahihirapan silang unawain ang obra maestra sapagkat hindi nila maiugnay ang kanilang sarili sa mga tekstong kanilang binabasa (0.04). Nangangahulugang hindi direktang maiuugnay ang mga mag-aaral na gumagamit ng estilo ng pagkatuto tulad ng pagtatala ng mahahalagang detalye sa mataas na akademikong performans.

Pinatutunayan ito ng pag-aaral na isinagawa ni Barclay (2011) na pinamagatang "Learning *Styles and Academic Performance among Diverse Populations of Undergraduates*" na ang estilo sa pagkatuto ay maiuugnay sa mas mataas na akademikong performans ng mga mag-aaral na may iba't ibang kultura at pangkat-etniko kaya't mahalagang ikunsidera ang kultural na pagkakaiba-iba sa pag-aaral ng estilo sa pagkatuto.

Ugnayan ng akademikong performans sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa kategoryang mga akdang babasahin

May makabuluhan at negatibong ugnayan sa akademikong performans ng mga mag-aaral sa salik sa pagkatuto ng mga mag-aaral ng obra maestra sa Filipino sa kategoryang mga akdang babasahin. Kung gayon, ipinakikita sa resultang ito na ang mga mag-aaral na mayroong mababang akademikong performans sa Filipino ay labis na nauunawaan ang obra maestrang may simpleng ayos ng mga salita (0.03).

Samantala, ang mga mag-aaral naman na mayroong mataas na akademikong performans sa Filipino ay higit na naniniwalang hirap silang unawain ang obra maestra na mayroong mga pangyayaring malayo sa totoong buhay (0.05).

Lumalabas sa resulta ng pag-aaral na naaapektuhan ang akademikong performans sa paraan ng pag-unawa sa obra maestra. Ito ay may implikasyong ang mga mag-aaral na may mababang akademikong performans ay may mababang ring lebel ng pagsusuri sa obra maestra. Sa kabilang banda, ang mga mag-aaral naman na nagtamo ng mataas na akademikong performans ay nahihirapan sa pagsusuri sa mga obra maestrang naglalaman ng di kapanipaniwalang pangyayari.

KONKLUSYON

Ayon sa resulta ng pag-aaral tungkol sa saloobin ng mga mag-aaral at mga salik sa pagkatuto ng mga obra maestra sa Filipino ay lumabas ang mga sumusunod:

1. Mas marami ang babae kaysa sa mga lalaking tagatugon, mas mababa rin ang bilang ng mga naka-enrol sa mas mababang baitang kung ikukumpara sa mas mataas na baitang. Karamihan sa mga mag-aaral ay nagtataglay ng makabagong uri ng babasahin tulad ng wattpad (onlayn) at e-book sa kanilang tahanan.

2. Naging positibo ang saloobin ng mga mag-aaral sa pag-aaral ng mga obra maestra sa Filipino, karamihan ng mga mag-aaral ay sumasang-ayon sa mga ito.

3. Ang mga babae ay kakikitaan ng pagkahilig sa nilalaman ng obra maestra samantalang ang mga lalaki ay mas nakatuon sa aplikasyon ng obra maestra sa totoong buhay at may mataas na tiwala sa sariling kakayahan.

4. Ang mga mag-aaral na kabilang sa mababang baitang ay nagpakita ng mas mataas na interes sa pag-aaral ng obra maestra. Samantala, ang mga mag-aaral sa mataas na baitang naman ay nagpakita ng mas mataas na pag-unawa sa mga obra maestra.

5. Ang mga mag-aaral na may mababang akademikong performans ay madaling mawalan ng pokus lalong-lalo na sa hindi kaaya-ayang kapaligirang pampagkatuto. Sa kabilang banda, ang mga mag-aaral naman na nagtamo ng mataas na akademikong performans ay nahihirapan sa pagsusuri sa mga obra maestra lalong-lalo na sa aplikasyon nito sa totoong buhay. Makakamit lamang ang mataas na akademik performans ng mga mag-aaral kung lubos ang pag-unawa sa binasang obra maestra.

6. Lubhang kasiya-siya ang akademikong performans ng mga mag-aaral sa ikaapat na markahan kung saan pinag-aaralan ang mga obra maestra sa Filipino.

REKOMENDASYON

Ang rekomendasyon ay batay sa pangunahing resulta ng isinagawang pananaliksik, ang mga sumusunod ay iminumungkahi ng mananaliksik:

1. Himukin ang mga mag-aaral na gumamit ng mga mapagkakatiwalaang sanggunian o babasahin na makatutulong sa kanilang pagkatuto sa mga obra maestra sa Filipino.

2. Laging iugnay ang implikasyon ng mga obra maestra sa Filipino sa buhay ng mga mag-aaral upang mapanatili ang kanilang interes dito sila man ay umakyat sa mas mataas na baitang.

3. Paglinang ng talasalitaan upang maunawaan ng mga mag-aaral ang malalalim na mga salita na sagana sa obra maestra sa Filipino na makatutulong na mapasimple ang kumplikadong mga ideya o salitang maaaring magpalito sa mga mag-aaral.

4. Panatilihing tahimik at siguraduhing may sapat na espasyo ang bawat mag-aaral sa silid-aralan upang magkaroon ng pokus at maunawaan nila ang pinag-aaralang obra maestra sa Filipino.

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DEVELOPMENT AND EVALUATION OF AN INTERACTIVE LEARNING MATERIAL IN READING FOR ENGLISH 8

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ABSTRACT

This study was concerned with developing and evaluating an interactive learning material in reading for English 8. The study considered the Philippine Informal Reading Inventory (Phil-IRI) result in analyzing, designing, developing, implementing, and evaluating an interactive learning material in reading. A descriptive methodology of research was used to come up with the findings and final output of the study. This study was conducted in Canda National High School, Sariaya, Quezon, and was assessed by ten (10) learners and five (5) teachers. The researcher creates interactive learning material using the different platforms of social media and survey questionnaires as the research instrument of the study. The findings of this study revealed that the development of Interactive Learning Material in Reading provides helpful guidance in performing other tasks and activities that align with the K-12 curriculum guide. It is also an effective tool in ensuring learning.

INTRODUCTION

English is widely used all over the world. It is the language for studying in any subject, as it also helps in communication. It is important for everyone as it broadens the minds, develops emotional skills, and improves the quality of life by providing job opportunities. The subject itself plays an essential role in the life of the learners with the advancement of technology and the approaches considering the individual differences of every learner, especially when it comes to reading skills. Using the least learned skill in reading for English 8, facilitates into a pace of cognitive development.

Education is constantly changing. Learners are not the usual ones who sit down and take notes during discussions. Thus, in the classroom, teachers have materials to help the learners to understand the concepts of education. The balance of traditional and modern concepts in teaching were visible in every teacher. In the study of Li, Yamaguchi, and Takada, 2018, stated that teachers conducting self-development with interactive learning materials were highly motivated to achieve better teacher assessment, and teachers with interactive learning materials had higher learning satisfaction. Lessons and discussions must be engaging and interactive. Interactive, in terms of learning materials that continually emerge and rise as effective educational materials within the classroom environment. One of the popular interactive learning materials used in the Philippines that was published last February 2023 is the STAR BOOK, a digital

library that promotes e-learning, a user-friendly database accessible even when you don't have an internet connection. It compiled information from books, journals, magazines, newspapers, theses, dissertations, and films on how to make a living have all been digitized and made available to students and educators in the field of science and technology. Teachers can use the system's built-in lessons aligned with the DepEd k- 12 program. Kotobee is also popular, an interactive e-book software that transforms early literacy primers into interactive self-study guides with games, audio voiceover, on-screen drawing, and other functions to keep students engaged in reading.

Generally, developed interactive learning materials can be classified as an aid to have effective teaching and learning. Hence, it is the ability of the teachers to identify the quality and appropriateness

upon utilizing the developed interactive learning materials and guide students to acquire more information so as to bring them with an appreciation of the topic.

Interactive Learning Materials are tools that are used in facilitating the teaching-learning process. These are the materials that are used in the classroom to support the learning plan and objectives of the teachers. The development and evaluation of interactive learning materials is one of the aspects that help the learners understand and achieving their academic goals. Conducting research that promotes the advancement of teaching-learning materials enriches the educational system, making the learners more competitive and boosting their self- confidence on the subject. Interactive Learning Materials in the K-12 Philippine curriculum were taken by the government, specifically by the Department of Education, within the implementation of the improved basic education curriculum. It strengthens the skills and abilities of the learners that produce competent graduates.

Therefore, different methods of facilitating teaching and learning are required considering recent technological advancements in order to keep up with the trend and the rate of cognitive development of the new generation of students. The usage of interactive learning materials is one such strategy (ILM).

It is sometimes possible to interchange interactive learning with what is known as electronic learning (e-learning), and according to Pollard and Hillage (2001), as cited by Lapie et al. (2015), it is the "delivery and administration of learning opportunities to help individual performance and development." Lapie et. al (2015) described interactive learning as "a way of acquiring information or learning through hands-on means and described e-learning as "communication and learning activities through electronic media."

Based on the Philippine Institute for Development Studies, "Many schools were ill- equipped to provide knowledge on contemporary issues; teachers complained about lack of appropriate teaching materials and felt that they lacked sufficient knowledge." EDCOM also found out that there is too little investment in education, which causes the learners to have a low achievement rate and disparities in access to education.

Using interactive learning materials can make the learners engage themselves in more experiential learning that suits their abilities and capabilities. It also enables the teachers to utilize different platforms such as media and tools that make the learners. Through these learning materials, the learners build self-confidence, enthusiasm, and opportunities to collaborate and stay motivated.

The research study of Cavus, Ibrahim, British Journal of Educational Technology 48 (2), 625- 641, 2017, "Learning English using Children's Stories in Mobile Devices," shows that using interactive mobile applications improves the learning skills of the learners such as vocabulary, pronunciation, listening and comprehension. The learners who engage on the study found the interactive mobile application enjoyable and useful.

Furthermore, this study focused on developing and evaluating the effectiveness of Interactive Learning Material needed in order to adapt the trends that fit to the new generation of learners. Utilizing interactive learning materials in the Philippine classroom are very popular, especially among Filipino teachers. Most of the teachers developed their own material that suits the capabilities and abilities of the students. Through this study, the abilities of the learners will improve and boost their self-confidence in building their skills in English 8. It also visualizes a goal-oriented teaching-learning environment, student performances, and an effective direction to gain better results.

According to the study of Lorena Manaj Sadiku, 2015, Four skills activities in the language classroom serve many valuable purposes: they give learners scaffold support, opportunities to create contexts in which to use the language for exchanges of real information, evidence of their own ability (proof of learning) and, most important, confidence.

Statement of the Problem

This study aimed to develop and evaluate the interactive learning materials in reading for English 8, and specifically it also aimed to answer the following questions:
1. What is the least learned skill in reading for English 8 based on Philippine Informal Reading Inventory (Phil- IRI)?
2. What is the process of development of the interactive learning material in reading for English 8?
3. How do teachers and students evaluate the developed interactive learning materials in reading for English 8 in terms of:
   a. Accuracy

b. Relevance

c. Appropriateness?

4. Is there a significant difference between the evaluation of teacher and students on the development of interactive learning material in reading for English 8?

METHODOLOGY

This section contains the method of research, population, sample size, and sampling technique, description of the respondents, research instrument, data-gathering procedure, and the statistical treatment of the data.

Research Design

The study used the descriptive type of research in the conduct of the study wherein the collection of data to test hypothesis and answer questions concerning the current status of the subject of the study was obtained. The researcher made used of a self-made questionnaire regarding the students and teacher's evaluation of the developed interactive learning material in reading for English 8.

Participants

The researcher chose 10 grade 8 learners and 5 teachers from Canda National High School as the participant of the study. Purposive sampling technique used wherein discretion of the researcher form. It is chosen to be used because the researchers purely consider the purpose of the study, along with the understanding of the target audience. Thus, there is a selected group of individuals for the analysis of the study.

Research Instrument

The researcher used the Interactive Learning Materials and survey questionnaire for gathering data to determine the result of the study. The questionnaire designed by the researcher included items from books, observations and mostly from the internet undergoes rigid examination, critiquing, and validation. The panel of the researcher who is experts in the topic, head teachers, master teachers, and Doctor of Education who work hand in hand to finally came out with a reliable and valid instrument needed to conduct the study.

The respondents were guided by the rating scale value of "4" for Strongly Agree (SA); "3" for Agree (A); "2" for Disagree (D); and "1" for Strongly Disagree (SD) for the interpretation of their responses.

It validated by the expert people in the field using the validator's questionnaire assessment guided by the scale, interpretation, and description.

Research Procedure

To accomplish this study, the present researcher considered the following steps in gathering and managing the data:

The researcher used ADDIE Model which stands for analysis, design, development, implementation and evaluation. Analysis was used during the pre- test of PHIL- IRI. It was used to identify the least learned skills in reading for English 8. The result was used in designing the interactive learning materials for reading in English 8 including their abilities in reading. The development of material during the analysis and design were considered. It is the production of the learning materials using different methods. The used of different social media platforms in which the learners at present time were purely engaged like powtoon, youtube, facebook and messenger were used even the offline videos was also available to use. The implementation of the developed materials let the researcher used it by the learners during the teaching- learning process. It helped on the evaluation and identified the necessary materials to be used in the future. The researcher explained to the learners on how the interactive learning materials in reading work on the different platforms of social media. The evaluation made the researcher avoid bias information.

Necessary permits were also conducted. A letter of approval pursued from the Schools Division Superintendent of the Division of Quezon Province to conduct the said study among the chosen schools.

Upon completing the necessary permit, the researcher distributed the survey questionnaire to the school heads and teachers though google form. Since it utilized google forms the data were collected through a CSV file and were subjected to appropriate statistical treatment.

Afterwards, transcription of the surveys and analysis of results of the study was done using the quantitative method.

Data Analysis

To accomplish this study, the researcher considered the following steps in gathering and managing the data. The data collected was tallied, tabulated, analyzed and interpreted.

The researcher utilized Frequency and Percentage Distribution in problem number 1 to determine the least competencies of the students in Reading for English 8.

This was employed to determine the average responses at the respondents on the evaluation of the developed interactive learning materials in reading for English 8.

In addition, Weighted Arithmetic Mean was used in problem number 2 and 3 to determine the evaluation of the students and teachers in the developed interactive learning material. For the interpretation and analysis of data, the following descriptions will be utilized:

DISCUSSION OF RESULTS AND FINDINGS

Table 1. Evaluation of Teachers and Students in the developed Interactive Learning Material

Scale	Range	Descriptive Rating	
4	3.25-4.00	Strongly Agree	SA
3	2.50-3.24	Agree	A
2	1.75 -2.49	Disagree	D
1	1.00-1.74	Strongly Disagree	SD

Tally toll and SPSS utilized to determine the significant differences in question number 4, the researcher used tally toll and SPSS (Statistical Package for the Social Sciences). Specifically, Test of Normality, Test of Homogeneity or Test of Significance utilized to identify if the study used parametric or non-parametric tools.

RESULTS AND DISCUSSIONS

This part of the study shows the presentation, analysis and interpretation of the gathered data from the tests and questionnaires answered by the respondents.

1. Least Learned Skill in Reading for English 8.

The researcher used the Philippine Informal Reading Inventory (Phil- IRI) result of grade 8 learners from Canda National High School to identify the least learned skills in reading for English 8 and found out that the least learned skill in reading is the Reading Comprehension.

Table 2. Least Learned Skill in Reading for English 8

SECTION	FRUSTRATION	INSTRUCTIONAL	INDEPENDENT
Leo	16	21	1
Libra	25	17	0
Aries	25	14	1
Taurus	20	19	0
Gemini	15	22	0
Aquarius	19	19	0
Pisces	17	19	0
TOTAL	137	131	2
Rank	1	2	3

As gleaned in the table, the total scores of frustration is 137, instructional, 131 and independent is 2. These findings explained that most learners who need attention in reading comprehension and some of them understand and comprehend it well. As Gilakjani and Sabouri (2016), Journal of Studies in Education 6, explained that reading is an interactive process in which readers must construct a meaningful representation of a text using effective reading strategies.

The learning materials should provide learners different preferences that suit the abilities and capabilities of the learners.

Additionally, as cited in K-12: Key to Quality Education (2012), instructional materials shall be available; flexible enough to be localized, indigenized and enhanced based on respective educational and social contexts.

The materials must improve students' abilities and skills by engaging them in authentic, real-world tasks. It is stated that only meaningful tasks are given to the students in order to help them even after schooling especially to the application in everyday life situations. The learners must also developed their reading habits with the help of the teachers and integrate it in their teaching- learning process

Moreover, according to Regencia (2014), these materials would serve as a way to develop the student's skills and abilities through hands-on and meaningful learning experiences that will enable them to be competitive and productive citizen in the future.

2. Process of Development of the Interactive Learning Material in Reading for English 8.

The researcher used an online platform in editing and developing an interactive learning material. This can be downloaded and use it through their mobile phones. Videos, pictures, and content of the story are included.

The first step used by the researcher was ANALYSIS in which identifies learners' capabilities and abilities in reading. The researcher identifies those learners in the group of FRUSTRATION, INSTRUCTIONAL and INDEPENDENT using Phil- IRI (Philippine Informal Reading Inventory) result of Canda National High School. The researcher let the learners to answer it and identify the group that they belong.

The Philippine Informal Reading Inventory (Phil-IRI) Assessment Tool used as classroom-based assessment tool to measure and describe students' reading performance. Information gathered from the assessment helped classroom teachers to design and provide appropriate reading instructional materials for the learners. This approach emphasizes the need for education that is learner- oriented, responsive and culture sensitive. It also helped school heads to plan appropriate school reading program to improve learner's outcome.

Moreover, the researcher DESIGN the interactive learning material based on the needs of the learners using the result during the process of analysis.

Using the result of Phil- IRI, the researcher decided and considered to analyze the K-12 curriculum guide in English for Grade 8, that served as a guide in designing the reading materials. The researcher also considered the individual differences, interest, and abilities of the learners.

The third step used by the researcher was DEVELOPMENT, in which the result during the analysis and design were considered. The used of different social media platforms in which the learners at present time were purely engaged like Powtoon, Youtube, Facebook and messenger were used even the offline videos was also available to use.

Furthermore, the fourth step which was the IMPLEMENTATION of the developed materials let the researcher used it by the learners during the teaching- learning process. The researcher explained to the learners on how the interactive learning materials in reading work on the different platforms of social media.

Lastly, the researcher's final step was EVALUATION. This makes the researcher to think more critically and avoid bias information. Then afterwards, the chosen learners and teachers answer the survey questionnaire to identify if the interactive learning materials in reading for English 8 suit the abilities and capabilities of the learners.

3. Teachers and Students Evaluation on the Developed Interactive Learning Materials in Reading for English 8.

3.1 In Terms of Accuracy

Table 3. Teachers and Students Evaluation on the Developed Interactive Learning Materials in Reading for English 8 in Terms of Accuracy

Indicators	Teachers			Students		
	WM	VI	R	WM	VI	R
The content of the reading material is according to topics presented in K-12 Curriculum Guide for Grade 8 English.	4.00	SA	2	3.70	SA	4
The content is congruent with the objectives and desired learning competencies.	4.00	SA	2	3.90	SA	1.5
The reading material has organized tasks within the abilities and skills of the students.	3.80	SA	4	3.80	SA	3
The reading material conveys simple and understandable instructions.	4.00	SA	2	3.50	SA	5
The reading material uses words that are within the students' level of comprehension.	3.60	SA	5	3.90	SA	1.5
Composite Mean	**3.88**	**SA**		**3.76**	**SA**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
        A = Agree   VI = Verbal Interpretation

As revealed in Table 3, the teacher-respondents strongly agreed that the content of the reading material is according to topics presented in K-12 Curriculum Guide for Grade 8 English, the content is congruent with the objectives and desired learning competencies, and the reading material conveys simple and understandable instructions which gained the highest equal weighted means of 4.00 and similar ranks of 2. These means that the passage made by the researcher which is based on the K- 12 curriculum guide is accurate in terms of content and competencies.

Meanwhile, the said group of respondents also strongly agreed that the reading material uses words that are within the students' level of comprehension which got the least weighted mean of 3.60 and least rank of 5. As stated by Schallert (2017), Theoretical Issues in Reading Comprehension stated that the information content of pictures and its relationship to the text may play a crucial role and beneficial to the learners.

On the part of the students-respondents, they also strongly agreed that the content is congruent with the objectives and desired learning competencies, and the reading material uses words that are within the students' level of comprehension which got the highest equal weighted means of 3.90 and equal ranks of 1.5.

On the other hand, the said group of respondents strongly agreed that the reading material conveys simple and understandable instructions with the least weighted mean of 3.50 and least rank of 5.

The composite means of 3.88 for teachers and 3.76 for students concluded that they strongly agreed on the accuracy of the developed Interactive Learning Materials in English 8.

3.2. In Terms of Relevance

Table 4. Teachers and Students Evaluation on the Developed Interactive Learning Materials in Reading for English 8 in Terms of Relevance

Indicators	Teachers			Students		
	WM	VI	R	WM	VI	R
The reading material reflects the kind of environment students are exposed with.	4.00	SA	2	3.70	SA	1.5
The reading material is in-line with the K-12 Curriculum Guide for Grade 8 English.	3.60	SA	5	3.60	SA	3
The reading material presents adequate and understandable information relevant to students' knowledge.	4.00	SA	2	3.50	SA	4

Indicators	WM	VI	R	WM	VI	R
The reading material exemplifies objectives stated in the K-12 Curriculum Guide for Grade 8 English.	3.80	SA	4	3.70	SA	1.5
The reading material provides tasks that target the desired learning outcomes and competencies set for Grade 8 English.	4.00	SA	2	3.30	SA	5
Composite Mean	**3.88**	**SA**		**3.56**	**SA**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
      A = Agree   VI = Verbal Interpretation

As presented in Table 3, the teacher-respondents strongly agreed that the reading material reflects the kind of environment students are exposed with, the reading material presents adequate and understandable information relevant to students' knowledge, and the reading material provides tasks that target the desired learning outcomes and competencies set for Grade 8 English which garnered the highest equal weighted means of 4.00 and similar ranks of 2. The findings stated that the interactive learning material for reading is relevant to the life situation of the students. As K- 12 Basic Education Program 2012 states, these tasks should be designed to help learners develop their whole being as they engage in the wholesome process of meeting standards set for each grade level.

Furthermore, the said group of respondents also strongly agreed that the reading material provides tasks that target the desired learning outcomes and competencies set for Grade 8 English which got the least weighted mean of 3.60 and least rank of 5.

For the responses of the students-respondents, they also strongly agreed that the reading material reflects the kind of environment students are exposed with, and the reading material exemplifies objectives stated in the K-12 Curriculum Guide for Grade 8 English which made the highest equal weighted means of 3.70 and equal ranks of 1.5.

Moreover, the said group of respondents strongly agreed that the reading material conveys simple and understandable instructions with the least weighted mean of 3.30 and least rank of 5.

The composite means of 3.88 for teachers and 3.56 for students affirmed that they strongly agreed on the relevance of the developed Interactive Learning Materials in English 8.

3.3 In Terms of Appropriateness

Table 5. Teachers and Students Evaluation on the Developed Interactive Learning Materials in Reading for English 8 in Terms of Appropriateness

Indicators	Teachers			Students		
	WM	VI	R	WM	VI	R
The reading material elicits active participation of the students from class discussions.	4.00	SA	3	4.00	SA	3
The reading material enables the students to develop his/ he critical and analytical thinking.	4.00	SA	3	4.00	SA	3
The reading material serves as new learning materials in English 8.	4.00	SA	3	4.00	SA	3
The provided activities in each lesson are presented with clear directions and appropriate with the ability of the students	4.00	SA	3	4.00	SA	3
The reading material is easy to understand by the students.	4.00	SA	3	4.00	SA	3
Composite Mean	**4.00**	**SA**		**4.00**	**SA**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
      A = Agree   VI = Verbal Interpretation

As reflected in the table, the teacher and students respondents gave similar weighted means of 4.00 and ranks 3 for all the items. These generalized that the teachers and students strongly agreed on the appropriateness of the developed Interactive Learning Materials in English 8. These findings mean that the reading material serves as new learning materials in English 8.

4. Difference Between the Evaluation of Teachers and Students on the Developed Interactive Learning Material in Reading for English 8.

Table 6

Variables	t-value	p-value	Decision	Interpretation
Accuracy	0.79	0.44370	p>0.05, Failed to Reject Ho	Not Significant
Relevance	1.60	0.13361	p>0.05, Failed to Reject Ho	Not Significant
Appropriateness	0.00	1.0000	p>0.05, Failed to Reject Ho	Not Significant

As shown in the Table, when the evaluation of the teachers and students on the developed Interactive Learning Material in Reading for English 8 were compared, the computed t-values of 0.79 for accuracy, 1.60 for relevance and 0.00 for appropriateness have corresponding p-values of more than 0.05, thus failing to reject the null hypothesis.

These safely inferred that the evaluation of the teachers and learners on the developed Interactive Learning Material in Reading for English 8 have no significant differences in terms of accuracy, relevance and appropriateness. This means that developed interactive learning material was effective and useful to the teachers and learners. As self- regulated learning theory stated, that the ability of the learners to conduct self- regulated learning is vital in achieving learning objectives particularly in an environment where regular As Bruner's theory of instruction stated that effective teaching and learning has four significant aspects: attitude, knowledge, the materials used and consideration. The learner's ability to conduct self-regulated learning is vital in achieving learning objectives particularly in an environment were regular guidance and support from the instructors are not available.

CONCLUSIONS

Based on the findings on this study, the following conclusions were drawn:
1. The development of Interactive Learning Material in Reading provides helpful guidance in performing other tasks and activities in line with the K-12 curriculum guide for English 8 and with the use of different platforms of social media which are congruent to the lesson.
2. Interactive Learning Material is an effective tool in ensuring learning.
3. The interactive learning material in reading for English 8 are perceived by the teachers and learners as highly accepted in terms of accuracy, relevance and appropriateness.

RECOMMENDATIONS

Based on the conclusions formulated from the findings, the following recommendations are given:
1. It is recommended that the teachers should encouraged to produce interactive learning materials to divert the traditional way of teaching style into interactive way.
2. Aside from interactive learning material, other methods or strategies for reading may also be utilized and be subjected to research.
3. Other subjects may also use interactive learning material as a tool in improving the performance of the students.
4. Further research is recommended that focuses more on the interactive learning materials use for reading and will further discuss the subject, with the inclusion of the variables.

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EFFECT OF ONLINE LEARNING ENVIRONMENT TO THE ACADEMIC PERFORMANCE OF SELECTED STUDENTS IN MANUEL S. ENVERGA UNIVERSITY FOUNDATION CANDELARIA INC.

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ABSTRACT

The study aimed to determine the effect of the online learning environment to the academic performance of selected students in Manuel S. Enverga University Foundation Candelaria Incorporated. This study is to determine if there is an effect of the online learning environment in terms of parent support, physical environment, pupil's attitude, students' attitudes, strong and reliable internet connections, learning materials, and academic performance. Using the survey questionnaire for this research, the 50 selected students of Manuel S. Enverga University Candelaria determined the student's academic performance during the pre-pandemic (face-to-face class) and during the pandemic (online class). Based on the given result, the researcher developed an action plan on the effect of online learning environment to the academic performance of the students. In this study, parental support was the most important factor to take into account.

INTRODUCTION

Online education, also referred to as e-learning or remote learning, has grown in popularity recently, in part because of the COVID-19 pandemic. Digital technologies are used to deliver educational content and to make it easier for teachers and students to communicate with one another during online learning. While there are many advantages to online learning, such as accessibility and flexibility, its effect on academic performance has been hotly debated. Online learning can affect academic performance in both positive and negative ways, according to studies.

The global impact was that online learning is quickly rising to the top of the list of effective educational delivery methods. COVID-19 was so severe that online learning seemed to penetrate every aspect of our expanding world, forcing schools to close and ending all in-person interactions between teachers and learners. Fortunately, most schools and educational institutions immediately changed to an online method so that students could resume their studies. The rise of e-learning, in which instructions are delivered remotely via digital platforms rather than in actual classroom education has undergone a significant transition Online learning has developed into a global trend in the education industry for students.

From its inception to the current situations around the world, a strange suspect by the name of SARS-CoV-2 had seriously impacted global health. Due to COVID-19's severe contagiousness, ultimately impacted our way of life and caused a new custom of living within the curbs. UNESCO estimates that 186 countries will have implemented nationwide closures by the end of April 2020, affecting roughly 73.3% of all enrolled students (Education: From disruption to recovery, 2020). As a result of the total lockdown, educational institutions were forced to quickly turn to online teaching strategies to guarantee that students continued to learn because traditional face-to-face instruction was impractical in this unprecedented situation.

With the current coronavirus (COVID-19) pandemic, many higher education institutions in most countries, including in East Asia, have transitioned to online learning. However it has been challenging for students without access to the internet, and these digital inequalities persist across all countries. Only

Singapore, Brunei, and Malaysia have over 80 percent internet penetration. In Indonesia, Thailand, and Cambodia, less than 60 percent of the population has access to the internet, while only around 40 percent have access in Myanmar and Vietnam.

The digital divide is about more than internet access, however. It is also about the reliability, speed, and affordability of internet and data access, as well as having access to electronic devices conducive to learning. The most vulnerable often face more than one disadvantage, which magnifies the impact. Many institutions or governments have introduced a loan system to provide students in need with appropriate devices. How ready systems, students, and teachers are to adapt to online learning is another important issue. The transition to remote teaching and learning is significantly facilitated by having the necessary infrastructure. Prior to the pandemic, some universities adopted a "online forward" teaching and learning strategy. According to Taylor's University in Malaysia, for instance, each of its courses has a separate virtual site that enables online participation for assessments, assignments, peer support, and communication with peers and lecturers. When it comes to online education, nations with large internet infrastructure, like the Republic of Korea, have significant advantages. However, even there, questions have been raised about whether teachers and students have the necessary skills to use software and learning technologies effectively. (Noah Yaroow 2023)

To adapt to the new normal and social distancing guidelines of the WHO, health experts, and the government, the COVID-19 pandemic forced teachers to make significant changes to the Philippine educational system. Teachers are regarded as essential employees in the Philippines because, despite the country's ongoing rise in COVID-19 cases, they were required to continue attending schools and universities to prepare the modules they would need to fully transition from a 100% face-to-face classroom setup to 100% online classes.

Due to the Philippines' unreliable internet connection, the majority of schools and universities there have face-to-face classroom arrangements. Except for the extremely few schools that offered specialized distance-learning courses, teaching online classes was practically unheard of prior to the pandemic. This represents the biggest challenge for the teachers since passing their board exams. Given that the majority of the teachers still struggle with technology and work in developing nations, it took a lot of learning and unlearning for everyone.

The truth is that online classes are extremely difficult. Because no educational institution anticipated this, the majority of them don't have their own online platforms, and if they do, those platforms are frequently underdeveloped and unmaintained and would crash multiple times a week, in addition to the nation's poor internet connection. This makes online classes challenging for the majority of Filipino students. Many thanks to Google, Discord, Zoom, Canvas, and other free teleconferencing and "classroom" programs because they were incredibly helpful during this extremely trying time. However, problems persist because even some teachers are not knowledgeable about these platforms (and it is not their fault), so they are unable to help students who are experiencing problems with the channel.

Let's ignore the fact that many students who take online classes don't have studio-style rooms with settings akin to offices. Students who live in densely populated areas would have to deal with additional outside noise, which can distract them from concentration and, naturally, learning. All of us have been challenged by this new learning method. Our resentment should be perceived as a cry for assistance and an appeal to various facets of society. (Joshua Villalobos2020).

In a recent article, Hou et al. (2020) noted that young Chinese students from resource-scarce localities may be at risk for mental disorders during the COVID-19 pandemic due to social and cultural factors. Similar observations were noted in the Philippines, a developing and resource-scarce country. Children had a higher risk for poor mental health compared to adults in the Philippines partly due to their shift to online learning modalities during the pandemic (Malolos et al., 2021)

Through a range of learning modalities, such as online learning, modular learning, and blended learning, the BE-LCP seeks to ensure that students can continue learning even during the pandemic. The order emphasizes the significance of guaranteeing that all students have access to these modalities and offers guidance on how to put them into practice. The title of DepEd Order No. 12 series of 2021 "The order also specifies actions to be taken in case of COVID-19 cases in schools and provides guidelines for the conduct of face-to-face classes in areas where the national government permits it, subject to strict health and safety protocols. Guidelines on the Implementation of the Basic Education Learning Continuity Plan for Schools. The DepEd Order No. 12 series of 2021 offers thorough instructions for putting the BE-LCP into practice during the COVID-19 pandemic. (DepEd2020).

In the Philippines, learning management systems (LMS) like Moodle and Canvas are frequently used in conjunction with other platforms and tools like Google Classroom, Microsoft Teams, and Zoom. Google Classroom is very popular because it is free, simple to use, and works well with other Google products like Google Drive and Google Meet. Microsoft Teams is also well-liked because it provides capabilities like real-time video conferencing, file sharing, and group document editing. Many colleges and universities use Zoom, another well-liked video conferencing platform, for online courses and meetings. To manage course content, assignments, and grades, some colleges and universities also have their own LMSs, like Moodle and Canvas. In general, the Philippine online learning environment is developing and adapting to meet the needs of students, teachers, and institutions during the pandemic to implement the Basic Education Learning Continuity Plan (BE–LCP) in response to the difficulties brought on by the COVID–19 pandemic in the Philippines (Marissa Fearny, 2020).

To continue educating students while maintaining physical distance, many Philippine educational institutions, including those in the province of Quezon, have shifted to online or blended learning. Infrastructure-wise, the availability of technology and internet connectivity in Quezon Province may differ depending on the location. While some places might have less reliable access to computers and the internet, other places might have a more advanced infrastructure. The primary government organization in charge of managing basic education in the Philippines, including in Quezon Province, is the Department of Education (DepEd). DepEd has developed a framework for blended learning and includes the use of online platforms, printed modules, and other distance learning techniques. To facilitate online learning, the department also helps educators, students, and parents.

The Manuel S. Enverga University remains committed to offering its members top-notch instruction and approved course materials. MSEUF will make the most of distance learning through online platforms to ensure the continuity of the teaching and learning process and to cover and deliver all lessons to students during the ECQ period. Under the CHED Hi-ED Bayanihan Program, the (CHED) has partnered with MSEUF as one of the six universities to train smaller HEIs in the nation. The CHED Hi-Ed Bayanihan Program, according to CHED Chair De Vera III, aims to help small HEIs that are having trouble making the switch to e-learning during the COVID-19 pandemic. CHED has determined that MSEUF is prepared and capable of implementing e-learning instruction.

Online learning is the process of learning something new or improving one's skills while utilizing digital tools like the internet, computers, and mobile devices. It is a type of distance learning that enables students to access learning materials, curricula, and instructors from a distance.

Learning environment is a physical or virtual setting that offers the materials, equipment, and interpersonal interactions required to support efficient learning. Any place or platform where learning takes place can be referred to, including a classroom, a library, an online course platform, etc.

Academic performance refers to the. knowledge attained and designated by marks assigned by the teacher. In an educational context, academic performance is the educational goal to be achieved by a student, teacher, or institution. over a certain period and is measured either by examinations or continuous assessments and grades, scores on standardized tests, and overall academic accomplishments are frequently used to assess a student's academic performance in high school.

This study aimed primarily to assessed the effect of the online learning environment to the academic performance of selected students in Manuel s. Enverga University Foundation Candelaria Incorporated. The difference of this study from the other studies done regarding online learning is that first, it assessed the condition of the online learning environment of the student's academic performance. Secondly, it will assess whether the online learning experience of the students during the Covid-19 pandemic has been successful or not. It will be focused on the effect of the online learning environment to the academic performance of selected students in Manuel S. Enverga University Foundation Candelaria Incorporated who have undergone online classes during the School Year 2021-2022.

Statement of the Problem

This study aimed primarily to assess the effect of the online learning environment to the academic performance of selected students in Manuel S. Enverga University Foundation Candelaria Incorporated.

Specifically, the study sought to provide answers to the following questions:
1. What is the profile of the respondents in terms of
    1.1 age
    1.2 sex

1.3 available learning materials
1.4 parents' educational attainment?
2. What is the level of academic performance of the selected students during online learning?
3. What is the effect of online learning environment to the academic performance of selected students in terms of:
    3.1 parents support
    3.2 physical environment condition
    3.3 students' attitude
    3.4 strong reliable internet connection
    3.5 proper gadgets and
    3.6 learning materials available at home?
4. Is there a significant relationship between:
    4.1 level of academic performance and effect of online learning environment and
    4.2 profile and effect of online learning environment?
5. What action plan can be developed based on the results of the study?

Research Design

The study used a descriptive method of research. Descriptive research comprises obtaining accurate and pertinent information about a phenomenon in order to discover essential factors and establish trustworthy generalizations about it without interfering with, affecting, or exerting control over it (Jones, 2021). It was used determine the effect of online learning environment to the academic performance of selected students in Manuel S. Enverga University Foundation Candelaria Incorporated.

Participants

The study was conducted at Manuel S. Enverga University Foundation Candelaria Inc. located in Brgy. Malabanban, Candelaria, Quezon. The respondents of the study were composed of fifty (50) selected students in grade 8 from two sections in School Year 2021-2022.

Research Instrument

The researcher created a self-created questionnaire in which the questions will aid in determining the effect of the online learning environment on the academic achievement of the students. Thus, the researcher enlisted the help of a language instructor to validate the instruments, and they supplied comments, recommendations, and guidance on the instruments' content.

Questionnaire was utilized because it was the primary data gathering instrument/method. In addition, the researcher acquired material and ideas from a variety of sources, including books and the internet.

This instrument consisted of sets of questions classified according to parental support, physical environment condition, students' attitude, strong and dependable internet connections, home learning materials, and academic performance. The researcher administered the instruments on selected eighth-grade students from Manuel S. Enverga University Foundation Candelaria, Incorporated.

Procedure

After the validation of the research instrument, the researcher sought permission from the High School Principal of Manuel S. Enverga University Candelaria, Inc. to conduct the study during the school 2021-2022. After the approval, the selected Grade 8 students were subjected to the study. The selected Grade-8 students answered survey questions prepared by the researcher. Results were collected, tallied, tabulated, and submitted to Lipa City Colleges and Statistic Center for statistical analysis.

Ethical Considerations

Participants are the researcher's partners in the study process, and developing trusting connections with them is crucial. In order to accomplish so, ethical factors were taken into account. Prior to the distribution and use of the instrument and material, the participants should be given a letter of request from the researcher, as specified by the adviser. The request letter was addressed to the principal and their adviser, who have special parental responsibility within the school under Article 218 of the Philippine Family Code, because the participants are minors.

Following data collection from research participants, the data was treated with strict secrecy and kept private throughout the research process. The researcher also gathered references for the research paper that was used to back up the investigation and the content that was being created.

Data Analysis

The following statistical tools were used to interpret the results of the study.

1. Frequency distribution was used to determine the proportion of responses relative to the whole. Specifically, this was used to find the proportion of respondents in variables, such as, age, family economic status and the parent's educational attainment of the respondents.
2. Weighted Mean was utilized to determine the effect of online learning environment to the academic performance of the selected students in terms of parents' support, physical environment condition, students' attitude, strong reliable internet connection, proper gadgets and, learning materials available at home.
3. To determine the significant relationship between the effect of online learning and the academic performance, the Pearson r correlation formula was used.

The following Five – point Scale was adopted to measure the adjectival rating of the respondents' assessment and its qualitative interpretation as shown in the following range of values:

Scale	Verbal Interpretation	Statistical Value
5	Very High Effect	4.21 - 5.00
4	High Effect	3.41 – 4.20
3	Moderate Effect	2.61 – 3.40
2	Less Effect	1.81 – 2.60
1	No Effect	1.00 – 1.80

RESULTS AND DISCUSSIONS

This part of the study shows the presentation, analysis and interpretation of the data gathered from the questionnaires answered by the respondents.

Table 1. Distribution of Profile of the Respondents

Profile Variables	Frequency	Percentage	Rank
Age:			
12 years old	2	4	3
13 years old	37	74	1
14 years old	11	22	2
Total	**50**	**100**	
Sex:			
Male	23	46	2
Female	27	54	1
Total	**50**	**100**	
Available Learning Materials:			
Basic phone	9	18	7
Smart phone	45	90	2
Laptop/desktop	47	94	1
Tablet	11	22	6
Books	38	76	3
Tv	18	36	5
Radio	2	4	8
Printer	20	40	4
IPAD	1	2	9
Parents' Educational Attainment:			
High School	13	26	2
Vocational	1	2	4.5
College	30	60	1
with Master's Degree units	5	10	3
Full- Fledge Master's Degree Holder	1	2	4.5
Total	**50**	**100**	

As seen in the table, in terms of the respondents' age, 37 of them or 74% at rank 1 were 13 years old whereas two or 4% at rank 3 were 12 years old.

With respect to the respondents' sex, 27 of them or 54% at rank 1 were female while 23 or 46% at rank 2 were male.

In addition, out of 50 total respondents, 47 of them or 94% at rank 1 have laptop or desktop while one or 2% at rank 9 had an IPAD.

In terms of the respondents' parents' educational attainment, 30 of them or 60% at rank 1 were college graduates whereas vocational graduate and full-fledge Master's Degree holder gained equal frequency counts of one or 2% at ranks 4.5.

1. Level of Academic Performance of the Selected Students During Online Learning.

Table 2. Level of Academic Performance of the Selected Students During Online Learning

Academic Performance	Frequency	Percentage	Rank
90 - 100 (Outstanding)	35	70	1
85 - 89 (Very Satisfactory)	15	30	2
Total	50	100	
Highest Grade	97 (Outstanding)		
Lowest Grade	85 (Very Satisfactory)		
Mean Grade	89.92 (Very Satisfactory)		

As given in Table 2, the outstanding grades of 90 - 100 gained the highest frequency count of 35 or 70% at rank 1. On the other hand, the very satisfactory grades of 85 - 89 got the least frequency count of 15 or 30% at rank 2.

The highest grade was 97 (outstanding), the lowest was 85 (very satisfactory) and the mean grade was 89.92 (very satisfactory

In online classes, the effectiveness of the instructor has a significant impact on how satisfied the students are. A professional with exceptional teaching abilities and knowledge of how to meet the educational needs of students is referred to as an instructor with high levels of instructor quality (Luekens et al., 2004). Finally, the findings show that instructors promptly answer queries and deliver feedback on assignments to support strategies that help learners in online courses enhance instructor participation, instructor interaction, understanding, and participation (Martin et al., 2018). Parents help the students with their performance and improve their learning.

2. Effect of Online Learning Environment to the Academic Performance of Selected Students.

2.1 In Terms of Parents Support Involvement

Table 3. Effect of Online Learning Environment to the Academic Performance of Selected Students in Terms of Parents Support Involvement

Items	Weighted Mean	Interpretation	Rank
I am always ready before my online class because my parents help me prepare all my needs.	4.22	Very High Effect	2
2. I am able to follow my lessons well during online class because my parents brought me tools in learning.	4.44	Very High Effect	1
3. I am able to understand the lessons because my parents give me enough time to review after my online class.	4.18	High Effect	3
I am able to love learning even online because my parents prepare time frame for my daily routine.	4.06	High Effect	4
5. I am able to practice and test my knowledge of the lessons discussed because my parents provide assessment based on the lessons.	3.80	High Effect	5
Composite Mean	**4.14**	**High Effect**	

As reflected in the table, the respondents assessed that they are able to follow their lessons well during online class because their parents brought their tools in learning which was rated as very high effect with the highest weighted mean of 4.44 and the highest rank of 1.

Parents are expected to help children learn at home and take on the role of the school's teachers. Parents are responsible for overseeing the learning process, from providing online digital media as learning resources to managing learning at home. To achieve the goals of distance learning, the role and supervision of parents is essential. The need for parental involvement in children's homework is highlighted by recent incidents involving distance learning (Touloupis, 2021).

Meanwhile, the said group of respondents replied that they can practice and test their knowledge of the lessons discussed because their parents provide assessment based on the lessons which was interpreted as high impact with a weighted mean of 3.80 and least rank of 5.

Lilawati's (2020) research on distance learning found that parents assist and direct students as they complete teacher-assigned tasks, and that learning resources at home are not more beneficial to students than resources at school. Some parents think it's crucial for children to learn in school.

The composite mean of 4.14 generalized that parental support involvement has a high effect the online learning environment to the academic performance of the students.

A child's academic success serves as the primary driver for parents to become involved in their child's education (Novrinda et al., 2017). Parents are more likely to participate in educational activities if they value education for their children. On the other hand, parents who believe that teachers are the only ones responsible for the educational process are likely to be less involved. Trust between teachers and parents encourages teachers and parents to be more committed to working together (Gloria, 2020). According to Amini (2015), parental involvement in their children's education has a significant impact. Since parents are a child's first and most steadfast teachers, it is impossible to overstate the significance of their role.

3.2. In Terms of Physical Environment Condition

Table 4. Effect of Online Learning Environment to the Academic Performance of Selected Students in Terms of Physical Environment Condition

Items	Weighted Mean	Interpretation	Rank
I can see well in my room because my room is well lighted and ventilated.	4.26	Very High Effect	1
I can easily focus on the online class because my environment at home is quiet and peaceful.	4.08	High Effect	4
I am comfortable in my room for online classes.	4.20	High Effect	2
4. I am not easily distracted during my online class because my room is free from clutter.	3.86	High Effect	5
5. I can perform any activities at home during my online class because my learning space at home is suitable for diverse activities.	4.14	High Effect	3
Composite Mean	**4.11**	**High Effect**	

As gleaned in the table, the respondents acknowledged that they can see well in their room because it is well lighted and ventilated which was interpreted as very high effect with the highest weighted mean of 4.26 and the highest rank of 1.

The literature makes it clear that students' academic performance, health, and wellbeing will be greatly affect by the built environment of the classrooms. Asiyai, R. (2014). They used their room, which is well bright and ventilated, as their learning area while taking classes online.

On the other hand, the said group of respondents answered that they are not easily distracted during their online class because their room is free from clutter which was transcribed as high effect with a weighted mean of 3.86 and least rank of 5.

It seems that the environment is set for developing feelings of responsibility when students feel like they own the classroom. R. DeVries, et.al. (1994). For students to learn more, they need to be free from distractions.

The composite means of 4.11 concluded that physical environment conditions have a high effect to the online learning environment to the academic performance of the students.

Choi et. al. (2014) made the case that a good physical environment has a positive impact on feelings and the willingness to work hard at learning, and that emotional state, mood, and motivation are the mediating factors between the physical environment and academic performance. A bad physical environment might have an adverse effect on one's emotional state a decrease in the desire to study or discomfort among learners. A learner can learn more in a secure environment that is free from clutter and has good ventilation.

3.3. In Terms of Pupils' Attitude

Table 5. Effect of Online Learning Environment to the Academic Performance of Selected Students in Terms of Pupils' Attitude

Items	Weighted Mean	Interpretation	Rank
I am excited to attend my online class.	3.88	High Effect	5
I attend my online class on time.	4.68	Very High Effect	1
I prepare all the things I need for online class.	4.58	Very High Effect	2
I am attentive on my online class.	4.32	Very High Effect	3
I actively participate in my online class.	4.10		4
Composite Mean	**4.31**	**Very High Effect**	

As presented in Table 5, the respondents replied that they attend their online classes on time which was rated as very high effect with the highest weighted mean of 4.68 and the highest rank of 1.

Researchers have found that learners' perspectives and attitudes toward online learning are important determinants of their learning outcomes. There is excitement to attend class if the students are motivated. On the contrary, the said group of respondents assessed that they are excited to attend their online classes which was rated as high effect with a weighted mean of 3.88 and least rank of 5.

The students' attitudes at the beginning of their learning have an effect on their online learning, even though there are numerous other studies conducted by researchers on the issues related to active online learning. The composite mean of 4.31 signified that pupils' attitude conditions has a very high effect to the online learning environment to the academic performance of the students.

The attitudes of the students, including their drive, prior knowledge, computer skill, and learning preferences, are significant influences on their learning. We think that by assessing the students' motivation, prior knowledge, computer skills, and learning preferences before they begin their online classwork, will be able to create instructions that will encourage better and more efficient learning. Would try to understand the students' attitudes after identifying them at the beginning of their learning, and then would propose a framework based on neuroscience (the study of the human brain) that could assist teachers in creating online learning that would enhance active online learning for students (Fauziah 2016.

3.4. In Terms of Strong Reliable Internet Connection and Proper Gadgets

Table 6. Effect of Online Learning Environment to the Academic Performance of Selected Students in Terms of Strong Reliable Internet Connection and Proper Gadgets

Items	Weighted Mean	Interpretation	Rank
1. Our internet connection at home is fast and reliable.	3.98	High Effect	3
2. We have proper devices like laptop, tablet, and smart cellphone that I use on my online class.	4.46	Very High Effect	1
3. I use a good quality device for my online class.	4.42	Very High Effect	2
4. We always upgrade the devices that I use for my online class to ensure maximum adaptability.	3.90	High Effect	4
Composite Mean	**4.19**	**High Effect**	

As discussed in Table 6, on succeeding page, the respondents answered that they have proper devices like laptop, tablet, and smart cellphone that they use on their online classes which was explained as very high effect with the highest weighted mean of 4.46 and the highest rank of 1.

The availability of numerous new advantages, such as teaching and learning that connect teachers and students in both traditional classroom and online settings, makes learning with mobile technologies possible. The combination of wireless technology and mobile computing, as Alexander (2004) notes, "is resulting in an escalating transformation of the educational world." The learner must have access to quick and dependable online devices to understand the lessons. Yuhsu et.al (2007)

Furthermore, the said group of respondents affirmed that they always upgrade the devices that they use for their online class to ensure maximum adaptability which was explained as high impact with a weighted mean of 3.90 and least rank of 5.

Mobile technologies effectively provide students with additional convenience and flexibility compared to the traditional classroom and enable them to learn whenever and wherever they choose. Because each learner is "connected" wherever they choose to be in that learning space when mobile technologies are integrated into the classroom environment, there are opportunities to loosen up the rigidity of the traditional classroom setup. In areas that accommodate their needs, students will be able to continue their education outside of the classroom. Students can participate in learning environments conveniently because of mobile technologies. Yuhsun Edward Shih and Dennis Mills (2007)

The composite mean of 4.19 inferred that strong reliable internet connection and proper gadget has a high effect to the online learning environment to the academic performance of the students.

According to the study of Yuhsun et. al. (2007) The study concentrated on the results of the students' learning as well as the advantages and difficulties they encounter when using mobile learning. They believed that mobile learning would offer a new, practical means of receiving and retrieving information that would help to support collaborative learning even more. They anticipated that by incorporating mobile learning techniques into the course with an appropriate instructional design, students would be able to make better use of their time for learning and be more motivated and engaged in it.

3.5. In Terms of Learning Materials Available at Home

Table 7. Effect of Online Learning Environment to the Academic Performance of Selected Students in Terms of Learning Materials Available at Home

Items	Weighted Mean	Interpretation	Rank
I have complete textbooks and references for all my subjects.	4.54	Very High Effect	1
I have printed worksheet/activity sheets to review the lessons even after my online class.	4.00	High Effect	5
I have all the necessary supplies for my projects and other related activities.	4.34	Very High Effect	3
I make it a point that any additional learning resources are provided when necessary.	4.32	Very High Effect	4
5. The available learning resources are useful and functional.	4.52	Very High Effect	2
Composite Mean	**4.34**	**Very High Effect**	

As written in Table 7, the respondents agreed that they have complete textbooks and references for all their subjects which was translated as very high effect with the highest weighted mean of 4.54 and the highest rank of 1.

Will more effective curriculum materials inevitably have an impact on students' learning? ask Stern and Roseman (2004). It makes sense, on the surface, that quality curriculum materials should influence students' learning outcomes. According to Chambliss and Calfee (1989), "Theory and practice both suggest that well-designed textbooks can enhance student understanding."

The textbook serves as a foundation for a structured understanding of the entire syllabus, so it is significant. For them to be able to teach effectively, textbooks assist teachers in understanding the concept and relevant research.

Moreover, the said group of respondents acknowledged that they have printed worksheet/activity sheets to review the lessons even after their online class which was rated as high impact with a weighted mean of 4.00 and least rank of 5.

According to the studies of Esu, Enukoha, and Umoren (2004) confirmed that instructional materials help students learn abstract concepts by helping to make concepts concrete and igniting their imaginations. Additionally, educational resources assist in while conserving the energy of the teacher and decreasing the teacher-centeredness in instruction, actively engage more students in the learning process. In a similar vein, Mathew (2012) asserts that the use of instructional materials enhances learning by allowing students to actively participate in classroom instruction. All these perspectives imply that using educational materials can enhance students' performance.

The composite mean of 4.34 concluded that learning materials available at home has a very high effect to the online learning environment to the academic performance of the students.

It is impossible to overstate the value of instructional materials in learning and teaching. The importance of materials in the implementation of curricula has been demonstrated in a great deal of writing. Learning is made more engaging, applicable, realistic, and appealing by instructional materials. They also make it possible for teachers and students to contribute actively and effectively to class activities.

They provide opportunities for learning new things, expanding one's knowledge, and fostering self-actualization and confidence. Ibeneme (2000) noted that teaching tools are crucial for practical and demonstration work by students and teachers in the classroom.

The ability to support learning can be found in all forms and sizes of teaching materials. Making lessons interesting, facilitating learning, and enabling teachers to clearly communicate concepts are the goals of teaching and learning materials.

4. Relationship Between Level of Academic Performance and Effect of Online Learning Environment; as Well as Profile and Effect of Online Learning Environment

Table 8.1. Relationship Between Level of Academic Performance and Effect of Online Learning Environment

Variables Compared	r-value	p-value	Decision	Interpretation
Academic Performance versus Impact of Learning Environment at Home				
Parents Support Involvement	0.42	0.00296	$p<0.01$, Reject Ho	Highly Significant
Physical Environment Condition	0.35	0.01474	$p<0.05$, Reject Ho	Significant
Pupils Attitude	0.44	0.00175	$p<0.01$, Reject Ho	Highly Significant
Strong Reliable Internet Connection	0.45	0.00133	$p<0.01$, Reject Ho	Highly Significant
Learning Materials Available at Home	0.35	0.01474	$p<0.05$, Reject Ho	Significant

As shown in the table, when the academic performance of the respondents during pandemic were compared to their assessment on the Effect of online learning environment, the computed r-values of 0.42 for parents' support involvement, 0.44 for pupils' attitude and 0.45 for strong reliable internet connection have corresponding p-values of less than 0.01, thus rejecting the null hypothesis.

In addition, the computed r-values of 0.35 for both physical environment condition and learning materials available at home have corresponding p-values of less than 0.05, thus also rejecting the null hypothesis.

These safely concluded that the academic performance of the respondents has high significant relationships to their heir assessment on the Effect of online learning environment in terms of parents' support involvement, pupils' attitude, and strong reliable internet connection; and significant relationships in terms of physical environment condition and learning materials available at home.

Kapasia et al. (2020) examined how lockdown affects students' learning performance in a related study. Their findings showed that the lockdown seriously disrupted the educational process for the students. The students also discussed some difficulties they had with their online classes. These problems are exacerbated in marginalized and remote students and include anxiety, depression, bad Internet, and unfavorable home learning environments.

The confinement of students during the pandemic had a significant positive impact on their performance, contrary to Kapasia et al (2020)'s findings, according to Gonzales et al. (2020). They explained

these outcomes as being the result of students continuously using learning strategies, which increased their learning effectiveness.

However, students used a range of techniques to get past the difficulties they encountered while learning online. For instance, to address the issues with their home learning environment, students talked to their family, moved to a quieter location, studied late at night when everyone in the family was already asleep, and sought advice from their peers and teachers. Students used the Internet, joined Facebook groups where free resources are shared, sought assistance from others, used resources at home, and spoke with teachers to get around the limitations of learning resources.

The different approaches taken by students supported earlier reports on their active orientation when confronted with academic and non-academic issues in an online learning environment (Fawaz et al., 2021). Each student's particular coping mechanisms may have been influenced by a variety of external factors, including the resources that were available, the student's personality, the family structure, relationships with peers and teachers, and aptitude. Researchers may deepen this research by examining how and why different variables affect people's use of strategies.

As gleaned in the table, on the succeeding page, when the assessment on the respondents on the effect of online learning environment at home were compared to their age, the computed r-values of 0.57 for strong reliable internet connection, and 0.60 for learning materials available at home have corresponding p-values of less than 0.01, thus rejecting the null hypothesis.

Furthermore, the computed r-values of 0.33 for parents' support involvement, 0.28 for physical environment condition and 0.30 for pupil's attitude have corresponding p-values of less than 0.05, thus rejecting also the null hypothesis.

Table 8.2 Relationship Between Profile of the Respondents
and Effect of Online Learning Environment

Variables Compared	r-value	p-value	Decision	Interpretation
Age versus Effect of Learning Environment				
Parents Support Involvement	0.33	0.01926	$p<0.05$, Reject Ho	Significant
Physical Environment Condition	0.28	0.04891	$p<0.05$, Reject Ho	Significant
Pupils Attitude	0.30	0.03429	$p<0.05$, Reject Ho	Significant
Strong Reliable Internet Connection	0.57	0.00002	$p<0.01$, Reject Ho	Highly Significant
Learning Materials Available at Home	0.60	4.12E-6	$p<0.01$, Reject Ho	Highly Significant
Sex versus Effect of Learning Environment				
Parents Support Involvement	0.63	9.50 E-7	$p<0.01$, Reject Ho	Highly Significant
Physical Environment Condition	0.59	6.51 E-6	$p<0.01$, Reject Ho	Highly Significant
Pupils Attitude	0.29	0.04106	$p<0.05$, Reject Ho	Significant
Strong Reliable Internet Connection	0.64	5.60 E-7	$p<0.01$, Reject Ho	Highly Significant
Learning Materials Available at Home	0.61	2.57 E-6	$p<0.01$, Reject Ho	Highly Significant
Available Learning Materials versus Effect of Learning Environment				
Parents Support Involvement	0.53	0.00011	$p<0.01$, Reject Ho	Highly Significant
Physical Environment Condition	0.36	0.01196	$p<0.05$, Reject Ho	Significant
Pupils Attitude	0.35	0.01474	$p<0.05$, Reject Ho	Significant
Strong Reliable Internet Connection	0.57	0.00002	$p<0.01$, Reject Ho	Highly Significant
Learning Materials Available at Home	0.63	1.60 E-6	$p<0.01$, Reject Ho	Highly Significant
Highest Educational Attainment of Parents versus Effect of Learning Environment				
Parents Support Involvement	0.32	0.02661	$p<0.05$, Reject Ho	Significant
Physical Environment Condition	0.33	0.02199	$p<0.05$, Reject Ho	Significant
Pupils Attitude	0.35	0.01474	$p<0.05$, Reject Ho	Significant
Strong Reliable Internet Connection	0.43	0.00229	$p<0.01$, Reject Ho	Highly Significant
Learning Materials Available at Home	0.41	0.00380	$p<0.01$, Reject Ho	Highly Significant

These safely implied that the assessment of the respondents on the effect of online learning environment in terms of strong reliable internet connection and learning materials available at home have high significant relationships; and significant relationships in terms of parents' support involvement, physical environment condition, and pupils' attitude when compared according to their age.

While some studies contend that learning occurs throughout life and that the influence of environmental factors may persist even in later years, others contend that learning can occur at any age and that younger people may be more sensitive to environmental factors and have a greater capacity for learning.

Aside from age and learning environment, other elements like motivation, prior knowledge, and cognitive abilities may also influence learning outcomes.

The interaction between age and the learning environment is ultimately complicated and multifaceted, and it is impossible to say with certainty which factor has a bigger impact on learning. However, it is generally acknowledged that when developing efficient learning interventions and strategies, both age and the learning environment are significant factors to take into account.

When the assessment on the respondents on the effect of online learning environment at home were compared to their sex, the computed r-values of 0.63 for parents' support involvement, 0.59 for physical environment condition, 0.64 for strong reliable internet connection, and 0.61 for learning materials available at home have corresponding p-values of less than 0.01, thus rejecting the null hypothesis.

Moreover, the computed r-value of 0.29 for pupil's attitude has corresponding p-value of less than 0.05, thus rejecting also the null hypothesis.

These safely affirmed that the assessment of the respondents on the effect of online learning environment in terms of parents' support involvement, physical environment condition, strong reliable internet connection, and learning materials available at home have high significant relationships; and significant relationships in terms of pupils' attitude when compared according to their sex.

According to research, there may be differences between the ways that male and women learn, and process information may be differences between the ways that men and women learn and process information, according to research, but these variations can exist between individuals and are not universal. Furthermore, the learning environment frequently has an impact on how these differences affect the outcomes of learning.

Studies have shown, for instance, that while boys typically outperform girls in spatial tasks, girls typically outperform boys in verbal tasks. However, elements like the teacher's pedagogical approach, the environment in the classroom, and peer interactions can have an impact on the size of these differences.

Similar to this, regardless of a student's gender, the learning environment can significantly affect their learning outcomes. For instance, studies have shown that students are more likely to succeed academically when they are exposed to a supportive and positive learning environment and have access to resources like technology and high-quality teaching.

Additionally, when the assessment on the respondents on the effect of online learning environment at home were compared to their available learning materials, the computed r-values of 0.53 for parents' support involvement, 0.57 for strong reliable internet connection, and 0.63 for learning materials available at home have corresponding p-values of less than 0.01, thus rejecting the null hypothesis.

Consequently, the computed r-values of 0.36 for physical environment condition, and 0.35 for pupil's attitude have corresponding p-values of less than 0.05, thus rejecting also the null hypothesis.

These safely concluded that the assessment of the respondents on the effect of online learning environment in terms of parents' support involvement, strong reliable internet connection, and learning materials available at home have high significant relationships; and significant relationships in terms of physical environment condition, and pupils' attitude when compared according to their available learning materials.

While the environment and learning materials are important, other elements like learner motivation, prior knowledge, and learning style also have an impact on how well people learn. In order to maximize the potential for effective learning, it is crucial to take into account and optimize both the learning materials and the learning environment.

Lastly, when the assessment on the respondents on the effect of online learning environment were compared to their parent's educational attainment, the computed r-values of 0.43 for strong reliable internet connection, and 0.41 for learning materials available at home have corresponding p-values of less than 0.01, thus rejecting the null hypothesis.

In addition, the computed r-values of 0.32 for parental support involvement, 0.33 for physical environment condition and 0.35 for pupil's attitude have corresponding p-values of less than 0.05, thus rejecting also the null hypothesis.

These safely implied that the assessment of the respondents on the effect of online learning environment at home in terms of   strong reliable internet connection and learning materials available at home have high significant relationships; and significant relationships in terms of parents' support involvement, pupils' attitude, and physical environment condition when compared according to their parents'

educational attainment. The outcomes of parents' education have been consistently linked to those of their children's, according to research. Children of more educated parents typically perform better in school, go on to earn more education themselves, and have more success in the workforce.

But it's also critical to consider how parents' educational backgrounds affect the environment in which their kids learn. A supportive home environment for learning, including access to books, educational resources, and technology, is more likely to be provided by parents with higher levels of education. They might also have more knowledge and abilities to assist their kids with their schoolwork and other projects. Better educated parents may have more resources to contribute to their children's education in addition to the home environment. They might be able to afford private schools or tutoring, and they might be able to afford to pay for their kids' extracurricular activities like sports or music lessons. Overall, while the level of education of the parents has a significant impact on the educational outcomes of their children, it is not the only factor. Children's academic success is significantly influenced by the learning environment their parents create, including their access to resources and support.

ACTION PLAN

EFFECT OF ONLINE LEARNING ENVIRONMENT TO THE ACADEMIC PERFORMANCE OF SELECTED STUDENTS SY 2022-2023

Educational institutions have switched to online learning in response to the devastating pandemic. It is regarded to be the most realistic strategy to protect schooling while keeping a safe distance from the destructive COVID-19 outbreak. It should be noted that online learning is only one of several possibilities for distance education. Education seeks to benefit everyone, especially those who are less privileged, under-resourced, or otherwise out of reach of educational opportunities. Learning has become an essential component of all learners' and educators' lives. In general, "distance education" refers to any type of learning experience in which the student and instructor are geographically separated. This is the primary reason the researcher devised this effort to remedy the study's deficiencies.

The objectives of this plan are:
1. Enhance the online learning experience.
2. Obtain parental support in the online class.
3. Improve the learners' attitude and eagerness to learn through online classes.

Areas of Concern	Specific Objective	Strategies	Time Frame	Human Resources	Material Resources	Success Indicators
Parental support in the online class	Encourage parents to provide support for their children	Conduct a seminar on how to support children during online classes	Year Round	Learners, Parents, and Teachers	Internet Connection, and Available learning materials	Improved student performance and eagerness to study, even by means of online learning
Physical environment condition	To improve the facilities by removing unnecessary distractions and to make your online lessons clutter-free background	Keep the physical surroundings clean and clear of distractions				
Attitude and willingness to learn from online classes.	To enhance their attitude toward learning by means of online courses.	Encourage and urge students to attend on time, make necessary preparations, and participate fully.				
Strong and reliable internet connection and proper devices	To enhance internet connectivity and electronic devices	Encourage parents to enhance their internet connection in order to ensure their children have a stable and reliable connection.				
Learning materials available at home	To enhance the learning resources available at home	Hands-on activities may be utilized to supplement lectures.				

CONCLUSIONS

From the results of the study, the researcher concluded that:
1. There was a highly significant relationship between the profile of respondents in terms of age, sex, available learning materials, and highest educational attainment of parents and the effect of online learning environment in terms of strong reliable internet connection, and learning materials available at home. As a result, concerns such as internet connectivity and learning materials at home should be given adequate attention and careful consideration.
2. There was a highly significant relationship between the level of academic performance and effect of online learning environment in terms of parents' support involvement, pupils' attitude, and strong reliable internet connection. Therefore, bridging the gaps between these aspects should be prioritized in order to improve students' academic performance during online classes.

RECOMMENDATIONS

In light of the findings and conclusions, the following are recommended:
1. The proposed action plan, which took into account the variables, is thus recommended to improve students' academic performance during online classes.
2. Parents and teachers should collaborate to reinforce the proposed action plan in order to create an effective online learning environment and improve student performance in online classes.
3. Teachers should continually evaluate the issues that may affect students' performance during online classes.
4. Further research may be conducted in other locale and add more variables and participants.

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CHALLENGES AND COPING MECHANISMS OF SELECTED JUNIOR HIGH SCHOOL STUDENTS ON BLENDED LEARNING

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ABSTRACT

An enormous health epidemic that just hit the educational system has rocked its basis. It is crucial to develop a sophisticated understanding of students' blended learning experiences throughout the COVID-19 epidemic, given the uncertainty of today. Despite the fact that this topic has been the subject of numerous researches, little is known about the challenges students face and the particular coping mechanisms they use to overcome them during blended learning; this research aims to fill the gap. Using a descriptive approach, the findings revealed that the blended learning challenges of Junior High School students varied in terms of motivation, technological literacy and competency, availability of gadgets, and learning environment. Their greatest challenge was linked to technological literacy and competency and availability of gadgets, while their least challenge was the learning environment. The findings further revealed that the COVID-19 pandemic impacted the quality of the learning experience and students' mental health. In terms of coping mechanisms employed by students, the most frequently used were expressive and avoidance, while the least is active. Implications of this are as follows: basic education institution's preparedness in the part of the school administrators and teachers is widening awareness of the students challenges brought by Blended learning while students can broaden their perspective on the possible coping strategies they may employ; and lastly,, findings can be a helpful tool in determining best interventions to address issues and elicit interconnected that can be very helpful in achieving a positive learning outcome.

Keywords: blended learning, challenges, coping mechanisms

INTRODUCTION

In December 2019 fatal and contagious Corona Virus also known as the COVID19 outbreak wreaked havoc on people all over the world and brought significant impact on the world economy. The COVID-19 had a significant impact on all sectors of societies at the international and national level, and people are facing a very tough time as it has blocked all the economic, social, educational and business sectors. This pandemic had a wide range of effects on different industries, and one of it is in Education. Many nations have halted face-to-face instruction and assessment. Numerous colleges, universities, and schools have stopped offering in-person instruction. According to data from the United Nations Educational, Scientific and Cultural Organization (UNESCO), by mid-May 2020, more than 1.2 billion educational institutions in more than 190 countries worldwide and 8 million in the Philippines led to the massive closure of face-to-face activities in order to prevent the spread of the virus and mitigate its impact. Responses like community lockdown and quarantine of several countries have led students and teachers to study and work from home which led to the delivery of online learning platforms (Crawford et al., 2020). Educational institutions are having a hard time coming up with solutions to this difficult circumstance. It is very challenging for the educational institutes to commence sessions and let student go to schools, colleges and universities to continue the education and complete the courses (Vladescu et. al, 2019).

The COVID-19 pandemic had significant effects on the education system around the world, impacting students, teachers, and administrators at all levels. Some of the effects of this pandemic in the Philippine educational system are school closures, shifting to a new teaching-learning process, increased educational inequality, and mental health challenges resulting from different challenges faced by the learners. Overall, the COVID-19 pandemic has disrupted the education system in profound ways, and its effects are likely to be felt for years to come. In order to address some of the effects like shifting of teaching-learning process, face-to- face classes are being replaced with blended education.

Blended modality, also known as blended learning or hybrid learning, refers to an approach to education that combines traditional in-person classroom instruction with online learning. In a blended modality course, students typically participate in both face-to-face and online learning activities, with the goal of leveraging the benefits of both modes of instruction. Blended modality courses may include a variety of online activities, such as watching video lectures, participating in online discussions, completing interactive simulations, and engaging with multimedia content. In-person class meetings may be used to facilitate hands-on activities, group discussions, and other interactive activities that are best conducted in a face-to-face setting. The COVID-19 pandemic has accelerated the adoption of blended modality approaches in education, as schools and universities have had to quickly adapt to remote learning.

One emerging reality as a result of the world health crisis is the migration of blended learning modalities, a new teaching method that integrates technology and digital media with traditional classes, to mitigate the risk of face-to-face interaction. Universities are forced to migrate from face-to-face delivery to blended modality as a result of the pandemic. In the Philippines, most universities have resorted to blended learning during school lockdowns (Dayagbil et al, 2021).

But still this new emerging learning modality did not cover the whole problem. It even resulted in something new and demanding modalities that necessitate a lot of effort and perseverance known to be as challenges. Some of the most significant challenges of blended learning in the Philippines are technology barriers, lack of teacher training and support and lack of student engagement, motivation and time management resulting to poor assessment and evaluation.

According to Arinto (2020) on her study entitled as "Issues and Challenges in Blended Learning: Perspective from the Philippines", these pedagogical changes in education underscore the fact that online technologies are not neutral. They are like "a trojan mouse" that teachers let into their practice without realizing that it will require them to rethink not just how they use particular hardware or software, but all of what they do. Furthermore, this pedagogical change in education is complex and often challenging not only for individual teachers but most especially for the students. It has noted, the enhancement of blended education by taking advantage of the e-learning environment is just as challenging as the adoption of online learning because the individual academic's expertise served to create a comprehensive high quality learning environment for distance learners.

In another study conducted by Rotas, 2020 entitled as "Difficulties in Blended Learning: Voices of Students in the Wake of COVID-19 Crisis", he concluded that "In this Philippine context, blended learning reveals a digital divide among Filipino students. This current situation in new learning modality may most possibly exacerbate existing inequalities and may translate to barriers in online learning. For example, a cross-sectional study reported that thirty-two percent (32 %) out of 3, 670 Filipino students surveyed, have difficulties adjusting to new learning styles and do not have reliable internet access. For some, it may present difficulty to purchase a facilitative learning device or encounter difficulties in their working space at home to easily tune in to online classes and immediately turn in assignments in the online system. Despite the efforts to make education accessible for all, many difficulties are still confronting Filipino students in the practice of blended education".

It is obvious that institutions in the Philippines, which are located in a developing nation, are observably unprepared for the rapid movement of education in the midst of the ongoing crisis, and the system for distant learning appears chaotic. It also highlighted the digital divide faced by Filipino students now enrolled in blended learning programs. In contrast to the other, students now have to deal with obstacles related to blended learning in addition to the challenges they had to overcome before the crisis on a face-to-face learning set-up. As a result of the numerous duties they must manage every day, students experience a lot of stressful situations. In the big picture, studying is difficult, and students are going through a social catastrophe. Due to this, students tend to utilize coping techniques to cope to these challenges.

The COVID-19 pandemic has brought about a significant shift to blended learning in the Philippines, with many students now participating in a mix of online and face-to-face instruction. Some of the

coping mechanisms that Filipino students have used to adapt to blended learning are establishing a routine, maintaining communication with teachers and classmates, making use of available resources, seeking support when needed and maintaining a positive attitude.

As a proof, a conclusion from the study conducted by Cahapay, 2021 entitled as "From Stress to Success: Exploring how Filipino students cope with

Blended Learning amid COVID-19 Pandemic" stated that "blended learning in the middle of the COVID-19 crisis poses hurdles to students but also drives them to survive despite the number of challenging tasks they need to experience every day". The study described how Filipino students cope with challenges related to blended learning in the middle of the COVID-19 pandemic, like as follows looking for stable internet connection and good working environment, borrowing e-learning materials, practicing good time management and even diverting leisure times to useful activities or merrymaking. Cahapay, 2021 even concluded that coping mechanisms are a useful way to assist students in handling challenging circumstances. It is either conscious or unconscious change or adaptation that reduces tension and anxiety in a stressful event or scenario.

Because of these, the researcher made the decision to carry out a study with the goal of understanding those factors in her own locale. Since the locale of the study uses blended learning as teaching method that becomes the basis of this research. The researcher identified challenges brought by blended learning and the coping mechanisms students used to adjust to these difficulties. The researcher wanted to measure how these challenges and coping mechanisms significantly relate to and differ from one another. As an outcome the researcher provided an intervention program, such as an Action Plan, to address the difficulties and enhance the coping strategies frequently utilized by the learners.

Statement of the problem

The purpose of this study was to assess challenges and coping mechanisms of selected Junior High School students in School A and School B on Blended Learning.

Specifically, the following research questions were addressed:
1. What is the demographic profile of the two groups of learner respondents in terms of:
    1.1 age,
    1.2 sex,
    1.3 family income,
    1.4 gadgets used, and
    1.5 internet connectivity?
2. What are the challenges encountered by the two groups of learners in blended learning in terms of:
    2.1. motivation,
    2.2. technological literacy and competency,
    2.3. availability of gadgets, and
    2.4. learning environment?
3. What are the coping mechanisms utilized by the two groups of learners to overcome the challenges brought by Blended Learning in terms of:
    3.1. active,
    3.2. expressive, and
    3.3. avoidance?
4. Is there a significant difference between the responses of the two groups of learners on the challenges and coping mechanisms on blended learning?
5. Is there a significant relationship between challenges experienced by the two groups of learners and coping mechanisms they utilized?
6. Is there a significant difference between the challenges and coping mechanisms utilized by the two groups of learners when grouped according to their profile?
7. Based on the research findings, what will be the Action Plan?

METHODOLOGY

This section presents the methods employed in this study. It includes the research design, participants, research instrument, procedure, ethical considerations, and data analysis.

Research Design

This study was designed as a descriptive approach aimed at understanding the challenges experienced and coping mechanisms employed by the selected Junior High School students of two schools within the locale of the researcher. According to McCombes (2022), "Descriptive research aims to describe a population, situation or phenomenon accurately and systematically. It can answer what, where, when, and how questions, but not why questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables. The researcher does not control or manipulate any of the variables, but only observes and measures them".

In this study, the researcher described the challenges encountered by the respondents on Blended Learning in terms of motivation, technological literacy and competency, availability of gadgets and learning environment. Also, the researcher described the coping mechanisms, either through active, expressive or avoidance coping, utilized by the respondents to overcome those challenges. After these, the researcher evaluated the relationship between challenges and coping mechanisms.

Participants

The total student population in Junior High School Department of School A was 724, while School B was 565 respectively. Through the use of Raosoft formula, the researcher determined the number of samples to be used in this study that represented the population which resulted as follows. For School A, one hundred twenty-one (121) students from Grade 7, one hundred seventeen (117) from Grade 8, one hundred twenty-five (125) from Grade 9 and one hundred thirty-two (132) from Grade 10 or a total of four hundred ninety five (495) students. In addition, School B was composed of one hundred twenty-four (124) students from Grade 7, ninety (90) from Grade 8, ninety-three (93) from Grade 9 and one hundred six (106) from Grade 10 or a total of four hundred thirteen (413) students.

This research applied stratified random sampling technique where researcher partitioned the total population into subpopulation before the administration of questionnaires. Stratified random sampling is a method for sampling from a population whereby the population is divided into subgroups and units are randomly selected from the subgroups. Stratification of target populations is extremely common in survey sampling (The SAGE Encyclopedia of Educational Research, Measurement and Evaluation). Since stratified random sampling was used the only attribute considered was the grade level of the respondents.

Research Instrument

To get the appropriate data needed, the researcher employed a combination of a self – made and adapted survey checklist questionnaire.

The questionnaire consisted of three (3) parts.

Part I gathered the demographic profile of the participants. The tool for profile determined the age, sex, monthly family income, gadgets and internet connectivity used by the students during Blended Learning.

Part II of the questionnaire was used to determine the challenges encountered by the learners in Blended Learning in terms of their Motivation, Technological Literacy and Competency, Availability of Gadgets and Learning Environment.

Part III of the questionnaire determined the coping mechanisms (Active, Expressive and Avoidance) utilized by the learner to overcome the challenges brought by Blended Learning.

Part I and III of the questionnaire were self – made part. The draft of the questionnaire was drawn out to and on the researcher's readings, professional literature, published and unpublished theses relevant to the study. The study of Cao, 2021 entitled "Rapid Transitioning to Remote Learning: Shared Responsibility and Coping Strategies" was used as basis by the researcher in constructing indicators for part III of the questionnaire. According to Cao (2021), there are five items that can be used to describe each coping techniques.

To determine the reliability of the questionnaire, the researcher asked expert people in the field like the grammarian, statistician, licensed guidance counselor, psychologist, and Junior High School Principal to evaluate it. On the other hand, part II was where the researcher adapted a questionnaire from an existing study by Barrot et. al., 2018 entitled as "Students' Online Learning Challenges during the Pandemic and how they cope with them: The case of the Philippines".

The second and third part of the questionnaire used a 4-point Likert scale such as 4 – Strongly Agree (SA), 3 – Agree (A), 2 – Disagree (D) and 1 – Strongly Disagree (SD) so as to eliminate bias and for convenience in the statistical analysis of data. Some of the terms were also contextualized based on the locality. A validation tool was used to assess its practicality and validity. The questionnaire was verified by a group of validators for content, grammatical structure, and statistical concerns.

Procedure

The researcher asked certain expert people in the field like grammarian, licensed guidance counselor, psychologist, and Junior High School Principal to validate and assess the questionnaire in order to guarantee its reliability and validity. The person expressing concern received a letter. The availability of validators was considered by the researcher.

After series of validation and revisions in the questionnaire and acquiring all the formal permission that the researcher must acquire from the Graduate School and the locale where the data were collected, the researcher delved into gathering the data needed on the profile, challenges encountered, and coping mechanism employed on Blended Learning of the participants. The survey questionnaire was in a Google Form. The researcher individually gave the link to the class advisers of the respondents. The advisers shared the link with the students.

The researcher allotted two (2) weeks to gather and compile all the data needed.

Data Analysis

As soon as the researcher gathered the data, it was compiled, sorted, organized, and tabulated. It was subjected to statistical treatment to answer the questions proposed in the study. The statistical tools employed were the Frequency count, Percentage, Weighted Mean, t-test, Pearson's r Correlation and Kruskal Wallis. The data gathered in this study was subjected to the following statistical treatment.

Frequency Count and Percentage. This determined the number of the respondents who checked in the particular item. The demographic profile, in terms of age, sex, monthly family income, gadgets and internet connectivity used during Blended Learning of the respondents was identified.

Weighted Mean. This was utilized to get the average or central value like Percentage and Rank of every statement regarding the challenges and coping mechanism of the participants on Blended Learning.

t-test. This was used to determine the significant difference between the responses of the respondents on the challenges and coping mechanisms they utilized.

Pearson's r Correlation. This tool is employed to compute for the value of relationship between the challenges and coping mechanism of the participants on Blended Learning.

Kruskal Wallis. This tool is used to compute the value of difference between the challenges and coping mechanism of the participants on Blended Learning when grouped according to their profile.

RESULTS AND DISCUSSIONS

This part of the study gives the presentation, analysis and interpretation of data gathered from the questionnaires answered by the respondents. Such presentation is in accordance with the specific questions posited on the statement of the problem.

1. Profile of the Respondents.

As presented in the table, out of 495 respondents from School A, 265 of them or or 53.54% at rank 1 belonged to the age range of 14 - 16 while 230 or 46.46% at rank 2 came from the age range of 10 - 13.

For the respondents from the respondents from School B, the age range of 14 - 16 also got the highest frequency count of 236 or 57.14% at rank 1 whereas 10 - 13 years old made the least frequency count of 199 or 48.18% at rank 2.

Table 1. Demographic Profile of the Two Groups of Learners in Blended Learning in Terms of Age, Sex, Family Income, Gadgets Used and Internet Connectivity

Profile Variables	School A			School B		
	F	P	R	F	P	R
Age						
10 – 13	230	46.46	2	199	48.18	2
14 – 16	265	53.54	1	214	51.82	1
Total	**495**	**100**		**413**	**100**	
Sex						
Male	203	41.01	2	177	42.86	2
Female	292	58.99	1	236	57.14	1
Total	**495**	**100**		**413**	**100**	
Monthly Family income						
P0 - P5,000	62	12.53	5	92	22.28	2
P5,001 - P10,000	52	10.51	6	106	25.67	1
P10,001 - P15,000	63	12.73	4	56	13.56	3
P15,001 - P20,000	75	15.15	3	54	13.08	4
P20,001 _ P25,000	119	24.04	2	53	12.83	5
More than P25,000	124	25.05	1	52	12.59	6
Total	**495**	**100**		**413**	**100**	
Gadgets Used During Blended Learning						
Mobile Phone	268	54.14	1	339	82.08	1
Laptop/Desktop	166	33.54	2	63	15.25	2
Tablet/I-pad	61	12.32	3	11	2.66	3
Total	**495**	**100**		**413**	**100**	
Internet Connectivity Used During Blended Learning						
Mobile Data	106	21.41	2	156	37.77	2
Wireless Fidelity	389	78.59	1	257	62.23	1
Total	**495**	**100**		**413**	**100**	

With respect to the sex of the respondents, female gained the highest frequency count of 292 or 58.99% and 236 or 57.14% at ranks 1 while male obtained the least frequency counts of 203 or 41.01% and 177 or 42.86% at ranks to for School's A and B, respectively.

In terms of the respondents' monthly family income, more than P25,0000 got the highest frequency count of 124 or 25.05% at rank 1 while P5,001 - P10,000 made the least frequency count of 52 or 10.51% at rank 2 for School A.

For the respondents from School B, the monthly family income of P5,001 - P10,000 yielded the highest frequency count of 106 or 25.67% at rank 1 whereas more than P25,000 made the least frequency count of 52or 12.59% at rank 6.

Regarding the gadgets used during blended learning, mobile phone got the highest frequency counts of 268 or 54.14% and 339 or 82.08% at ranks 1 while tablet/I-pad garnered the least frequency counts of 61 or 12.32% and 11 or 2.66% at ranks 2 for Schools' A and B, respectively.

Lastly, in terms of internet connectivity used during blended learning, WIFI obtained the highest frequency counts of 389 or 78.59% and 257 or 62.23% at ranks 1 while mobile data gained the least frequency counts of 106 or 21.41% and 156 or 37.77% at ranks 2 for Schools' A and B, respectively.

2. Challenges Encountered by the Two Groups of Learners in Blended Learning.

2.1 In Terms of Motivation

As shown in the table, the respondents from Schools' A and B strongly agreed that during blended learning, they were challenged in turning in their assignments for their classes on time so that they are either fully finished by the due date or not rushed to be finished which got the highest weighted means of 3.86 and 3.37, respectively with similar ranks of 1.

**Table 2. Challenges Encountered by the Two Groups of Learners
in Blended Learning in Terms of Motivation**

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I turn in assignments for my classes on time so that they are either	3.86	SA	1	3.37	SA	1
2. I usually ask for appropriate help during online classes.	3.20	A	5	3.14	A	5
3. I have enough preparation before my class.	3.14	A	6	3.31	SA	2
4. I have good time management skills during asynchronous classes.	3.31	SA	4	3.06	A	6
5. I know how to properly use online peer learning strategies like learning from one another, peer tutoring, group discussion, and peer feedback to better facilitate learning.	3.39	SA	2	3.19	A	4
6. I have strong ability to control my own thoughts, emotions, and	3.34	SA	3	3.25	SA	3
Composite Mean	**3.29**	**SA**		**3.22**	**A**	

Motivation and learning are two concepts which are connected. The essential factor in engaging in learning activities is motivation, therefore without motivation, someone won't complete learning tasks.

2.2 In Terms of Technological Literacy and Competency

Table 3 Challenges Encountered by the Two Groups of Learners in
Blended Learning in Terms of Technological Literacy and Competency

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I have enough competence and proficiency in using various learning online educational applications (Google Classroom, Google Meet or Zoom).	3.47	SA	1	3.20	A	2
2. I accept learning technology.	3.41	SA	2	3.30	SA	1
3. I feel excited by an overly complex technology.	3.18	A	5	3.10	A	4
4. I have enough ability to effectively use technology to facilitate learning.	3.31	SA	3	3.15	A	3
5. I have high understanding of directions and expectations during online learning.	3.25	SA	4	3.06	A	5
Composite Mean	**3.32**	**SA**		**3.16**	**A**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
        A = Agree   VI = Verbal Interpretation

As gleaned in Table 3, the respondents from School A strongly agreed that during blended learning, they were challenged in having enough competence and proficiency in using various learning online educational applications (Google Classroom, Google Meet or Zoom) which gained the highest weighted mean of 3.47 with rank of 1.

For the respondents from School B, they strongly agreed that during blended learning, they were challenged in accepting learning technology which made the highest weighted mean of 3.30 and highest rank of 1.

On the contrary, School B respondents agreed that during blended learning, they were challenged in having high understanding of directions and expectations during online learning which obtained the least weighted mean of 3.06 and least rank of 5.

The composite means of 3.32 for School A and 3.16 for School B inferred that they strongly agreed and agreed, respectively on the challenges they encountered during blended learning in terms of technological literacy and competency.

2.3 In Terms of Availability of Gadgets

Table 4. Challenges Encountered by the Two Groups of Learners in Blended Learning in Terms of Availability of Gadgets

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I have a sufficient access to learning technology during online	3.31	SA	2	3.07	A	2
2. I experienced equalities with regards to access to and use of technologies during synchronous classes despite of my socioeconomic, physical, and psychological condition.	3.23	A	4	3.06	A	3
3. I have an updated learning gadget.	3.26	SA	3	3.04	A	4
4. I have enough Internet access for online classes.	3.34	SA	1	3.10	A	1
5. I have a learning gadget with fast processing speed.	3.22	A	5	2.99	A	5
Composite Mean	**3.27**	**SA**		**3.05**	**A**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
                A = Agree   VI = Verbal Interpretation

As seen in the table, the respondents from Schools' A and B strongly agreed and agreed that during blended learning, they were challenged in having enough Internet access for online classes which yielded the highest weighted means of 3.3.26 and 3.04 respectively with similar ranks of 1.

2.4 In Terms of Learning Environment

Table 5. Challenges Encountered by the Two Groups of Learners in Blended Learning in Terms of Learning Environment

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I experienced online distractions such as social media or online games during asynchronous classes.	3.14	A	1	3.06	A	3
2. I experienced distractions at home like unnecessary noise and commands from my parents during synchronous classes.	3.09	A	3	3.10	A	1.5
3. I have difficulties in selecting the best time and area for learning at home.	2.96	A	4	3.04	A	4
4. I think that home set-up limits the completion of certain requirements for my subject (e.g., laboratory and physical activities).	3.11	A	2	3.10	A	1.5
Composite Mean	**3.07**	**A**		**3.07**	**A**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
                A = Agree   VI = Verbal Interpretation

As given in Table 5, the respondents from School A agreed that during blended learning, they were challenged in experiencing online distractions such as social media or online games during asynchronous classes which gave the highest weighted mean of 3.14 and the highest rank of 1.

Based from the result one of the distractions at home during blended learning is online distractions. This can be supported by a study conducted by Suryaman et al. (2020) which looked into how learning occurred at home during the pandemic. Their findings showed that learners faced many obstacles in a home learning environment, such as lack of mastery of technology, high Internet cost, limited interaction or socialization between and among students and engagement to social media during blended learning.

With respect to the respondents from School B, they agreed that during blended learning, they were challenged in experiencing distractions at home like unnecessary noise and commands from their parents during synchronous classes, and in thinking that home set-up limits the completion of certain requirements for their subject (e.g., laboratory and physical activities) which gained the highest equal weighted means of 3.10 and highest equal ranks of 1.5.

**Table 6. Summary Table on the Challenges Encountered
by the Two Groups of Learners in Blended Learning**

Indicators	School A			School B		
	CM	VI	R	CM	VI	R
1. Motivation	3.29	SA	2	3.22	A	1
2. Technological Literacy and Competency	3.32	SA	1	3.16	A	2
3. Availability of Gadgets	3.27	SA	3	3.05	A	4
4. Learning Environment	3.07	A	4	3.07	A	3
Grand Mean	**3.24**	**SA**		**3.13**	**A**	

Legend: SA = Strongly Agree   CM = Composite Mean   R = Ranking
        A = Agree   VI = Verbal Interpretation

The grand means of 3.24 for School A and 3.13 for School B signified that they strongly agreed and agreed, respectively that the most challenging are motivation and technological literacy and competency while the least are learning environment and availability of gadgets on the challenges they encountered during blended learning.

3. Coping Mechanisms Utilized by the Two Groups of Learners to Overcome the Challenges Brought by Blended Learning.

3.1 In Terms of Active
As discussed in Table 7, the respondents from Schools A and B strongly agreed that they face the challenges they encounter during classes and try to find out a solution during blended learning which made the highest weighted means of 3.36 and 3.32, respectively and the highest ranks of 1.

**Table 7. Coping Mechanisms Utilized by the Two Groups of Learners to Overcome
the Challenges Brought by Blended Learning In Terms of Active**

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I face the challenges I encounter during classes and try to find out a solution.	3.36	SA	1	3.32	SA	1
2. I think about what I can do to obtain better control over a specific situation arise during online class.	3.29	SA	4	3.20	A	5
3. I knew what had to be done, so I doubled my efforts to make things work.	3.31	SA	3	3.27	SA	2.5
4. I concentrate on the efforts on doing something about it especially in accomplishing tasks given to me.	3.35	SA	2	3.27	SA	2.5
5. I make a plan of action before doing my activities.	3.28	SA	5	3.23	A	4
Composite Mean	**3.32**	**SA**		**3.26**	**SA**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
            A = Agree   VI = Verbal Interpretation

Furthermore, the respondents from School A agreed that during blended learning, they made a plan of action before doing their activities, while on the part of the respondents from School B, they agreed and think about what they can do to obtain better control over a specific situation arise during online class which got the least weighted means of 3.10 and highest equal ranks of 1.5.

Moreover, these group of respondents from Schools' A and B also agreed that during blended learning, they make a plan of action before doing their activities, and they think about what they can do to obtain better control over a specific situation arise during online class which got the least weighted means of 3.28 and 3.20, respectively and least ranks of 5.

Table 8. Coping Mechanisms Utilized by the Two Groups of Learners to Overcome the Challenges Brought by Blended Learning In Terms of Expressive

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I share to my friends and family whenever I face difficulties due to schoolworks.	3.15	A	3	3.04	A	3
2. I asked for help to my friends and family whenever I cannot handle school matters.	3.20	A	2	3.07	A	2
3. I discuss my feelings to someone to relieve the pressure and tension brought by online class.	3.07	A	5	2.99	A	5
4. I get upset and let my emotions out especially when I cannot comply on the school tasks given to me.	3.10	A	4	3.01	A	4
5. I try to get advice from someone about what to do.	3.21	A	1	3.15	A	1
Composite Mean	**3.15**	**A**		**3.05**	**A**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
          A = Agree   VI = Verbal Interpretation

Moreover, these groups of respondents from Schools' A and B also agreed that during blended learning, they discussed their feelings to someone to relieve the pressure and tension brought by online class which made the least weighted means of 3.07 and 2.99, respectively and least ranks of 5.

3.2 In Terms of Avoidance

As revealed in Table 9, the respondents from Schools A and B both strongly agreed that they wish that the pandemic would go away and be back to normal face to face classes which garnered the highest weighted means of 3.53 and 3.61, respectively and the highest ranks of 1.

Table 9. Coping Mechanisms Utilized by the Two Groups of Learners to Overcome the Challenges Brought by Blended Learning In Terms of Avoidance

Indicators	School A			School B		
	WM	VI	R	WM	VI	R
1. I wish that the pandemic would go away and be back to normal face to face classes.	3.53	SA	1	3.61	SA	1
2. I tried to keep things to myself.	3.19	A	2	3.01	A	2
3. I admit to myself that I can't deal with the tasks given and quit trying.	2.75	A	5	2.65	A	5
4. I turn to other substitute activities like social media or online games to take my mind off things.	3.06	A	3	2.90	A	3
5. I tried not to think about the problem (e.g. missed activities or unaccomplished tasks in school).	2.84	A	4	2.80	A	4
Composite Mean	**3.08**	**A**		**3.00**	**A**	

Legend: SA = Strongly Agree   WM = Weighted Mean   R = Ranking
          A = Agree   VI = Verbal Interpretation

The results revealed that the widely used strategy by the learners to avoid challenges brought by blended learning is wishing and hoping that the pandemic would go away and be back to normal face to face classes.

Lastly, these group of respondents from Schools' A and B also agreed that during blended learning, they admitted to themselves that they can't deal with the tasks given and quit trying which made the least weighted means of 2.75 and 2.65, respectively and least ranks of 5.

Learners in denial of a negative situation may not feel a shared responsibility for their academic success. A possible explanation for adopting this type of strategy is that many learners do not want to burden others with their problems or fear admitting their vulnerability.

**Table 10. Summary Table on the Coping Mechanisms Utilized by
the Two Groups of Learners in Blended Learning**

Variables	School A			School B		
	CM	VI	R	CM	VI	R
1. Active	3.32	SA	1	3.28	SA	1
2. Expressive	3.15	A	2	3.05	A	2
3. Avoidance	3.08	A	3	2.80	A	3
Grand Mean	**3.18**	**A**		**3.04**	**A**	

The grand means of 3.18 for School A and 3.04 for School B signified that they agreed, respectively that the most commonly used coping mechanism during blended learning is active coping while the least is avoidance coping.

4. Difference Between the Responses of the Two Groups of Learners on the Challenges and Coping Mechanisms on Blended Learning.

**Table 11. Difference Between the Responses of the Two Groups of Learners on
the Challenges and Coping Mechanisms on Blended Learning**

Variables Compared	t-value	p-value	Decision	Interpretation
Challenges on Blended Learning				
Motivation	2.16	0.03103	p<0.05, Reject Ho	Significant
Technological Literacy and Competency	4.03	6.05E-6	p<0.01, Reject Ho	Highly Significant
Availability of Gadgets	6.98	0.00000	p<0.01, Reject Ho	Highly Significant
Learning Environment	0.00	1.00000	p>0.05, Failed to Reject Ho	Not Significant
Coping Mechanisms on Blended Learning				
Active	1.73	0.08397	p>0.05, Failed to Reject Ho	Not Significant
Expressive	2.33	0.02002	p<0.05, Reject Ho	Significant
Avoidance	2.13	0.03344	p<0.05, Reject Ho	Significant

As shown in the table, when the responses of the two groups of respondents on the challenges they encountered during blended learning were compared, the computed t-values of 4.03 for technological literacy and competency and 6.98 for availability of gadgets have corresponding p-values of less than 0.01, thus rejecting the hypothesis. In addition, the computed t-value of 2.16 for motivation has a corresponding p-value of less than 0.05, thus rejecting also the hypothesis. On the contrary, the computed t-value of 0.00 for learning environment has a corresponding p-value of more than 0.05, thus failing to reject the hypothesis.

These safely concluded that when the responses of the two groups of respondents on the challenges they encountered during blended learning were compared, high significant differences were found in terms of technological literacy and competency, and availability of gadgets; significant difference in terms of motivation; and no significant difference in terms of learning environment.

4. Relationship Between Challenges Experienced by the Two Groups of Learners and Coping Mechanisms they Utilized on Blended Learning

**Table 12. Relationship Between the Challenges Experienced by the Two Groups of
Respondents and Coping Mechanisms they Utilized on Blended Learning**

Variables Compared	r-value	p-value	Decision	Interpretation
Challenges Versus Coping Mechanisms on Blended Learning				
Motivation				
Active	0.57	0.0000	p<0.01, Reject Ho	Highly Significant
Expressive	0.42	0.0000	p<0.01, Reject Ho	Highly Significant
Avoidance	0.30	0.0000	p<0.01, Reject Ho	Highly Significant

Technological Literacy and Competency				
Active	0.60	0.0000	p<0.01, Reject Ho	Highly Significant
Expressive	0.40	0.0000	p<0.01, Reject Ho	Highly Significant
Avoidance	0.30	0.0000	p<0.01, Reject Ho	Highly Significant
Availability of Gadgets				
Active	0.57	0.0000	p<0.01, Reject Ho	Highly Significant
Expressive	0.39	0.0000	p<0.01, Reject Ho	Highly Significant
Avoidance	0.31	0.0000	p<0.01, Reject Ho	Highly Significant
Learning Environment				
Active	0.31	0.0000	p<0.01, Reject Ho	Highly Significant
Expressive	0.35	0.0000	p<0.01, Reject Ho	Highly Significant
Avoidance	0.55	0.0000	p<0.01, Reject Ho	Highly Significant

As displayed in Table 12, when the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of motivation were compared to their coping mechanisms, the computed r-values of 0.57 for active, 0.42 for expressive and 0.30 for avoidance have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

These safely signified that the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of motivation have high significant relationships with the coping mechanisms such as active, expressive and avoidance.

Furthermore, when the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of technological literacy and competency were compared to their coping mechanisms, the computed r-values of 0.60 for active, 0.40 for expressive and 0.30 for avoidance have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

These safely inferred that the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of technological literacy and competency have high significant relationships with the coping mechanisms such as active, expressive and avoidance.

Moreover, when the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of availability of gadgets were compared to their coping mechanisms, the computed r-values of 0.57 for active, 0.39 for expressive and 0.31 for avoidance have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

These safely affirmed that the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of availability of gadgets have high significant relationships with the coping mechanisms such as active, expressive and avoidance.

To conclude, when the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of learning environment were compared to their coping mechanisms, the computed r-values of 0.31 for active, 0.35 for expressive and 0.55 for avoidance have corresponding p-values of less than 0.01, thus rejecting the hypothesis.

These safely implied that the responses of the two groups of respondents on the challenges they encountered during blended learning in terms of learning environment have high significant relationships with the coping mechanisms such as active, expressive and avoidance.

5. Difference on the Challenges Utilized by the Two Groups of Learners when Grouped According to their Profile.

As given in Table 12.1, when the responses of the two groups of respondents on the challenges they encountered during blended learning were grouped according to their age, the computed t-values of 2.78 for motivation and 2.63 for learning environment have corresponding p-values of less than 0.01, thus rejecting the null hypothesis. In addition, the computed t-value of 2.44 for availability of gadgets has a corresponding p-value of less than 0.01, thus rejecting also the hypothesis. Meanwhile, the computed t-value of 1.18 for technological literacy and competency has a corresponding p-value of more than 0.05, thus failing to reject the hypothesis.

These safely generalized that the responses of the two groups of respondents on the challenges they encountered during blended learning have high significant differences in terms of motivation and learning environment significant difference in terms of availability of gadgets; and no significant difference in terms of technological literacy and competency when grouped according to their age profile.

Table 12.1. Difference on the Challenges Utilized by the Two Groups of Respondents on Blended Learning When Grouped According to their Profile

Variables Compared	t/*F-	p-value	Decision	Interpretation
Age				
Motivation	2.78	0.00555	p<0.01, Reject Ho	Highly Significant
Technological Literacy Competency	1.18	0.23831	p>0.05,Failed to Reject Ho	Not Significant
Availability of Gadgets	2,44	0.01588	p<0.05, Reject Ho	Significant
Learning Environment	2.63	0.00868	p<0.01, Reject Ho	Highly Significant
Sex				
Motivation	0.65	0.51587	p>0.05,Failed to Reject Ho	Not Significant
Technological Literacy Competency	0.40	0.68925	p>0.05,Failed to Reject Ho	Not Significant
Availability of Gadgets	0.02	0.98405	p>0.05,Failed to Reject Ho	Not Significant
Learning Environment	0.07	0.94421	p>0.05,Failed to Reject Ho	Not Significant
Monthly Family Income				
Motivation	12.22	0.13606	p<0.01, Reject Ho	Highly Significant
Technological Literacy Competency	2.33	0.07363	p>0.05,Failed to Reject Ho	Not Significant
Availability of Gadgets	3.25	0.02216	p<0.05, Reject Ho	Significant
Learning Environment	8.36	0.00031	p<0.01, Reject Ho	Highly Significant
Gadgets Used During Blended Learning				
Motivation	11.24	0.00104	p<0.01, Reject Ho	Highly Significant
Technological Literacy Competency	13.65	0.00081	p<0.01, Reject Ho	Highly Significant
Availability of Gadgets	10.24	0.00254	p<0.01, Reject Ho	Highly Significant
Learning Environment	11.24	0.00104	p<0.01, Reject Ho	Highly Significant
Internet Connectivity Used During Blended Learning				
Motivation	2.99	0.00287	p<0.01, Reject Ho	Highly Significant
Technological Literacy Competency	4.99	0.70207	p<0.01, Reject Ho	Highly Significant
Availability of Gadgets	10.32	0.00000	p<0.01, Reject Ho	Highly Significant
Learning Environment	0.59	0.55534	p>0.05,Failed to Reject Ho	Not Significant

When the responses of the two groups of respondents on the challenges they encountered during blended learning were grouped according to their sex, the computed t-values of 0.65 for motivation, 0.40 for technological literacy and competency, 0.02 for availability of gadgets and 0.07 for learning environment have corresponding p-values of more than 0.05, thus failing to reject the null hypothesis.

These safely implied that the responses of the two groups of respondents on the challenges they encountered during blended learning have no significant differences in terms of motivation, technological literacy and competency, availability of gadgets and learning environment when grouped according to their sex.

These safely inferred that the responses of the two groups of respondents on the challenges they encountered during blended learning have high significant differences in terms of motivation, technological literacy and competency, availability of gadgets and learning environment when grouped according to their gadgets used during blended learning.

Table 12.2 Difference on the Coping Mechanisms Utilized by the Two Groups of Respondents on Blended Learning When Grouped According to their Profile

Variables Compared	t/*K-value	p-value	Decision	Interpretation
Age				
Active	1.32	0.18717	p>0.05,Failed to Reject Ho	Not Significant
Expressive	0.64	0.52233	p>0.05,Failed to Reject Ho	Not Significant
Avoidance	1.26	0.20799	p>0.05,Failed to Reject Ho	Not Significant
Sex				
Active	1.06	0.28943	p>0.05,Failed to Reject Ho	Not Significant
Expressive	0.96	0.33731	p>0.05,Failed to Reject Ho	Not Significant
Avoidance	1.14	0.25459	p>0.05,Failed to Reject Ho	Not Significant
Monthly Family Income				
Active	2.35	0.07168	p>0.05,Failed to Reject Ho	Not Significant
Expressive	1.36	0.27409	p>0.05,Failed to Reject Ho	Not Significant
Avoidance	2.11	0.09906	p>0.05,Failed to Reject Ho	Not Significant

Gadgets Used During Blended Learning				
Active	8.36	0.00532	p<0.01, Reject Ho	Highly Significant
Expressive	1.37	0.29114	p>0.05,Failed to Reject Ho	Not Significant
Avoidance	1.98	0.18067	p>0.05,Failed to Reject Ho	Not Significant
Internet Connectivity Used During Blended Learning				
Active	3.29	0.00104	p<0.01, Reject Ho	Highly Significant
Expressive	0.60	0.54866	p>0.05,Failed to Reject Ho	Not Significant
Avoidance	0.78	0.43559	p>0.05,Failed to Reject Ho	Not Significant

In addition, when the responses of the two groups of respondents on the coping mechanisms they employed during blended learning were grouped according to their internet connectivity during pandemic, the computed t-value of 3.29 has a corresponding p-value of less than 0.01, thus rejecting the hypothesis.

CONCLUSIONS

The following Conclusions were drawn:
1. Technological literacy and competency, and availability of gadgets were the most challenging that the students encountered during this modality.
2. But in response to these difficulties, educators develop fresh approaches to teaching. However, students also acquire coping mechanisms in order to adjust to this new medium of learning. The students employed active coping the least out of all the coping strategies.
3. Finally, this study examined the significant relationship between the challenges faced by the two groups of learners and the coping strategies they adopted.

RECOMMENDATIONS

The study came up with the following recommendations:
Navigating the landscape of blended learning presents a range of challenges, necessitating adaptive strategies and resilient coping mechanisms. Because of this several recommendations can be made in light of the findings of this research study in order to increase the efficacy of blended learning and better assist junior high school students in overcoming challenges and attaining better learning outcomes:
Since the foremost challenge lies in the technological literacy and competency of the students,
1. The stakeholders should offer comprehensive technical support to both educators and students.
2. To be able to address technological barriers, engaging students in a blended environment can be practiced through interactive online content, incorporating gamification elements, and fostering peer collaboration that may guide students having this dilemma. Also adequate teacher training and ongoing support are vital.
3. Workshops on technology integration can arrange training sessions or workshops to improve the technical literacy and competency of both students and teachers. The effective use of digital tools, internet platforms, and gadgets could be covered in these courses, lowering the hurdles brought on by a lack of technological proficiency.
4. Availability of learning gadgets is also an issue. This can be addressed by giving diverse assessment methods that can still gauge student progress without using high end learning tools. Flexibility of the educator remains the key for the students to adapt to these strategies and changing circumstances.
5. A flexible assessment technique is also a good recommendation. Educators should think about implementing a variety of assessment techniques that take into account the difficulties that students may encounter in a blended learning setting. Open-book exams, project-based evaluations, and interactive assignments that promote critical thinking and inventive problem-solving could all fall under this category.
6. Establish specialized counseling and support services to aid students in better managing the pressures of blended learning. These programs could provide advice on time management, study techniques, and emotional health, empowering students to handle difficulties more skillfully.
7. Promoting active coping by teachers can try to support students' use of proactive coping mechanisms by promoting active coping techniques.

8. Another recommendation is to encourage continuing investigation into and evaluation of the efficacy of blended learning methodologies. This will make it possible for teachers to modify their methods in response to changing trends, student feedback, and technological improvements.
9. Future studies may broaden the learning setting to include K–12 and a number of higher education institutions from various geographic regions in order to strengthen the findings. As a final point, this pandemic has surely changed the educational landscape and stretched it to its breaking point. However, this extraordinary occurrence is also what will strengthen the educational system and enable it to withstand attacks in the future.

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THE ECONOMIC CONTRIBUTION OF LOCAL BUSINESSES IN THE MUNICIPALITY OF INFANTA PANGASINAN

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ABSTRACT

The study described the economic profile, business profile, and economic contribution of local businesses in the Municipality of Infanta, Pangasinan, for the business years 2021 and 2022 with an end view to determine the economic contribution of local businesses in town. The study used a descriptive survey research design with a 100% retrieval rate. Research instrumentation achieved internal consistency with 237 respondents. It utilized frequency count, percentage, summation, mode, and one-way Analysis of Variance. Initial findings revealed that 95 or 40.08% earned income under the bracket of 15,001-50,000, 123 or 51.90% employed 3-4 employees in their stores, there was an average total product line in town with an aggregate of 12 or 5.04%, businesses in town were dominated by 88 or 37.13% variety stores where 133 or 56.12% with 10 years in operation or more. Further, local businesses prefer to invest in the minimum capital requirement applicable to small-scale businesses in town. The computed means (EC=EP) confirmed the null hypothesis. In light of the preceding findings, this study concluded that the local businesses' change in values (supply, consumption, revenue) resulted in negative performance means negative business contribution or negative impact, such as in the cases of Barangays Babuyan, Bamban, Nayom, Batang, Bayambang, Patima, and Pita. The study recommended a review of zero contributions or even negative business performances, a consortium among government leaders to design business schemes to reinforce economic contributions in town, and adopt the proposed mini business plan intended for the business profile of the thirteen Barangays, accordingly.

INTRODUCTION

The world of business evolves because of the continuing flow of product frontier and service provision among producers and consumers. With the ever-changing consumer demands, businesses must innovate to live up to the expectations the world sets, which are said to be insatiable. Identified businesses, such as the Micro, Small and Medium Enterprises (MSMEs), whether big or small operating around the corners, must prioritize consumer delight while ensuring contribution to the overall economic growth, market share, and employee well-being. It is where this paper materializes to determine the economic contribution of local businesses in town. Consequently, business success stories welcome business opportunities, product development, and service experience among the target market. Likewise, business continuity becomes a strong indicator for continuous growth of the economy, availability of employment, and accumulation of assets.

Micro, Small and Medium Enterprises (MSMEs) have been identified as the backbone of the global economy (Canare and Francisco, 2018). Noted that MSMEs are essential to the economy as they are linked statistically with job creation, innovation, and wealth. As such, MSMEs play a crucial role in the realization of the fullest economic potential and growth of one nation.

On a global scale, MSMEs include number of employees, total assets, and annual revenue. Further, in the context of partnership in nation-building, it contributed statistically to one's economy through value-added, employment generation, and importation and exportation capacity.

MSMEs are technically linked with local businesses, wholesalers, and retailers in an identified business center in the region, city, municipality, or town. These local businesses operate by the provisions set by regulatory agencies, i.e., the Local Department of Trade and Industry (DTI) and the concerned Municipal Business Licensing Office, to ensure smooth sailing business transactions. Local businesses are then classified, categorized, and arranged according to the measurement scale set by these governing agencies in the country.

The National American Retail Hardware Association (NHRA, 2020) wrote an article about the significance of local businesses, which can increase sales and profitability for businesses and lead to job creation and economic growth. By presenting products that are more appealing and easier to find, local businesses can encourage consumers to make purchases. This increased revenue can be reinvested for business expansion and market growth (www.nhra.org).

On the other hand, economic growth can be considered a contributing indicator to any country's development. Statistics showed that Gross National Product (GNP) and Gross Domestic Product (GDP) can also be considered yardsticks when adding value to the total growth rate of the country's economy. Some notable effects on the economy are increased tax revenue in favor of the government to carry out its essential social services like provisions of healthcare, education, and infrastructure.

The big question lies in converging these two perspectives, i.e., local business operations and economic growth and its possibilities and opportunities for the countryside's economy. By potentially identifying its significance and contribution materially, concerned stakeholders, policymakers, business owners, and consumers will have a bedrock of data to propose appropriate strategies to propel business engines and drive the economy toward growth and sustainability. A sound business operation could generate income, employment rates, and raise living standards among its citizens.

However, despite these numerous government initiatives to achieve the many goals of sustainable business operations, the current state of Philippine local businesses has some negative setbacks.

For example, an article by Business Insights narrated how inflation could impact different businesses (Lee, 2021). It is mentioned that inflation can have several effects on businesses. One major impact is increased costs for raw materials manufacturing and overhead expenses. Businesses may choose to absorb some of these costs to avoid losing consumers but, it still puts a strain on their profitability. Additionally, inflation reduces the purchasing power of consumers. As prices rise, people can afford to buy fewer goods and services. It leads to lower sales for businesses, decreasing total revenue. Moreover, was there relentless yet sincere support for our local entrepreneurs? If there's any, to what extent will it result in a 'win-win' situation among stakeholders? These are just some lingering questions that continue to beset the market where a simple Sari-Sari store operates in the corner is challenged to go for bankruptcy or business closure because of mismanagement or other factors that potentially affect its day-to-day business operation. In addition, what appropriate business models or strategies reinforce local businesses?

Based on the presented claims and arguments, the researchers would like to describe the economic contribution of local businesses in Infanta, Pangasinan, as well as the potential problems these businesses face in achieving their goals of contributing to economic success and growth.

Given the importance of businesses in the local economy, understanding their economic contribution is crucial for policymakers and business owners alike. This study shall describe the economic contribution of local businesses on local products, income generation, and overall economic growth in Infanta, Pangasinan. It shall provide significant insights into the role of local businesses in the local economy and update policymakers and decision-making bodies. This study will help local government leaders to have a greater appreciation for helping their citizens improve their living statuses through the successful operation of local businesses in the town. This study also aims to reach out to concerned authorities to have sincere plans and programs to boost the economic contribution of local businesses for future benchmarking and peer emulation across key tows and Municipalities.

Statement of the Problem

The study described the economic contribution of local businesses in the Municipality of Infanta, Pangasinan.

The following questions guided this study.

1. What is the economic profile of local businesses in terms of:
   1.1 average business monthly income;
   1.2 employment generation rate; and
   1.3 local product offerings?
2. What is the profile of the local businesses in terms of:
   2.1 types of local business;
   2.2 years of business operation; and
   2.3 initial capital investment?
3. What is the economic contribution on the profile of local businesses in the Municipality of Infanta for the past two years according to the:
   3.1 change in the number of product supply;
   change in personal consumption; and
   change in annual revenue?
4. What are the cited problems encountered by local businesses in town?
5. Is there a significant difference between the economic contributions of local businesses and their economic profile?
6. What business strategies can support the economic contribution of local businesses?

METHODOLOGY

This study used a descriptive survey research design to describe the economic profile, business profile, and economic contribution of local businesses in the Municipality of Infanta, Pangasinan.

It also determined the economic contribution (product supply, personal consumption, and annual revenue) in terms of the economic profile of the local businesses in the locality.

The study was conducted in the thirteen Barangays of the Municipality of Infanta, Pangasinan. The thirteen Barangays were Brgy. Babuyan, Brgy. Bamban, Brgy. Batang, Brgy. Bayambang, Brgy. Cato, Brgy. Doliman, Brgy. Maya, Brgy. Nangalisan, Brgy. Nayom, Brgy. Patima, Brgy. Pita, Brgy. Poblacion, and Brgy. Potol.

In this study, the respondents were the owners or managers of the local businesses in Infanta, Pangasinan. The records concerning registered businesses were retrieved from the Local Business Permit and Licensing Division Office (BPLDO) as of January 31, 2023.

The study used statistical tools, such as frequency, percentage, Lynch formula, and T-test analysis, to present and interpret data.

The sample size was determined using the Lynch formula (Lynch et al., 1972 and cited by Ardoles, 1992).

The following table showed the total registered businesses in the Municipality of Infanta.

Table 1. Registered Local Businesses

Registered Local Businesses*		Registered Local Businesses*	
Agricultural Products	30	Gasoline Stations	5
Amusement Centers	5	General Merchandise	79
Apartment and Space Rental	9	Government Subsidiary	1
Bakeries and Bakeshops	10	Meat Shops	16
Cooperative	4	Motorcycle Parts and Accessories	16
Corporate Business	9	Quasi-banking Functions	16
Drugstores and Beauty Products	7	Retailing	45
Dry Goods	29	Sari-Sari Stores	266
Eatery, Canteens, and Restaurants	16	Trading Enterprises	28
Food Stalls, Stands, and Kiosks	24	Variety Stores	42
Furniture and Fixtures	2	**Total**	**659**

The total number of registered local businesses was 659 as of January 31, 2023. However, only 615 [659 (business registrants) – 44 (service providers) = 615 (product offerors)] local businesses included in the statistics based on expert panel judgment.

The total sampling was 237 based on the computed Lynch as shown below.

$n = NZ^2 \times p \, (1-p)$

$n = 615 \, (3.84) \times 0.25 \, / \, 615 \, (0.0025) + 0.96$

$n = 2,361.6 \times 0.25 \, / \, 1.5375 + 0.96$

$n = 590.4 \, / \, 2.4975$

$n = 236.396$ or 237

Further, the following table showed the distribution of respondents using convenient sampling.

Table 2. Distribution of Respondents

Distribution	
Babuyan	12
Bamban	18
Batang	18
Bayambang	18
Cato	18
Doliman	7
Maya	18
Nangalisan	18
Nayom	18
Patima	18
Pita	15
Poblacion	56
Potol	3
Total	**237**

For statements of the problem nos. 1 and 2, the statistical treatment used were frequency count and percentage to describe the economic and business profile indicators. The formula was;

$$P = \frac{f}{n} \, (100)$$

Where:

F= frequency

N= total number of respondents

P= percentage

For statement of the problem no. 3, the statistical treatment used were frequency count, percentage, and summation to describe the economic contribution of local businesses for the past two years, i.e., Y2021 and Y2022.

For statement of the problem no. 4, mode was used for the cited problems encountered by local businesses in the town wherein reference was made for the following descriptions.

Rating	Descriptive Equivalent Rating
5	Strongly Agree (SA)
4	Moderately Agree (MA)
3	Fairly Agree (FA)
2	Moderately Disagree (MD)
1	Strongly Disagree (SD)

For statement of the problem no. 5, the formula One-way ANOVA was used to determine the significant difference between the economic profile of the respondents (independent variables) and the economic contributions (dependent) of the local businesses.

FINDINGS

For statement of the problem no. 1, the following table revealed the summary average business monthly income in the Municipality of Infanta, Pangasinan.

Table 4. Summary Average Business Monthly Income

Average Business Monthly Income	All Barangays	
	N	%
5,000 & below	38	16.03
5,001-15,000	52	21.94
15,001-50,000	95	40.08
50,001-100,000	42	17.72
100,001-300,000	10	4.23
Total	237	100

Table 4 revealed the summary of average business monthly income in the Municipality of Infanta, Pangasinan. There were 38 or 16.03% business owners whose average monthly income ranged from 5,000&below, 52 or 21.94% ranged from 5,001-15,000, 95 or 40.08% ranged from 15,001-50,000, 42 or 17.72% ranged from 50,001-100,000, and 10 or 4.23% ranged from 100,001-300,000.

Further, data confirmed that there were 95 or 40.08% more business owners whose average monthly income ranged from 15,001-50,000 in town, while there were 10 or 4.23% lesser business owners ranged from 100,001-300,000. The following table revealed the summary employment generation rate in the Municipality of Infanta, Pangasinan.

Table 6. Summary Employment Generation Rate

Employment Generation Rate	All Barangays	
	N	%
1-2 employees	90	37.97
3-4 employees	123	51.90
5 or more employees	24	10.13
Total	237	100

Table 6 revealed the summary of employment generation rate in the Municipality of Infanta, Pangasinan. There were 90 or 37.97% businesses with 1-2 employees, 123 or 51.90% businesses with 3-4 employees, and 24 or 10.13% of 5 or more employees.

Further, data confirmed that businesses in town, 123 or 51.90% of them employed 3-4 employees in their stores. The following table described the economic profile in terms of the local product offerings in the Municipality of Infanta, Pangasinan.

Table 7. Local Product Offerings Per Barangay

Local Product's Offerings	Total	%
Babuyan	9	50.00
Bamban	15	83.33
Batang	16	88.89
Bayambang	14	77.78
Cato	17	94.44
Doliman	17	242.86
Maya	13	72.22
Nangalisan	11	61.11
Nayom	17	94.44
Patima	9	50.00
Pita	11	73.33
Poblacion	7	12.50
Potol	14	466.67
Average	12	5.04

Table 7 revealed the local product's offerings of the thirteen Barangays.

Barangay Babuyan offered 9 or 50% variety of local product line in the market. Barangay Bamban offered 15 or 83.33% variety of local product line in the market. Barangay Batang offered 16 or 88.89% variety of local product line in the market. Barangay Bayambang offered 14 or 77.78% variety of local product line in the market. Barangay Cato offered 17 or 94.44% variety of local product line in the market. Barangay Doliman offered 17 or 242.86% variety of local product line in the market. Barangay Maya offered 13 or 72.22% variety of local product line in the market. Barangay Nangalisan offered 11 or 61.11% variety of local product line in the market. Barangay Nayom offered 17 or 94.44% variety of local product line in the market. Barangay Patima offered 9 or 50% variety of local product line in the market. Barangay Pita offered 11 or 73.33% variety of local product line in the market. Barangay Poblacion offered 7 or 12.50% variety of local product line in the market. Barangay Potol offered 14 or 466.67% variety of local product line in the market.

Further, data confirmed average total product line in town, there was an aggregate of 12 or 5.04% from the total 237 businesses which offered same local product line in the market.

For statement of the problem no. 2, the following table revealed the summary types of local businesses in the Municipality of Infanta, Pangasinan.

Table 9. Summary Types of Local Business

Type of Local Business	N	%
Agricultural Product	8	3.38
Bakery	5	2.11
Cellphone Repair Shop	7	2.95
Construction	8	3.38
Flower Shop		
Food Stalls	11	4.64
General Merchandise	4	1.69
Motorcycle Parts and Accessories	16	6.75
Printing	9	3.80
Retailing	4	1.69
Sari-Sari Store	77	32.49
Variety store	88	37.13
Total	**237**	**100**

Table 9 revealed the summary types of local businesses in the Municipality of Infanta, Pangasinan.

There were 8 or 3.38% agricultural type of local businesses, 5 or 2.11% bakery type of local businesses, 7 or 2.95% cellphone repair shop type of local businesses, 8 or 3.38% construction type of local businesses, 11 or 4.64% food stalls type of local businesses, 4 or 1.69% general merchandise type of local businesses, 16 or 6.75% motorcycle parts and accessories type of local businesses, 9 or 3.80% printing type of local businesses, 4 or 1.69% retailing type of local businesses, 77 or 32.49% sari-sari store type of local businesses, and 88 or 37.13% variety store type of local businesses.

Further, data confirmed that businesses in town were dominated by 88 or 37.13% variety stores out of 237 with no flower shop as of this date. The following table revealed the summary years of business operation in the Municipality of Infanta, Pangasinan.

Table 11. Summary Years of Business Operation

Years of Business Operation	N	%
Less than 1 year	28	11.81
1- 10 years	76	32.07
10 years or more	133	56.12
Total	**237**	**100**

Table 11 revealed the summary years of business operation in the Municipality of Infanta, Pangasinan. There were 28 or 11.81% operating businesses with less than a year, 76 or 32.07% operating businesses with 1-10 years, and 133 or 56.12% operating businesses with 10 years or more.

Further, data confirmed that operating businesses in town was dominated by 133 or 56.12% with 10 years or more out of 237 registrants. The following table revealed the summary of initial capital investment of local businesses in the Municipality of Infanta, Pangasinan.

Table 13. Summary Initial Capital Investment

Initial Capital Investment	N	%
5,000&below	8	3.38
5,001-15,000	22	9.28
15,001-50,000	64	27.00
50,001-100,000	50	21.10
100,001-300,000	46	19.41
300,001-500,000	11	4.64
500,001-1,000,000	11	4.64
1,000,001-3,000,000	7	2.95
3,000,001-10,000,000	14	5.91
10,000,001 or more	4	1.69
Total	**237**	**100**

Table 13 revealed the summary of initial capital investment of local businesses in the Municipality of Infanta, Pangasinan.

There were 8 or 3.38% business owners' initial capital ranged from 5,000&below, 22 or 9.28% business owners' initial capital ranged from 5,001-15,000, 64 or 27% business owners' initial capital ranged from 15,001-50,000, 50 or 21.10% business owners' initial capital ranged from 50,001-100,000, 46 or 19.41% business owners' initial capital ranged from 100,001-300,000, 11 or 4.64% business owners' initial capital ranged from 300,001-500,000, 11 or 4.64%business owners' initial capital ranged from 500,001-1,000,000, 7 or 2.95% business owners' initial capital ranged from 1,000,001-3,000,000, 14 or 5.91% business owners' initial capital ranged from 3,000,001-10,000,000, and 4 or 1.69% business owners' initial capital ranged from 10,000,001 or more.

Further, data confirmed that 64 or 27% business owner's initial capital ranged from 15,001-50,000 while only 4 or 1.69% ranged from 10,000,001 or more. This could be inferred that local businesses prefer to invest minimum capital requirement applicable for small scale businesses in town. For statement of the problem no. 3, the following table revealed the summary of change in number of product supply in the Municipality of Infanta, Pangasinan.

Table 15. Summary Change in Number of Product Supply

Change in Number of Product Supply	#	%	Change in Values
	65	27.43	1525000

Table 15 revealed the summary of change in number of product supply in the thirteen Barangays.

Data confirmed that there were 65 or 27.43% local businesses with computed change in number of product supply amounting to 1525000. The following table revealed the summary of change in personal consumption in the Municipality of Infanta, Pangasinan.

Table 17. Summary Change in Personal Consumption

Change in Personal Consumption	#	%	Change in Values
	72	30.38	1740000

Table 17 revealed the summary of change in personal consumption in the thirteen Barangays.

Data confirmed that there were 72 or 30.38% local businesses with computed change in personal consumption amounting to 1740000.

The following table revealed the summary of change in annual revenue in the Municipality of Infanta, Pangasinan.

Table 19. Summary Change in Annual Revenue

Change in Annual Revenue	#	%	Change in Values
	71	29.96	1865000

Table 19 revealed the summary of change in annual revenue in the thirteen Barangays.

Data confirmed that there were 71 or 29.96% local businesses with computed change in annual revenue amounting to 1865000. For statement of the problem no. 4, the following table revealed the cited problems encountered by local businesses in the Municipality of Infanta, Pangasinan.

Table 20. Local Business Problems

Cited Problems	Mode	Descriptive Equivalent Rating
BIR (Tax) Compliance	1	Strongly Disagree
Permits and Licenses Renewal	5	Strongly Agree
Limited Capital	1	Strongly Disagree
Loan Payment	1	Strongly Disagree
Mismanagement	1	Strongly Disagree
Poor Business Location	1	Strongly Disagree
Access to Credit or Financial Services	1	Strongly Disagree
Discouragement on Potential New Business	1	Strongly Disagree
Government Support to Business Training and Seminars	5	Strongly Agree
Existence of New Competitors	3	Fairly Agree
Low Profits	2	Moderately Disagree
Cost of Technology	1	Strongly Disagree
Fast Employee Resignation	1	Strongly Disagree
Lack of Local Business Campaign	1	Strongly Disagree
Low Demand for Products	1	Strongly Disagree

Table 20 revealed the problems encountered by local businesses in the thirteen Barangays. Respondents revealed that Permits and Licenses Renewal and Government Support to Business Training and Seminars with mode of 5 and with descriptive equivalent ratings of Strongly Agree (SA) became the topmost problems followed by the Existence of New Competitors with mode of 3 and with a descriptive equivalent rating of Fairly Agree (FA).

Further, respondents revealed that Low Profits with mode of 2 and with a descriptive equivalent rating of Moderately Disagree (MD) was not a problem to them, likewise, the BIR (Tax) Compliance, Limited Capital, Loan Payment, Mismanagement, Poor Business Location, Access to Credit or Financial Services, Discouragement on Potential New Business, Cost of Technology, Fast Employee Resignation, Lack of Local Business Campaign, and Low Demand for Products with mode of 1 and with descriptive equivalent ratings of Strongly Disagree (SD). For statement of the problem no. 5, the following tables revealed the significant difference between the Economic Contributions of local businesses and their Economic Profile in terms of Average Business Monthly Income, Employment Generation Rate, and Local Product's Offerings in the Municipality of Infanta, Pangasinan.

Table 21. Significant Difference between the Economic Contributions of Local Businesses and their Economic Profile in terms of Average Business Monthly Income

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Change_Product_Supply	Between Groups	6.672E9	4	1.668E9	.315	.868
	Within Groups	1.229E12	232	5.299E9		
	Total	1.236E12	236			
Change_Personal_Consumption	Between Groups	2.805E9	4	7.013E8	.056	.994
	Within Groups	2.926E12	232	1.261E10		
	Total	2.928E12	236			
Change_Annual_Revenue	Between Groups	3.338E10	4	8.344E9	.458	.767
	Within Groups	4.229E12	232	1.823E10		
	Total	4.262E12	236			

The table showed the Analysis of Variance (ANOVA) between the Economic Contributions of Local Businesses (Change in Product Supply, Change in Personal Consumption, and Change in Annual Revenue) when grouped according to Average Business Monthly Income of the respondents in the Municipality of Infanta, Pangasinan.

The computed F-value were .315, .056, and .458, respectively, and significance (p-value) p=.868, p=.994, and .767, respectively, which were greater than the alpha 0.05.

This meant that there was no significant difference on the economic contributions of local businesses when grouped according to their Average Business Monthly Income.
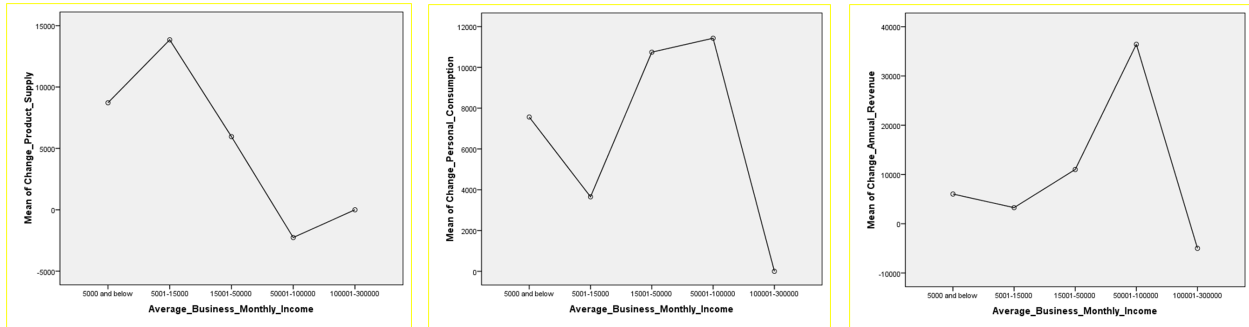

Table 22. Significant Difference between the Economic Contributions of Local Businesses and their Economic Profile in terms of Employment Generation Rate

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Change_Product_Supply	Between Groups	1.108E10	2	5.541E9	1.058	.349
	Within Groups	1.225E12	234	5.235E9		
	Total	1.236E12	236			
Change_Personal_Consumption	Between Groups	2.981E10	2	1.491E10	1.203	.302
	Within Groups	2.899E12	234	1.239E10		
	Total	2.928E12	236			
Change_Annual_Revenue	Between Groups	4.805E10	2	2.403E10	1.334	.265
	Within Groups	4.214E12	234	1.801E10		
	Total	4.262E12	236			

The table showed the Analysis of Variance (ANOVA) between the Economic Contributions of Local Businesses (Change in Product Supply, Change in Personal Consumption, and Change in Annual Revenue) when grouped according to Employment Generation Rate of the respondents in the Municipality of Infanta, Pangasinan.

The computed F-value were 1.058, 1.203, and 1.334, respectively, and significance (p-value) p=.349, p=.302, and .265, respectively, which were greater than the alpha 0.05. This meant that there was no significant difference on the economic contributions of the local businesses when grouped according to their Employment Generation Rate.
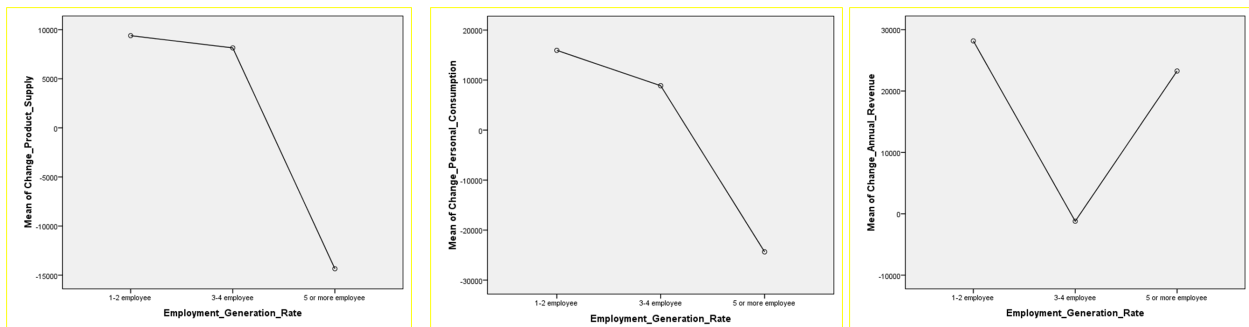
Table 23. Significant Difference between the Economic Contributions of Local Businesses and their Economic Profile in terms of Local Product's Offerings

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Change_Product_Supply	Between Groups	1.387E11	28	4.955E9	.939	.558
	Within Groups	1.097E12	208	5.276E9		
	Total	1.236E12	236			
Change_Personal_Consumption	Between Groups	4.526E11	28	1.616E10	1.358	.118
	Within Groups	2.476E12	208	1.190E10		
	Total	2.928E12	236			
Change_Annual_Revenue	Between Groups	5.894E11	28	2.105E10	1.192	.242
	Within Groups	3.673E12	208	1.766E10		
	Total	4.262E12	236			

The table showed the Analysis of Variance (ANOVA) between the Economic Contributions of Local Businesses (Change in Product Supply, Change in Personal Consumption, and Change in Annual Revenue) when grouped according to Local Product's Offerings of the respondents in the Municipality of Infanta, Pangasinan.

The computed F-value were .939, 1.358, and 1.192, respectively, and significance (p-value) p=.558, p=.118, and .242, respectively, which were greater than the alpha 0.05. This meant that there was no significant difference on the economic contributions of local businesses when grouped according to their Local Product's Offerings.
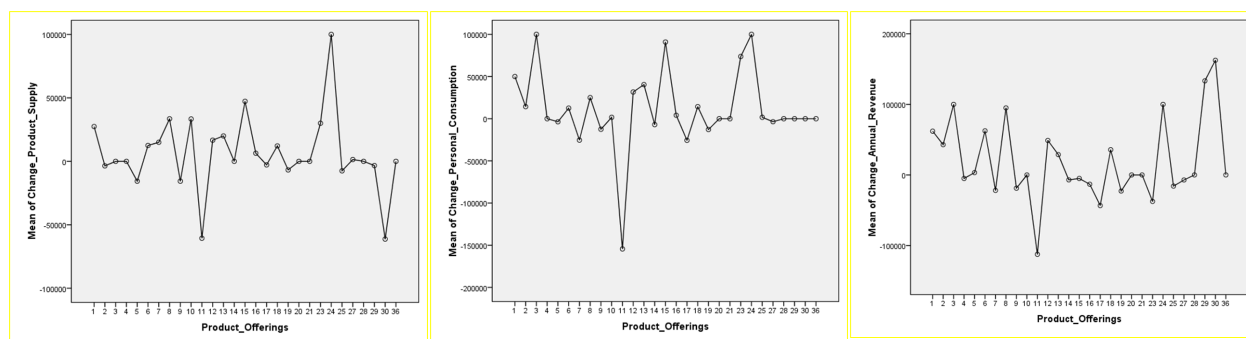
For statement of the problem no. 6 concerning business strategies in support to the economic contribution, this study proposed two business strategies achieving a sincere support concerning the economic contribution of local entrepreneurs in the Municipality of Infanta, Pangasinan.

The study designed a mini-business plan for the respective thirteen Barangays as it validated which among them considered to be business or non-business ready to date. The mini-business plan narrated the individualized business opportunities and challenges that the concerned Barangay Officials and entrepreneurs may consider. Though this strategy, investors and other group of business interests may objectively assess the capital requirement alongside with preparedness when deciding and putting up now a type of business deemed most appropriate at present times.

On the other hand, the group researchers prepared a promotional video that could transcend the time of timeless review and introduction of the many possibilities of the thirteen Barangays in the Municipality. Through the powerful video promotional campaign nowadays discussing salient of business opportunities introduce for the stakeholders and in the global market as it could help potential capitalists and business risk-takers to encourage investment and exploration more about the hidden paradise of the Municipality of Infanta awaiting to be rediscovered yet.

CONCLUSIONS

The following conclusions were drawn based on the findings of the study.

1. There are no perfect local businesses operating in town though they offered same products or business types but seemed different in their respective economic contributions and business profile.
2. The variables used in this study, such as the Economic Contribution (change in product supply, personal consumption, annual revenue) and Economic Profile (Average Business Monthly Income, Employment Generation Rate, and Local Product's Offerings) are stand-alone research constructs which mean they are not affected by any way of change in market status.
3. There were possible identified business and non-business ready among the thirteen Barangays in the Municipality of Infanta, Pangasinan.
4. Local entrepreneurs enjoy only a minimum earning capacity, i.e., 5,000&below which may become a major concern when planning for business expansion and product diversification.
5. Product diversifications are not encouraged in town as well as increasing number of employees in the store.
6. No registered flower shop means target market prioritizes basic needs over aesthetics.
7. Long years of business operation may not guarantee an increasing employment generation rate while becoming vulnerable to new entrants or competitors among local businesses.
8. Local businesses prefer to invest minimum capital requirement applicable for small scale businesses in town.
9. Identified local businesses, such as in the cases of Barangays Maya, Nangalisan, Bamban, Doliman, Patima, Pita, and Potol, without positive economic contribution or even zero contributions may not guarantee a strong business operation in town.
10. Change in values (supply, consumption, revenue) with negative performance means negative business contribution or negative impact, such as in the cases of Barangays Babuyan, Bamban, Nayom, Batang, Bayambang, Patima, and Pita.

RECOMMENDATIONS

In light of the preceding findings and conclusions of the study, the following statements were hereby recommended to help achieve local business goals in the Municipality of Infanta, Pangasinan.

1. There must be an immediate review on the identified Barangays which registered zero contributions or even negative business performances.
2. Local Barangay Officials may sit their 3-5-year strategic planning for identified business and non-business ready Barangays to validate the achievement of the proposal.
3. Local Barangay Officials may ask assistance, such as seminars, training, and workshops about enterprise development, micro small management, and business simulation to increase confidence level.
4. Local Business Permit and Licensing Division Office (BPLDO) may strategize business schemes to instill business acumen among local entrepreneurs and propel business operation.
5. Concerned Local Government Unit may initiate consortium with the Academic Sectors in the community tapping the expertise of Business Teachers or Professionals in crafting the Municipal Business Plan.
6. Establish and empower Market Association(s) and other groups of interest for a collective effort as it promises a more refined and synchronous implementation of planned business activities.
7. The Local Department of Trade and Industry (L-DTI) may tap the Municipal Business Permit and Licensing Division Office (M-BPLDO) to discuss business schemes to cater the thriving needs of local business entrepreneurs.
8. A business customer complaint desk or office or social media platform may be structured wherein local entrepreneurs may easily lodge their inputs and suggestions.
9. Adopt the proposed mini business plan of this study designed for the business profile of the thirteen Barangays.
10. Further studies must be pursued to check the variables of the study (supply, consumption, revenue, monthly income, employment generation, and products) to validate existing claims and arguments.

SHORT ACKNOWLEDGMENT

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LEADERSHIP STYLES OF SCHOOL PRINCIPALS DURING COVID – 19 PANDEMIC AND ITS EFFECT ON TEACHER'S PERFORMANCE

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ABSTRACT

This study presented the leadership styles of school principals during Covid – 19 pandemic and its effect to teacher's performance. To serve the purpose of the study, quantitative strand was used. In this design, the numeric data are collected and analyzed. The data were used to assess the leadership styles of the school principals and its effect to teacher's performance. Based on the given result, the researcher developed a leadership development plan that will help the school principals enhance their leadership styles and improve the teacher's performance. Lastly, based on the findings of the study, the researcher recommends that the school principals and teachers under this study should carefully consider the evidence gathered in this study for their professional as well as personal growth.

INTRODUCTION

The Covid - 19 pandemic has had a significant impact on our daily lives over the last year (Azorin and Fullan, 2022). Tight restrictions were implemented everywhere to control the spread of infectious diseases worldwide. (Harris and Jones, 2020) It affected many aspects of life, including school systems which are now required to reform their instructional responsibilities and methods. (Zhao, 2020).

During pandemic, face – to – face learning is impossible. It was replaced with online learning or modular distance learning. It caused many problems and challenges for teachers. Teachers are not trained to teach virtually so it is not a common platform to them, that is the reason why teachers do not situate well in blended forms of learning.

Knowledge of school leadership is essential in this regard. The term "school leadership" refers to the process of determining the educational climate. A leader must respond appropriately to all difficulties and address management challenges using a leadership style dictated by the state of the organization being led. It includes the strategies for responding to socioeconomic and cultural circumstances (Alhouti, 2020) and the pandemic's consequences must be developed. To maximize the educational goals affected by the pandemic, school principals had to operate virtually quickly, efficiently, precisely, and appropriately (Harris and Jones, 2020; Netolicky, 2020). Unfortunately, these school leaders are confronted with unexpected situations that necessitate both immediate and long-term solutions. According to Harris and Jones (2020), the absence of regular human interactions, such as in-person interactions between and among school principals, families, teachers, and students, as well as the larger school environment, is one of the principal's most significant challenges during the pandemic.

During the pandemic, the modular distance learning approach was implemented in all of the public schools in the Sariaya East District. The majority of parents chose it because some barangays in the municipality have extremely subpar internet connections and the majority of families with children in public schools cannot afford to have stable internet. While most private schools in the Sariaya East District used online learning, few parents opted for modular distance learning.

The researcher's decision to choose this topic for her research was influenced by the situation of public and private elementary schools in the Sariaya East District. The researcher is interested in the

leadership styles used by elementary school principals in both public and private settings during the pandemic and how these styles affected the effectiveness of teachers. She also made the decision to select the eight (8) leadership styles described in this study because, according to her research and readings, these philosophies were the eight (8) leadership philosophies most prevalent in the educational system.

Statement of the Problem

This study attempted to analyze the different leadership styles of school principals in public schools both in elementary and high school during Covid – 19 pandemic as well as its effect to teacher's performance. Specifically, this investigation to answered the following questions:
1. What are the leadership styles of the school principals in public and private schools during covid – 19 pandemic in terms of:
    1.1 transactional leadership,
    1.2 transformational leadership,
    1.3 servant leadership,
    1.4 democratic leadership,
    1.5 autocratic leadership,
    1.6 bureaucratic leadership,
    1.7 laissez- Faire leadership,
    1.8 charismatic leadership?
2. What are the effects of leadership styles of school principals in public and private schools on the teacher's performances in terms of:
    2.1 quality of teaching
    2.2 team work
    2.3 organizational commitment?
3. Is there a significant difference between leadership styles of school principals in public and private schools and teaching performance?
4. Is there a significant relationship between the effects of leadership styles of the school principals in public and private schools and the teacher performance?
5. What leadership development plan should be proposed based from the findings of the study?

METHODOLOGY

This section presents the methods employed in this study. It includes the research design, participants, research instrument, procedure, ethical considerations, and data analysis.

Research Design

This study used quantitative research design that aimed at discovering how many people think, act, or feel in a specific way. It intended to reveal the different leadership styles that the school principals used during the Covid -19 pandemic and its effect to teacher's performance in five public Elementary Schools and three private Elementary Schools in Sariaya East District, Sariaya, Quezon. The technique of investigation is the use of questionnaire to determine the correctness of the responses of the respondents.

Participants

Teachers from the chosen three (3) private Elementary schools and the chosen five (5) medium-sized public Elementary schools, totaling 115 public school teachers and 20 private school teachers, were chosen as the study's respondents. Because they all employed the same learning method, modular distance learning, and had roughly the same number of teachers, the researcher chose these five medium-sized public elementary schools. The researcher selected the three private elementary schools because they all use the same learning modality as well. All of the participating schools are located in Sariaya, Quezon's Sariaya East District.

Research Instrument

The researcher used questionnaires to get the response of her respondents. Here is the basis that the researcher used to come up with the questionnaire that she used in this study.

Procedure

A questionnaire was used by the researcher to confirm her findings. The researcher carefully crafted her questionnaires by conducting research and readings. She created the questions and then presented them to her thesis adviser and the principal of her school for approval. During her pre-oral defense, she presented the validation to the panelists. They helped the researcher make some questionnaire revisions. After making all the necessary revisions, she distributed it to her chosen respondents personally as well as through emails and links. After getting the questionnaires, she gave them to the statistician so they could be examined using various statistical techniques to produce the findings, explanation, conclusion, and recommendations.

Data Analysis

The following were the statistical tools utilized in this part of the study.
- Weighted Mean.
  This was utilized to determine the average responses of the respondents on the leadership styles of school principals and effect in the teachers' performance.
- T – Test
  This was used to determine the significant differences between the responses of the respondents on the leadership styles of school principals and the teacher's performance.
- Pearson r
  This was employed to determine the relationship between the effects of leadership styles of the school principals and the teacher performance.

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RESULTS AND DISCUSSIONS

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This part of the study shows the tabular presentation, analysis and interpretation of data gathered from the questionnaires answered by the respondents.

1. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic.

Tables 1 - 8 give the responses of the respondents on the leadership styles of the School Principals in Public and Private Schools During Pandemic.

1.1 In Terms of Transactional Leadership

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Table 1. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Transactional Leadership

</div>

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
Focuses on the specific tasks and use rewards to motivate followers.	3.55	A	5	4.45	SA	4
Believes that his/her subordinates need to be carefully monitored to ensure that expectations are met.	4.22	SA	2	4.65	SA	2
Offers feedback design to keep subordinates on task.	4.60	SA	1	4.75	SA	1
Places a lot of importance on structure, organizational chart and rules	3.86	A	4	4.35	SA	5
Focuses on employee performance as a measure of success.	3.98	A	3	4.50	SA	3
Composite Mean	**4.04**	**A**		**4.54**	**SA**	

Legend: SA = Strongly Agree   MA = Moderately Agree   SD = Strongly Disagree   VI = Verbal Interpretation
        A = Agree   D = Disagree   WM = Weighted Mean   R = Ranking

As given in the table, the respondents from public and private schools strongly agreed that during COVID-19 pandemic, their principals offer feedback designs to keep subordinates on task which made the highest weighted means of 4.60 and 4.75, respectively at ranks 1.

This study bolsters House and Terrence's Path-Goal Theory, which states that increasing employee empowerment, motivation, and overall satisfaction is important to increase performance. Therefore, a smart leader should offer feedback designs to help her team members enhance their overall performance in order to maintain their concentration and ensure success.

Meanwhile, the respondents from public schools agreed that their principals during COVID-19 pandemic focus on the specific tasks and use rewards to motivate followers with a weighted mean of 3.55 whereas the respondents from private schools also agreed that their principals place lots of importance on structure, organizational chart and rules with a weighted mean of 4.35. Both were ranked 5th, the least.

This research backs up a Management Study article on transactional leadership, which emphasizes short-term objectives that are overly specific, standard operating procedures, organizational charts, structures, and the use of rewards solely to motivate the followers. This is one of its drawbacks, which is why it ranks last among public and private school teachers in this study.

The composite means were 4.04 for public schools and 4.54 for private schools which implied that the respondents agreed and strongly agreed, respectively on transactional leadership styles of their principals during COVID-19 pandemic.

According to a Management Study article, the transactional style of leadership is considered as inadequate, but not horrible, for fostering the development of a person's full leadership potential. Since both public and private school instructors agreed and firmly agreed in the transactional style of their school administrator throughout the pandemic, it is highly agreed in this study.

1.2. In Terms of Transformational Leadership

Table 2. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Transformational Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. open to innovation and changes whenever it may arise.	4.72	SA	2	4.55	SA	2.5
2. provides coaching and mentoring but allowing employees to make decision and take ownership of the task.	4.57	SA	4	4.55	SA	2.5
3. willing to hear ideas with open mind and respond without judgment or finality.	4.49	SA	5	4.60	SA	1
4. encourages the motivation and positive development of followers.	4.79	SA	1	4.35	SA	5
5. urges employees to move from an attitude of self-interest to a mindset where they are looking for the common good.	4.61	SA	3	4.45	SA	4
Composite Mean	**4.64**	**SA**		**4.50**	**SA**	

Legend: SA = Strongly Agree   MA = Moderately Agree   SD = Strongly Disagree   VI = Verbal Interpretation
A = Agree   D = Disagree   WM = Weighted Mean   R = Ranking

As seen in Table 2, the respondents from the public schools strongly agreed that their principals during COVID-19 pandemic encourage the motivation and positive development of followers which got the highest weighted mean of 4.79 and the highest rank of 1.

This study backs up Muhammed's (2020) observation that transformational leadership has a direct impact on positive employee work outcomes, which is one of the positive characteristics of transformational leadership.

The same item was strongly agreed by the respondents from the private schools which made a weighted mean of 4.35 but least rank of 5. In contrast to the responses of public school teachers, those who attended private schools ranked motivation and positive development as the least important.

Moreover, the respondents from public schools strongly agreed that their principals during COVID-19 pandemic are willing to hear ideas with open mind and respond without judgment or finality with the least weighted mean of 4.49 and least rank of 5.

This study supports an article entitled "What is transformational leadership? Understanding the Impact of Inspirational Guidance which states that transformational leaders remain open to new ideas and fresh perspective in an important aspect of transformational leadership. Rather than jumping to conclusions, those leaders regularly gather feedback and ideas from a range of sources before making strategic decisions.

This item was also strongly agreed by the respondents from the private school which yielded the highest weighted mean of 4.60 and the highest rank of 1.

This item demonstrates that in private schools, open mindedness and everyone's ideas are valued highly, which is why it ranked first among private school teachers' responses.

The composite means were 4.64 for public schools and 4.50 for private schools which signified that the respondents strongly agreed on transformational leadership styles of their principals during COVID-19 pandemic.

Transformational leadership is defined as a leadership style that affects individual and social change systems according to an article about Transformational leadership. Its ideal form produces valuable and positive change in its followers, with the ultimate goal of developing followers are transformed into leaders. Transformational leadership, when practiced authentically, boosts motivation and morale and followers' performance via a variety of mechanisms. These include connecting the sense of the follower; identity and self to the organization's mission and collective identity; being a role model for followers that inspires them; challenges followers to take greater ownership of their work; and comprehends the strengths and weaknesses performance.

1.3. In Terms of Servant Leadership

Table 3. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Servant Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. cultivates a culture of trust.	4.03	A	5	4.30	SA	4
2. thinks of other people rather than oneself.	4.18	A	4	4.35	SA	2.5
3. develops other leaders by allowing them to perform well as possible.	4.19	A	3	4.35	SA	2.5
4. supports subordinates with life issues not only just work- related issues.	4.41	SA	2	4.10	A	5
5. helps other to realize and use their full potentials.	4.67	SA	1	4.55	SA	1
Composite Mean	**4.30**	**SA**		**4.33**	**SA**	

Legend: SA = Strongly Agree   MA = Moderately Agree   SD = Strongly Disagree   VI = Verbal Interpretation
         A = Agree   D = Disagree   WM = Weighted Mean   R = Ranking

As reflected in the table, the respondents from public schools strongly agreed that during COVID-19 pandemic, their principals help others to realize and use their full potentials with the highest weighted mean of 4.67 and rank of 1.

It is encouraging to know that during the pandemic public school principals still assisted the teachers in identifying and utilizing the teacher's full potential for their growth and development, and it is well appreciated by the teachers. The responses of the public school teachers support Greenleaf's (1996) statement that "The servant leader focuses on the needs of the followers and helps them to become more autonomous, freer and knowledgeable."

On the other hand, the said group of respondents agreed that their principals cultivate a culture of trust which got the least weighted mean of 4.03 and least rank of 5.

Two characteristics of servant leadership include granting others your trust and being prepared to take chances for the people you serve. Despite the difficult pandemic circumstances, it is good to ob-

serve that public school principals still demonstrate these essential traits, as evidenced by the responses of public school teachers who served as the study's respondents.

For the respondents from private schools, they strongly agreed that during pandemic, their principals help others to realize and use their full potential which garnered the highest weighted mean of 4.55 and highest rank of 1.

On the other hand, the said group of respondents agreed that their principals support subordinates with life issues not only just work- related issues which made the least weighted mean of 4.10 and least rank of 5.

For coworkers and colleagues, especially in a shared team setting, creating community is vital. According to the private school teachers in this study, the characteristics of servant leaders are exhibited in their school principals by giving employees breaks to talk about things unrelated to their jobs, organizing social events, and establishing channels for employees to interact with one another.

The composite means were 4.30 for public schools and 4.33 for private schools which generalized that the respondents strongly agreed on servant leadership styles of their principals during COVID-19 pandemic.

It is encouraging to see that both public and private school teachers, as evidenced by their replies in this survey, firmly believed that their school principals exhibited servant leadership qualities even during the Covd-19 pandemic.

1.4. In Terms of Democratic Leadership

As revealed in the table, the respondents from public schools strongly agreed that during COVID-19 pandemic, their principals accept the suggestions of teachers about the policies and plans which yielded the highest weighted mean of 4.88 and rank of 1.

The ability to accept the thoughts and opinions of their subordinates in times of crisis is one of the best traits of democratic leaders (Ahamed, 2020). This enables them to come up with better proposals and the best solutions to the problems that need to be resolved. It is encouraging to learn that school principals in public schools possess this quality as it is extremely vital, particularly during pandemics.

Table 4. Leadership Styles of the School Principals in Public and Private Schools
During COVID – 19 Pandemic in Terms of Democratic Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. accepts the suggestions of teachers about the policies and plans.	4.88	SA	1	4.55	SA	1
2. shares plans regarding school activities with teachers prior to implementation.	4.57	SA	2	4.10	A	5
3. provides sociable relationship between staff members.	4.43	SA	5	4.25	SA	4
4. believes that a team work best when everyone is involved in taking decisions.	4.50	SA	3	4.40	SA	2
5. thinks that all group members should abide by personal decisions, so as long as follow proper procedures.	4.49	SA	4	4.30	SA	3
Composite Mean	**4.57**	**SA**		**4.32**	**SA**	

Legend: SA = Strongly Agree   MA = Moderately Agree   SD = Strongly Disagree   VI = Verbal Interpretation
       A = Agree   D = Disagree   WM = Weighted Mean   R = Ranking

Furthermore, the said group of respondents also strongly agreed that their principals provide sociable relationship between staff members which obtained the least weighted mean of 4.43 and least rank of 5.

This item has been at the bottom of the list because of many safety and health regulations that were put in place during the pandemic, as well as quarantines. This particular item is very well explanatory since during a pandemic, all sectors reduce their time for social interactions and gatherings in order to stop the spread of the corona virus for everyone's protection.

In terms of the responses of the respondents from private schools, they strongly agreed that during pandemic, their principals accept the suggestions of teachers about the policies and plans which made the highest weighted mean of 4.55 and highest rank of 1.

Meanwhile, the said group of respondents agreed that their principals share plans regarding school activities with teachers prior to implementation which gained the least weighted mean of 4.10 and least rank of 5.

The study's conclusions showed that school leaders exercised democratic leadership by consulting teachers before implementing school activities to ensure that each one would not jeopardize everyone's safety given that the study took place during the Covid-19 outbreak.

The composite means were 4.57 for public schools and 4.32 for private schools which generalized that the respondents strongly agreed on democratic leadership styles of their principals during COVID-19 pandemic.

1.5. In Terms of Autocratic Leadership

Table 5. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Autocratic Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. allocates task without teacher's will.	3.02	MA	3	2.20	D	4
2. decides solely without consulting the teachers.	2.68	MA	5	2.15	D	5
3. performance standards and expectations are set solely for teachers to accomplish.	3.57	A	2	3.25	MA	2
4. determined to push projects forward and get results.	3.77	A	1	3.85	A	1
5. set high standards for himself and expect others to do the same for themselves.	2.92	MA	4	3.00	MA	3
Composite Mean	**3.19**	**MA**		**2.89**	**MA**	

Legend: SA = Strongly Agree MA = Moderately Agree SD = Strongly Disagree VI = Verbal Interpretation
    A = Agree D = Disagree WM = Weighted Mean R = Ranking

As written in Table 5, the respondents from public schools agreed that during COVID-19 pandemic, their principals are determined to push projects forward and get results which got the highest weighted mean of 3.77 and rank of 1. The principle of this leadership style is determined to push projects to attain results that were ranked 1 in this study because autocratic leadership is overly task-oriented (Ahamed, 2020).

On the contrary, the said group of respondents moderately agreed that their principals decide solely without consulting the teachers which gained the least weighted mean of 2.68 and least rank of 5.

The findings in this particular section imply that autocratic leaders allow for fast-paced dynamics and one individual making decisions. This quality is one of the drawbacks of this leadership style, which is why it received the lowest ranking.

With respect to the responses of the respondents from private schools, they agreed that during pandemic, their principals are determined to push projects forward and get results which got the highest weighted mean of 3.85 and highest rank of 1.

Regarding the responses of the private school teachers, they felt that, despite being authoritarian, their principals were nevertheless motivated to push initiatives forward to assure their success despite the pandemic.

Contrary wise, the said group of respondents disagreed that their principals decide solely without consulting the teachers which garnered the least weighted mean of 2.15 and least rank of 5.

It is encouraging to know, with all due respect to the teachers and principals of private schools, that based on their responses, it appears that the principals still value the views of their employees and refrain from making decisions regarding matters pertaining to the school without first consulting the teachers.

The composite means were 3.19 for public schools and 2.89 for private schools which affirmed that the respondents moderately agreed on autocratic leadership styles of their principals during COVID-19 pandemic.

One of the best aspects of an autocratic or authoritarian leadership style is the ability to start implementing decisions as soon as they have been made. The way people are handled makes the majority of people feel taken advantage of

An authoritarian leadership style works well when decisions need to be taken quickly and without much debate, and this quality is advantageous during the Covid-19 pandemic. This explains why some instructors in public and private schools still support this leadership approach.

1.6. In Terms of Bureaucratic Leadership

Table 6. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Bureaucratic Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. Enhance her/his subordinates' ability to drive results with no influence of partiality or favoritism.	4.46	SA	2	3.75	A	4
2. Focuses on the results and the organization as a whole.	4.55	SA	1	4.50	SA	2
3. Let her subordinates develop their best practices.	4.35	SA	3	4.45	SA	3
4. Frames to achieve goals quickest and cheapest manner without diminishing the quality.	3.87	A	4	3.65	A	5
5. Gives guidance to the employees.	3.27	MA	5	4.60	SA	1
Composite Mean	**4.10**	**A**		**4.19**	**A**	

As discussed in the table, the respondents from public schools strongly agreed that during COVID-19 pandemic, their principals focus on the results and the organization as a whole which made the highest weighted mean of 4.55 and rank of 1.

In order to concentrate on results and the organization as a whole, a bureaucratic leader must have extremely clear roles, responsibilities, and expectations, claims Lee (2020). This result is in line with the findings of this study, which showed that instructors in public schools thought their principal possessed this trait during the pandemic.

Meanwhile, the said group of respondents moderately agreed that their principals give guidance to the employees which got the least weighted mean of 3.27 and least rank of 5.

One of the drawbacks of bureaucratic leadership is that the leader only provides minimal direction to their staff, and it is generally acknowledged by public school instructors who believe that their school principal exhibited this trait throughout the pandemic.

With respect to the responses of the respondents from private schools, they strongly agreed that during pandemic, their principals give guidance to the employees which made the highest weighted mean of 4.60 and highest rank of 1.

On the other hand, private school instructors who responded to the questionnaire stated that their principals provide them with guidance during pandemics, in contrast to the responses of the public school teachers. It is encouraging to know that principals of private schools support their staff members' personal and professional development as well as the success of the institution.

Furthermore, the said group of respondents agreed that their principals frame to achieve goals quickest and cheapest manner without diminishing the quality which made the least weighted mean of 3.65 and least rank of 5.

The composite means were 4.10 for public schools and 4.19 for private schools assumed that the respondents moderately agreed on bureaucratic leadership styles of their principals during COVID-19 pandemic.

1.7 In Terms of Laissez- Faire Leadership

As seen in the table, the respondents from public schools strongly agreed that during COVID-19 pandemic, their principals let the teachers make their decisions which obtained the highest weighted mean of 4.60 and rank of 1.

Table 7. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Laissez Faire Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. concerns in daily activities as well proceedings.	3.75	A	4	4.35	SA	1
2. gives a direction to teachers in classroom.	4.50	SA	2	3.70	A	2
3. seldom assists teachers to deal with work problems.	4.45	SA	3	2.70	MA	3.5
4. let the employees solve their own problems	3.65	A	5	2.45	D	5
5. let the teachers make their decisions.	4.60	SA	1	2.70	MA	3.5
Composite Mean	**4.19**	**A**		**3.18**	**MA**	

Laissez-faire leadership is a management style that entails significant work delegation and an open manner of decision making, according to an article published last May 26, 2021. It enables team members to be more adaptable and actively participate in crucial choices and tasks. The public school teachers who claimed that their principals gave them freedom to make decisions are unanimous in their support.

On the other hand, the said group of respondents agreed that their principals let the employees solve their own problems which made the least weighted mean of 3.65 and least rank of 5. There were moments throughout the pandemic when the principals allowed the staff solve their own concerns; this helped the staff members learn how to deal with difficulties and obstacles and ultimately come up with the best solutions. The independence of decision-making granted by school principals to their staff members is analogous. With regard to the responses of the respondents from private schools, they strongly agreed that during pandemic, their principals are concerned in daily activities as well proceedings which got the highest weighted mean of 4.35 and highest rank of 1.

Under laissez-faire leadership, significant duties are delegated and choices are made in an open forum. Team members are allowed more freedom and the chance to take part directly in important duties and decisions, but only when working in a school setting and under the leadership of the principal. As they pointed out to their school principals, the teachers at the private schools wholeheartedly concurred with this.

Moreover, the said group of respondents disagreed that their principals let the employees solve their own problems which obtained the least weighted mean of 2.45 and least rank of 5. In laissez-fair leadership, subordinates are allowed to have more freedom in decision- making and implementing projects but still with the supervision of the school principal. The composite means were 4.19 for public schools and 3.18 for private schools inferred that the respondents agreed and moderately agreed on laissez faire leadership styles of their principals during COVID-19 pandemic.

1.8. In Terms of Charismatic Leadership

Table 8. Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic in Terms of Charismatic Leadership

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
During Covid – 19 pandemic my school principal …						
1. inspires others.	4.46	SA	3	4.15	A	4
2. speaks in plain language that is understood by all.	4.65	SA	1	4.40	SA	2
3. a good listener.	4.55	SA	2	4.35	SA	3
4. inspires teachers to action.	4.26	SA	4	4.50	SA	1
5. behaves in a mature and responsible manner on all occasions.	4.16	A	5	4.10	A	5
Composite Mean	**4.42**	**SA**		**4.30**	**SA**	

As displayed in the table, the respondents from public schools strongly agreed that during COVID-19 pandemic, their principals speak in plain language that is understood by all which gained the highest weighted mean of 4.65 and rank of 1.

A leader who possesses charismatic leadership is one who has the ability to persuade others through charm, persuasion, and effective communication. Meanwhile, the said group of respondents agreed that their principals behave in a mature and responsible manner on all occasions which got the least weighted mean of 4.16 and least rank of 5. For the respondents from private schools, they strongly agreed that during pandemic, their principals inspire teachers to action which made the highest weighted mean of 4.50 and highest rank of 1. On the other hand, the said group of respondents agreed that during pandemic, their principals   behave in a mature and responsible manner on all occasions which obtained the least weighted mean of 4.10 and least rank of 5.

A school principal must behave appropriately in all situations. It is one of the best traits of an effective leader. It is encouraging to know that school principals in selected public schools and the school principals of selected private schools in Sariaya East District behaved and acted responsibly even during the difficult pandemic period, when there are many difficulties and challenges. It demonstrates how capable their leadership was. The composite means were 4.42 for public schools and 4.30 for private schools signified that the respondents strongly agreed on charismatic leadership styles of their principals during COVID-19 pandemic.

Table 9. Summary of the Leadership Styles of the School Principals in Public and Private Schools During COVID – 19 Pandemic

Leadership Style	Public			Private		
	WM	VI	R	WM	VI	R
1.Transactional Leadership	4.04	A	7	4.54	SA	1
2. Transformational Leadership	4.64	SA	1	4.50	SA	2
3. Servant Leadership	4.30	SA	4	4.33	SA	3
4.Democratic Leadership	4.57	SA	2	4.32	SA	4
5.Autocratic Leadership	3.19	MA	8	2.89	MA	8
6. Bureaucratic Leadership	4.10	A	6	4.19	A	6
7. Laissez-faire Leadership	4.19	A	5	3.18	MA	7
8. Charismatic Leadership	4.42	SA	3	4.30	A	5

Legend: SA = Strongly Agree   MA = Moderately Agree   SD = Strongly Disagree   VI = Verbal Interpretation
A = Agree   D = Disagree   WM = Weighted Mean   R = Ranking

As given in the table, the respondents from public schools strongly agree with the transformational leadership style of their school principals during covid-19 pandemic which made the highest weighted mean of 4.64 at rank 1.

A transformational leader routinely elicits suggestions and ideas from a variety of sources before making strategic decisions rather than assuming the worst and jumping to conclusions. A pandemic is a critical and unique situation that demands many changes, so this quality in a school principal is essential. It is essential to be open to fresh perspectives and recommendations in order to ease the burden and make things simpler without endangering anyone's health or safety.

Meanwhile, the respondents from the private schools strongly agree with the transactional leadership of their school principals during pandemic which made the highest weighted mean of 4.54 at rank 1.

Transactional leadership refers to rewarding and punishing employees based on their performance. Rewards and incentives are essential during the pandemic, especially in private schools with the "No work, no pay" policy in place. In order to cover costs, maintain the facility, and, of course, pay employees, private schools should take extra steps to maintain enrolment levels.

On the other hand both public and private schools respondents moderately agree with the autocratic leadership style of their school principal during covid – 19 pandemic as it earns the lowest weighted means of 3.19 and and 2.89 respectively and ranks 8th.

The ability of an autocratic leadership style to make decisions quickly and without much thought is its best quality. The respondents believe that this characteristic is neither appropriate nor applicable during a pandemic because there are so many factors to take into account when making decisions.

2. Effects of Leadership Styles of School Principals in Public and Private Schools on the Teacher's Performances.

2.1. In Terms of Quality of Teaching

Table 10. Effects of Leadership Styles of School Principals in Public and Private Schools on the Teacher's Performances In Terms of Quality of Teaching

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
I am satisfied with the way I…						
1. Integrate other learning areas in teaching my lessons.	4.57	HS	3	4.66	HS	3
2. Use effective verbal and nonverbal classroom communication strategies to support learners understanding, participation, engagement and achievement.	4.59	HS	1	4.55	HS	4
3. Establish safe and secure learning environment to enhance learning through the consistent implementation of policies, guidelines and procedures.	4.30	HS	5	4.05	S	5
4. Apply a range of successful strategies that maintain learning environment that motivate learners to work productively by assuring responsibilities for their own learning.	4.58	HS	2	4.75	HS	1.5
5. Adapt and implement learning programs that ensure relevance and responsive to the needs of all learners.	4.55	HS	4	4.75	HS	1.5
Composite Mean	**4.52**	**HS**		**4.55**	**HS**	

Legend: HS = Highly Satisfactory   Und = Undecided   HU = Strongly Disagree   WM = Weighted Mean
       S = Satisfactory   Uns = Unsatisfactory   VI = Verbal Interpretation   R = Ranking

As given in the table, the respondents from public schools assessed that they were highly satisfied with the way their principals use effective verbal and nonverbal classroom communication strategies to support learners understanding, participation, engagement and achievement which got the highest weighted mean of 4.59 at rank 1.

The Department of Education implemented the use of modular distance learning and online learning as learning modalities to ensure that students will continue to learn even if they stay at home with their parents during the Covid-19 pandemic, where face-to-face learning was prohibited due to various community quarantines. This was done in order to provide quality education. In order to achieve the goal of providing students with high-quality education, communication was crucial during the pandemic, so it is encouraging to know that teachers in public schools are very satisfied with the manner in which their principals communicate, whether it be verbally or non-verbally.

On the contrary, the said group of respondents were also highly satisfied with the way their principals establish safe and secure learning environment to enhance learning through the consistent implementation of policies, guidelines and procedures which obtained the least weighted mean of 4.30 and least rank of 5.

The health and safety protocols that were put in place during the COVID-19 pandemic are another crucial issue. It is the school principal's responsibility to ensure that the school is a safe and secure learning environment, so they should implement policies, guidelines, and procedures that will keep it secure against the spread of the virus.

For the respondents from private schools, they affirmed that they were highly satisfied with the way their principals apply a range of successful strategies that maintain learning environment that motivate learners to work productively by assuring responsibilities for their own learning, and adapt and implement learning programs that ensure relevance and responsive to the needs of all learners which got the highest and equal weighted means of 4.75 and equal ranks of 1.5.

Although there are no face-to-face classes during a pandemic, teachers from public and private schools have developed various strategies and even interventions to ensure that the quality of teaching and learning will not be compromised in the absence of face-to-face instruction.

2.2. In Terms of Team Work

Table 11. Effects of Leadership Styles of School Principals in Public and Private Schools on the Teacher's Performances In Terms of Team Work

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
I am satisfied with…						
1. The spirit of cooperation among my co-teachers.	4.63	HS	1	4.80	HS	3
2. The way my co-teachers are easy to make friends with.	4.26	HS	5	4.80	HS	3
3. The support of my co-teachers and my superior.	4.52	HS	4	4.80	HS	3
4. The assigned task and responsibilities are fair and just.	4.61	HS	2	4.45	HS	5
5. The willingness of my co-teachers to help and do initiate when I need them regarding my tasks.	4.54	HS	3	4.85	HS	1
Composite Mean	**4.51**	**HS**		**4.74**	**HS**	

Legend: HS = Highly Satisfactory   Und = Undecided   HU = Strongly Disagree   WM = Weighted Mean
S = Satisfactory   Uns = Unsatisfactory   VI = Verbal Interpretation   R = Ranking

As displayed in the table, the respondents from public schools answered that they were highly satisfied with the spirit of cooperation among their co-teachers which made the highest weighted mean of 4.63 at rank 1. One of the most frequently taught skills is cooperation. We learn at a young age that "together we stand, divided we fall," and that cooperation involves working together to accomplish a shared objective. This refers to a positive work environment where staff members collaborate to meet their individual and collective goals. To be effective, they must collaborate with one another rather than compete with one another. It is encouraging to learn that public school teachers are quite happy with the level of cooperation among them, which suggests that the leadership style of their school principals has a positive impact on their working relationship.

Meanwhile, the said group of respondents were also highly satisfied with the way their co-teachers are easy to make friends which yielded the least weighted mean of 4.26 and least rank of 5. A win-win attitude should be encouraged in organizations. Employees who cooperate with others and strive for mutual accomplishment should be encouraged because a win-win attitude leads to a favorable result for all involved parties and subsequently leads to organizational growth. Teamwork helps with conflict management and ensures that none of the employees holds grudges against another.

In terms of the respondents from private schools, they replied that they were highly satisfied with the willingness of their co-teachers to help and do initiate when they need them regarding their tasks which obtained the highest weighted mean of 4.85 and a rank of 1. Being able to assist someone when they need it is a highly significant quality in a person. Having someone who is willing to help motivates us to perform better during the Covid-19 pandemic, when everyone must make significant modifications as a result of the situation.

2.3. Organizational Commitment

As revealed in the table, the respondents from public schools assessed that they were highly satisfied with the assurance of a stress-free work environment which got the highest weighted mean of 4.58 at rank 1.

Table 12. Effects of Leadership Styles of School Principals in Public and Private Schools on the Teacher's Performances In Terms of Organizational Commitment

Indicators	Public			Private		
	WM	VI	R	WM	VI	R
I am satisfied with…						
1. The policies and practices towards the employees of the school.	4.55	HS	2	4.80	HS	3
2. The way my school principal provides help on hard problems.	4.51	HS	4	4.80	HS	3
3. The assurance of a stress-free work environment.	4.58	HS	1	4.80	HS	3
4. The opportunities provided by the school for the development of everyone.	4.52	HS	3	4.45	HS	5
5. The linkages of the school in the immediate community.	4.48	HS	5	4.85	HS	1
Composite Mean	**4.53**	**HS**		**4.74**	**HS**	

A case study found that the shift brought on by the epidemic causes stress and even sadness in roughly 9 out of 10 instructors. The majority of them needed more than 14 hours every day to complete their professional duties. Many educators also feel morally obligated to look out for the welfare of their students. It is encouraging to know that during the COVID-19 pandemic, school administrators maintained a stress-free environment, and the teachers much appreciated it.

On the contrary, the said group of respondents were also highly satisfied with the way the linkages of the school in the immediate community obtained the least weighted mean of 4.48 and least rank of 5. On the other hand, the said group of respondents were also highly satisfied with the way the opportunities provided by the school for the development of everyone which obtained the least weighted mean of 4.45 and least rank of 5.

The principal is in charge of the long-term growth of the faculty; he must be able to help faculty members identify the needs and skills of the community. It must be able to inspire educators to develop fresh approaches to instruction. He must be able to help teachers assess educational initiatives and student learning outcomes. In order for the principal to help with the improvement of teaching abilities, he must be able to evaluate the personalities and skills of teachers.

The composite means were 4.53 for public school teachers and 4.74 for private school teachers concluded that they were highly satisfied with the effects of leadership styles of their principals to their performance in terms of organizational commitment.

Organizational commitment includes the way the school interacts with the community, particularly with the parents. Since there are no face – to – face classes held throughout the pandemic, it is important for parents and teachers to get along well and maintain open lines of communication because doing so will significantly improve the learning of the students.

Table 13. Summary of the Effects of Leadership Styles of School Principals in Public and Private Schools on the Teacher's Performances

Effects of Leadership Styles of School Principals on the Teacher's Performance	Public			Private		
	WM	VI	R	WM	VI	R
1. Quality of Teaching	4.52	HS	2	4.55	HS	3
2. Teamwork	4.51	HS	3	4.74	HS	1.5
3. Organizational Commitment	4.53	HS	1	4.74	HS	1.5

Legend: HS = Highly Satisfactory   Und = Undecided   HU = Strongly Disagree   WM = Weighted Mean
       S = Satisfactory   Uns = Unsatisfactory   VI = Verbal Interpretation   R = Ranking

Based from the table above, public school teachers are highly satisfied with the effects of leadership style of their principal in their performance in terms of organizational commitment which got the highest weighted mean of 4.53 at rank 1.

The relationship the school has with the community, especially with the parents, is an example of organizational commitment. Since there are no face-to-face classes held during the pandemic, it's critical for parents and teachers to get along and keep lines of communication open because doing so will greatly enhance the students' learning.

Based from the findings, public school teachers are highly satisfied with the effects of leadership style of leadership style of their principal in their performance in terms of teamwork that obtain weighted mean of 4.51 at rank 3.

In response to the survey, private school teachers ranked the quality of their instruction third, with a weighted mean of 4.55. It is because private schools have access to books and other resources and teaching materials even though there were no in-person classes during the pandemic

3.Difference Between the Effects of Leadership Styles of School Principals, and Teachers Performance in Public and Private Schools.

As stated in the table, when the responses of the public school and private school teachers on the leadership styles of their principals, the computed t-values of 2.51 for transactional leadership, 2.24 for democratic, and 2.35 for laissez faire have corresponding p-values of less than 0.05, thus rejecting the null hypothesis.

These safely generalized that the responses of the two-groups of respondents on the leadership styles of their principals have significant differences in terms of transactional , democratic, and laissez faire.

Table 14. Difference Between the Effects of Leadership Styles of School Principals, and Teachers Performance in Public and Private Schools

Variables	t-value	p-value	Decision	Interpretation
Leadership Styles:				
Transactional	2.51	0.03091	p<0.05, Reject Ho	Significant
Transformational	1.90	0.08662	p>0.05, Failed to Reject Ho	Not Significant
Servant	0.26	0.80014	p>0.05, Failed to Reject Ho	Not Significant
Democratic	2.24	0.04900	p<0.05, Reject Ho	Significant
Autocratic	0.77	0.45910	p>0.05, Failed to Reject Ho	Not Significant
Bureaucratic	0.28	0.78518	p>0.05, Failed to Reject Ho	Not Significant
Laissez Faire	2.35	0.04064	p<0.05, Reject Ho	Significant
Charismatic	0.77	0.78518	p>0.05, Failed to Reject Ho	Not Significant
Effects of Leadership Styles to Teachers' Performance				
Quality of Teaching	0.24	0.81518	p>0.05, Failed to Reject Ho	Not Significant
Team Work	2.24	0.04900	p<0.05, Reject Ho	Significant
Organizational Commitment	2.69	0.02270	p<0.05, Reject Ho	Significant

The computed t-values of the rest of the enumerated leadership styles like transformational, servant, autocratic, bureaucratic and charismatic have corresponding p-values of more than 0.05, thus the hypothesis was failed to be rejected.

These inferred that the responses of the two-groups of respondents on the leadership styles of their principals have no significant differences in terms of transformational, servant, autocratic, bureaucratic and charismatic. With respect to the teachers' performances, the computed t-values of 2.24 for teamwork and 2.69 for organizational commitment have corresponding p-values of less than 0.05, thus rejecting the null hypothesis.

The responses of the respondents on their performances in terms of quality of teaching was found to have no significant difference as evidenced by the obtained t-value of 0.24 with p-value of more than 0.05, failing to reject the hypothesis.

4. Relationship Between on the Effects of Leadership Styles of the School Principals in Public and Private Schools and the Teacher Performance.

Table 15. Relationship Between the Effects of Leadership Styles of School Principals, and Teachers Performance in Public and Private Schools

Variables	t-value	p-value	Decision	Interpretation
Leadership Styles Versus Teacher's Performance				
Transactional				
Quality of Teaching	0.85	0.0009	p<0.01, Reject Ho	Highly Significant
Team Work	0.13	0.3602	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.55	0.0498	p<0.05, Reject Ho	Significant
Transformational				
Quality of Teaching	0.28	0.2167	p>0.05, Failed to Reject Ho	Not Significant
Team Work	0.22	0.2707	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.01	0.9781	p>0.05, Failed to Reject Ho	Not Significant
Servant				
Quality of Teaching	0.20	0.2898	p>0.05, Failed to Reject Ho	Not Significant
Team Work	0.26	0.2341	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.14	0.3498	p>0.05, Failed to Reject Ho	Not Significant
Democratic				
Quality of Teaching	0.39	0.1326	p>0.05, Failed to Reject Ho	Not Significant
Team Work	0.58	0.0394	p<0.05, Reject Ho	Significant
Org. Commitment	0.01	0.9781	p>0.05, Failed to Reject Ho	Not Significant
Autocratic				
Quality of Teaching	0.21	0.2802	p>0.05, Failed to Reject Ho	Not Significant
Team Work	0.22	0.2707	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.66	0.0189	p<0.05, Reject Ho	Significant
Bureaucratic				
Quality of Teaching	0.60	0.0333	p<0.05, Reject Ho	Significant
Team Work	0.08	0.8261	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.67	0.0170	p<0.05, Reject Ho	Significant

Laissez Faire				
Quality of Teaching	0.01	0.9781	p>0.05, Failed to Reject Ho	Not Significant
Team Work	0.31	0.1917	p>0.05, Failed to Reject Ho	Not Significant
Org. Commitment	0.78	0.0039	p<0.01, Reject Ho	Highly Significant
Charismatic				
Quality of Teaching	0.60	0.0333	p<0.05, Reject Ho	Significant
Team Work	0.69	0.0136	p<0.05, Reject Ho	Significant
Org. Commitment	0.67	0.0170	p<0.05, Reject Ho	Significant

As discussed in the table, when the transactional leadership style of the two-groups of respondents were compared to their teaching performance, the computed r-value of 0.85 for quality of teaching has a corresponding p-value of less than 0.01, thus rejecting the null hypothesis. In addition, the computed r-value of 0.55 for organizational commitment has a corresponding p-value of less than 0.05, thus rejecting also the null hypothesis.

On the contrary, the computed r-value of 0.13 for teamwork has a corresponding p-value of more than 0.05, thus the hypothesis was failed to be rejected.

In terms of the responses of the respondents on transformational and servant leaderships, it were found out that the responses of the teaching performances like quality of teaching, team work and organizational commitment have no significant differences.

Based from the findings of this study the three most common leadership styles used by the school principal of public and private elementary schools during covid – 19 pandemic that affect the teachers' performance were, Charismatic leadership, transactional leadership and bureaucratic leadership.

CONCLUSIONS

Based on the results of the study, the following conclusions are drawn.
1. The charismatic leadership style rank first when it comes to the leadership styles that the school principals used during covid-19 pandemic, therefore it has the most significant effect on the performance of the teachers whether they are from public or private school.
2. The leadership style of principals during pandemic had a huge effect on the teachers' performance especially in terms of organizational commitment since it ranked first on both public and private schools, therefore the relationship of the school in is community is very important during Covid-19 pandemic.

RECOMMENDATIONS

The following recommendations are hereby proposed in order to enhance the leadership styles of the principals.
1. School principals should use or possess the charismatic leadership style often to ensure better effect on the performance of the teachers both in public and private schools.
2. Develop a strong relationship with the community to ensure a better output not only in the performance of teachers but also in the performance of the pupils and the school itself not only during pandemic but also even without pandemic by conducting meetings and conferences with the stakeholders to interact with them.
3. The researcher proposed to use her Development Plan to help enhance further the success of teacher's performance under the leadership of the principal.
4. The researcher also proposed further studies for other researches about Leadership Styles of the school principals and its effect on teacher's performance for enhancement and improvement.

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ASSESSMENT OF THE TEACHERS' COMPETENCE IN THE DEVELOPMENT OF PERFORMANCE-BASED ASSESSMENT RUBRICS FOR PERFORMANCE-BASED LEARNING (PBL)

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ABSTRACT

The primary focus of the research was to explore the profiles and competence of 247 Technology and Livelihood Education (TLE) teachers relative to the development and implementation of performance-based assessment rubrics within the Division of Isabela. The determination of this sample size was guided by a confidence level of 95% and a margin of error set at 5%. The research employed descriptive and comparative research approaches. Result reveals a generally high awareness among teachers in the practical application of rubrics, though differences exist across different applications. Their competence in understanding rubric technical components ranges from basic to high, indicating a sufficient skill set for rubric development, but not necessarily expertise. Profiling teachers highlights significant differences in competence, with doctorate degree holders and those with over 6 years of service demonstrating higher levels. Additionally, teachers attending multiple training sessions or rubric-related seminars exhibit higher competence levels than those who have not attended such workshops. To address these disparities, the suggested interventions include subject-specific workshops, a dedicated repository of resources, regular feedback mechanisms, promotion of professional development, institutional audits, ongoing mentorship, and differentiated training paths based on teacher profiles. Additionally, future researchers are encouraged to conduct qualitative needs assessments and establish a suggestion box system to further explore challenges and gather insights for refining rubric development in TLE within the Performance-based Learning (PBL) activities.

INTRODUCTION

Performance-based Learning (PBL), as articulated by Voorhees (2001) and subsequently echoed by Cydis (2015) and Ernst et al. (2017), is a pedagogical approach strategically designed to validate a learner's attainment of specific competencies. This validation is accomplished through the execution of performance tasks, marking a shift from traditional assessment methods.

The Policy Guidelines on Classroom Assessment for the K-to-12 Basic Education Program, as outlined in DepEd Order No. 8, s. of 2015, mandate that Technology and Livelihood Education (TLE) teachers should allocate a weightage of 20% for written works (WW), 20% for quarterly assessments (periodical examinations), and the largest percentage of 60% for performance tasks (PT) when calculating students' quarter grades in the TLE subjects. It is evident that performance tasks carry the heaviest weight in determining quarterly grades. However, the researcher raised a question: "How do teachers assess performance tasks?" This led to an exploration of the potential utilization of performance-based assessment rubrics by the teachers. But on the perusals made, it is observed from Chowdhury's (2018) findings that the number of teachers using rubrics remains small, largely due to a prevailing tendency among them to rely on personal judgment for evaluating students' performance. This approach can yield inconsistencies and potential biases when assigning grades to a particular task.

In assessing performance task, teachers need to specify the purpose, select the appropriate task, develop the scoring criteria, supervise the process, and finally score the product or performance (Kirmizi et al., 2016). In fact, there are several types of rubrics specified by their composition and contend to fulfil

the educational objective of the subjects and these are principally categorized into holistic and analytic rubrics (Dawson, 2017). According to Nitko and Brookhart (2015), the former provides an overall score of the process or product directly, while the latter scores individual components separately to obtain a collective score (cited by Ernst et al., 2017).

Rubrics' technicalities and all the processes mentioned by Kirmizi et al. (2016) require teachers' competence when it comes to working on rubrics development for performance tasks' assessments. However, several factors hinder them in developing rubrics such as teachers have limited level of knowledge about rubrics and that teachers sometimes had difficulty making definitions that fit the criteria to be included in the rubric, making clear statements, deciding the level of scoring, and making the rubric appropriate to the level of students making it being more time-consuming (Gunez, 2020).

As per experienced, rubrics really can be very time consuming to create and time is not something that most teachers have an excess of since they are bombarded with other paper works to accomplish. In particular, there have been very few studies on the level of knowledge of teachers about rubrics (Senel et al., 2018), their competence to develop and implement these tools (Metin, 2010), and the challenges and difficulties they had in these processes (Gunez, 2020).

The scarcity of studies addressing teachers' competence about rubric development and implementation and the specific challenges they encounter in these processes underscores the significance of the research. Given the time constraints faced by educators amid numerous responsibilities, understanding and addressing these challenges are crucial for enhancing the effectiveness of performance-based assessments in TLE subjects. This study aims to contribute valuable insights to the existing literature, revealing possible practical difficulties faced by teachers and paving the way for potential solutions to improve the integration of performance-based assessment rubrics in the assessment process.

Literature Review

Stiggins (1987) proposed a step-by-step guide to develop valid performance-based assessment as shown in Fig. 1 (as cited by Ernst [2017]). Creating a performance-based assessment rubric, a crucial phase in this study, represents the fourth step in the process.
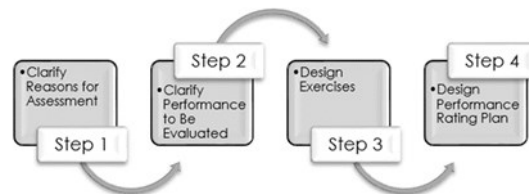

Figure 1. Stiggin's (1987) Process of Performance Assessment Design

Preceding this phase are three equally significant steps, each requiring observation of teachers' competence as they progress through these stages.

In performance-based learning, the implementation of performance-based assessment is essential. Ernst et al. (2017) has outlined a process for executing such assessments patterned to Stiggin's (1987) process as shown in Fig. 2.
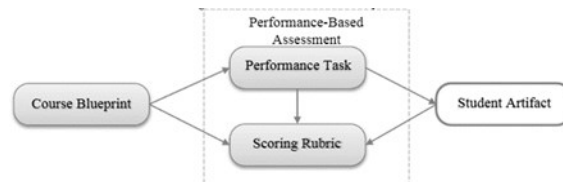

Figure 2. Performance-based Assessment Process

The process involves designing course blueprints, developing performance tasks based on those blueprints, creating scoring rubrics for assessment criteria, and finally, evaluating student artifacts produced in response to the performance tasks using the scoring rubrics.

As have been mentioned, performance-based assessments are typically evaluated using rubrics (Brown, 2017) but teachers require specialized assessment knowledge and skills in order to effectively assess student learning (Edwards, 2019) since it has been said that a rubric, comprising criteria, descriptors, and scales, is a sophisticated scoring guide that requires proper teacher training for effective utilization (Jeong, 2015). In fact, the model research papers of this study are that of Metin's Teachers' Difficulties in Preparation and Implementation of Performance Task (2013) and Costales' Difficulties in Performance Task Authentic Assessment Among Teachers (2022). There were contradicting results like case in point, on Metin findings. It was found out that majority of teachers had difficulty in preparing rubric which prompted the development of this research. Whereas on Costales' (2022), the findings tell that it was never become the teacher-respondents' problem. The result may mean that somehow, they are knowledgeable enough or competent in preparing rubric, rating scale and rating sheets.

Additionally, teachers' highest educational attainment, length of service and number of seminar/ training workshops attended related to rubrics development were the profiles under consideration due to the readings conducted. Bulilan (2022) suggests a close relationship between teachers' competence and their level of educational qualification, indicating that higher educational attainment leads to greater competence among teachers. Furthermore, despite Graham et al.'s (2022) assertion that there is no concrete evidence to support the idea that beginning teachers are less competent than experienced ones, the study investigates differences in teachers' competence based on their years of service, aligning with Kinni and Podolsky (2016) argument that longer years of service equate to greater teaching experience.

In addition to these findings, Padillo et al. (2021) point out that one of the contributing factors to effective instruction includes professional development activities, such as seminars and training programs. It is important to enhance the quality of educators by providing opportunities for training, seminars, workshops, and the like. This is particularly significant since Mufidah et al. (2021) discovered that teachers who are engaged in such programs more frequently tend to see improvements in their performance.

The connection between these readings and the competence of teachers in developing and implementing performance-based assessment rubrics in performance-based learning is that they emphasize the importance of continuous professional development and the potential benefits of higher educational qualifications and teaching experience on a teacher's overall competence.

STATEMENT OF THE PROBLEM

This study has a specific emphasis on exploring the competence level of teachers in terms of developing and implementing performance-based assessment rubrics for grading performance-based learning activities in Technology and Livelihood Education subjects. With this goal in sight, the study devised the following research questions:
1. What is the profile of the TLE teacher-respondents concerning their:
    a. highest educational attainment;
    b. length of service; and,
    c. number of seminar/training workshop attended related to rubric development?
2. What is the competence level of the teachers when it comes to the development and implementation of rubrics in assessing performance-based tasks in TLE subjects when it comes to the:
    a. practical application; and,
    b. technical components of rubrics?
3. Is there a significant difference between the competence of the TLE teachers on the development and implementation of rubrics in assessing performance-based tasks when categorized based on their profile variables?

METHODOLOGY

Research Design

The data gathered in this research underwent a process of description, analysis, and interpretation, employing descriptive and comparative research approaches. These methodologies were selected to describe the competence levels of the teachers and examine the differences observed in the teachers' competence in developing and implementing performance-based assessment rubrics for tasks related to Technology and Livelihood Education, with a focus on performance.

Participants/Respondents of the Study

There were 687 TLE teachers identified but only a total of 247 teachers instructing Technology and Livelihood Education at both junior and senior high levels were involved in the study, concentrating specifically on teachers within the Division of Isabela. The selection of this sample size, numbering to 247 teachers, was guided by a confidence level of 95% and a margin of error set at 5%.

Instrument/s of the Study

This study utilized a survey questionnaire as the main data collection tool. To evaluate teachers' competence in developing and implementing performance-based assessment rubrics for TLE performance-based learning, two 5-point Likert scales were used. One assessed technical components of rubrics, ranging from "Expert" to "Novice", and the other assessed practical application of rubrics, ranging from "Extremely aware" to "Not at all aware".

The statement indicators utilized in the questionnaires were developed based on extensive readings conducted by the researcher, drawing inspiration from the works of Gonzalez (2014), NCSU (n. d.), Andrade (2005), and materials from Angelo State University (n. d.). While there were revisions made, the questionnaire underwent validation with 30 TLE teachers, and the statistician tested it, yielding a Cronbach's alpha reliability of .913, signifying excellent internal consistency.

Data Collection and Analysis

The responses provided by the teacher-respondents underwent statistical analysis using the Statistical Package for Social Sciences (SPSS) along with descriptive and comparative statistical techniques. The evaluation of responses involved the utilization of frequency counts and percentages to ascertain information related to the teacher-respondents' profile and mean to determine teachers' competence level. Moreover, the Kruskal-Wallis H Test involving the calculation of f-values and p-values, was also used to discern variances in the teachers' competence levels concerning both the technical aspects and practical utilization of rubrics.

Ethical Considerations

Ethical considerations included obtaining permission to conduct the approved research concept from the Central Graduate School of Isabela State University. Approval processes extended from school division superintendents of the four divisions of Isabela to individual school principals, ensuring a hierarchical and respectful approach. Debriefing information was provided to direct teacher-participants, offering clarity on the research process and addressing any lingering questions or concerns.

FINDINGS

Profile of the Teachers

Table 1 shows the demographics of TLE teachers of both the public and private secondary schools in the province of Isabela.

Table 1. Profile of the teacher-participants

Profile	Frequency (n=247)	Percent (100.0)
Highest Educational Attainment		
Baccalaureate	168	68.0
Masteral	67	27.1
Doctoral	12	4.9
Length of Service		
Less than 1 year	36	14.6
1-5 years	59	23.9
6-10 years	70	28.3
11-15 years	40	16.2
16-20 years	18	7.3
20 years and above	24	9.7
Number of Seminar/Training Workshops attended related to Rubrics Preparation		
0	185	74.9
1-2	52	21.1
3 and above	10	4.0

It is evident that majority were teachers who had obtained baccalaureate degrees, constituting 168 individuals or 68%. There were also those who held master's degrees, accounting for 67 individuals or 27.1%. A smaller proportion, specifically 12 individuals or 4.9%, possessed doctorate degrees.

In terms of their accumulated teaching experience, the majority had already attained between 6 to 10 years of service, encompassing the largest portion. This was followed by 59 teachers, constituting 23.9%, who had 1 to 5 years of teaching background, while 40 teachers, accounting for 16.2%, fell into the category of having 11 to 15 years of service. There were also individuals who had less than a year of teaching experience, amounting to 36 respondents or 14.6% of the total. Moreover, 24 respondents, equivalent to 9.7%, had accumulated 20 years or more of teaching experience. However, a smaller group of only 18 respondents or 7.3% belonged to the category of having 16 to 20 years of teaching service.

Regarding the frequency of seminar and training workshops attendance among the participants, the data reveals that nearly all respondents, totaling 185 individuals or 74.9%, had not participated in any seminars or training sessions related to the creation and utilization of rubrics. However, a subset of 52 respondents, representing 21.1%, had engaged in a minimum of 1 to 2 seminars or training workshops focused on rubric preparation. Additionally, 10 individuals, comprising 30.4% of the respondents, had taken part in 3 to 4 seminar or training workshops on rubric preparation.

Competence Level of TLE Teachers in the Development and Implementation of Performance-based Assessment Rubrics

The results disclosed the competence of the teachers in the preparation and utilization of rubrics for the assessments of students' task-based learning activities in terms of the practical application and technical components of rubrics.

A. Practical Application of Rubrics

The findings illustrate a high competence level of the teachers in the preparation and utilization of rubrics in assessing performance-based tasks of students in terms of its practical application. The mean values, ranging from 4.42 to 4.93, indicate a high level of awareness, labeled from "very aware" to "extremely aware". Notably, the majority of statements received the label "extremely aware", with mean values from 4.52 to 4.93.

Teachers demonstrated exceptional awareness of the effectiveness of rubrics in TLE assessment and instruction. They acknowledged that rubrics facilitate effective assessment, enhance clarity in identify-

ing students' strengths and weaknesses, simplify and expedite scoring, and aid students in understanding task expectations. Furthermore, teachers recognized that using rubrics promotes fair grading, provides clear guidance to students since rubrics are given ahead of time to students, and reduces complaints about grades.

However, five statement indicators were labeled "very aware", with mean ratings ranging from 4.19 to 4.46. This indicates a slightly lower intensity of awareness regarding aspects such as precision and reliability in scoring TLE performance tasks, setting criteria descriptions, using rubrics as a progress-tracking tool, elimination of the need for lengthy comments from teachers, and the need for continuous revision whenever using rubrics for assessments.

While TLE teachers exhibit exceptionally high awareness in the practical application of rubrics, there are specific areas where their awareness is slightly less intense, labeled as "very aware".

B. Technical Components of Rubrics

Results revealed mean values ranging from 3.30 to 4.39, indicating the competence of TLE teachers in various technical aspects of rubrics, measured on a 5-point Likert scale. Scores between 3.30 and 3.57 suggest a competent level in tasks such as listing criteria, chunking criteria, defining criteria, revising criteria, and detailing performance levels.

While some technical aspects are rated as "proficient" with mean values from 3.53 to 4.39, indicating teachers' capability in crafting accurate and effective rubrics, these aspects include keeping criteria descriptions clear, deciding on rubric types, designing rating scales, organizing scale levels, and writing understandable descriptions. This discovery supports Costales' (2022) arguments that preparing rubric was never become the teachers' problem which may mean that somehow, they are knowledgeable enough in preparing rubrics. This contradicts the findings of Metin (2013), who reported that a majority of teachers faced difficulties in crafting rubrics.

Teachers exhibit competence ranging from basic to high levels in understanding the technicalities of rubrics, signifying their ability to perform these tasks but often requiring some guidance from experts.

Differences in the Teachers' Competence When Grouped According to Profile in terms of the Practical Application and Technical Components of Rubrics

Tables 2 and 3 showcase the statistical differences in teachers' competence when classified based on their Profiles.

Summary of Differences in the Teachers' Competence When Grouped According to Profile in terms of the Practical Application of Rubrics

The study categorizes teachers based on their highest educational attainment and reveals that, overall, there are no significant differences in the competence of TLE teachers in understanding the practical applications of rubrics which got an F-value of 1.403 with .456 p-value. However, one specific indicator related to the continuous revision of rubrics shows significant differences, with teachers holding doctoral degrees being more aware of the necessity for ongoing rubric revisions compared to those with lower degrees.

Further, no significant differences were found among teachers of varying lengths of service, except for specific areas. Teachers with 6 to 15 years and 20 years and above of service showed significantly higher competence in providing greater precision and reliability among scored TLE performance tasks. Additionally, those with more than 11 years of teaching experience had a significantly higher understanding of the continuous revision of rubrics. The interpretation of these data involved utilizing the obtained F-value of 1.493 and a p-value of .435.

The data also suggests that the number of seminar/training workshops attended did not significantly impact teachers' overall competence in the practical application of rubrics revealed by the F-value of 1.785 and p-value of .323. However, attending more than three sessions was associated with higher competence in specific aspects, such as ensuring students understand rubric criteria and recognizing the need for continuous rubric revision. These findings contradict the null hypothesis, indicating that additional workshops can enhance certain practical applications of rubrics.

Table 2. Differences in the Teachers' Competence When Grouped According to Profile in terms of the Practical Application of Rubrics

Highest Educational Attainment		Length of Service		Number of Seminar / Training Workshop	
F-value	p-value	F-value	p-value	F-value	p-value
1.403^{ns}	.456	1.493^{ns}	.435	1.785^{ns}	.323

* = significant at 0.05 level; ns = not significant

While many aspects show no significant differences, there are specific areas where significant disparities are observed, challenging the null hypothesis as shown in Table 2.

Summary of Differences in the Teachers' Competence When Grouped According to Profile in terms of the Technical Components of Rubrics

In Table 3, significant differences in teacher competence regarding the technical components of rubrics based on their highest educational attainment were found, rejecting the null hypothesis as indicated by the obtained F-value of 12.798 and a p-value of .034. Doctoral degree holders demonstrated a deeper understanding of rubric elements, aligning with Hammond's (2010) study which showed that teachers who had a strong academic foundation were viewed as having higher levels of competence. Baccalaureate and master's degree graduates, though competent to proficient, exhibited basic to moderate skills, requiring guidance.

When grouped according to length of service, the table further showcases significant differences with F-value of 12.680 and .009 p-value in teacher competence concerning the technical aspects of rubrics. Teachers with over 6 years of experience demonstrate higher competence level compared to those who had less than 6 years teaching experience. Further, teachers with 16 to 20 years of experience need improvement in defining criteria for rubrics as revealed by the competence level, suggesting a need for updating their skills. Somehow, Kini and Podolsky (2016) findings were true emphasizing that a lengthier year of service is equal to gains in teacher effectiveness with more experience.

When grouped according to the number of seminar / training workshop, it is notable that teachers with more seminar attendance exhibited higher competence level in crucial aspects like choosing rubric types and defining criteria. While those who did not attend any training sessions achieved only adequate competence, indicating a need for guidance from more experienced ones. It can be gleaned that there is a clear correlation between seminar attendance and competence levels as the data shows F-value of 8.038 and p-value of .007. This directly corresponds to the findings of Mufidah et al. (2021) that teachers who participate in these programs more regularly are likely to experience enhancements in their performance.

Table 3. Differences in the Teachers' Competence When Grouped According to Profile in terms of the Technical Components of Rubrics

Highest Educational Attainment		Length of Service		Number of Seminar / Training Workshop	
F-value	p-value	F-value	p-value	F-value	p-value
12.798*	.034	12.680*	.009	8.038*	.007

* = significant at 0.05 level; ns = not significant

The study reveals that educational attainment, length of service, and seminar attendance significantly influence teachers' competency in rubric technicalities. The findings provide valuable insights for educational institutions and policymakers to tailor professional development programs for teachers based on their educational background, experience, and training attendance.

CONCLUSIONS

Teachers demonstrated high awareness in the practical application of rubrics. Exceptional awareness of the effectiveness of rubrics in TLE assessment and instruction was noted, along with acknowledgment of rubric benefits such as fair grading and providing clear guidance to students. Some areas showed slightly lower intensity of awareness, particularly in precision and reliability in scoring TLE performance tasks and the need for continuous rubric revision.

In terms of the technical components of rubrics, doctoral degree holders demonstrated a deeper competence, while baccalaureate and master's degree graduates exhibited basic to moderate skills. Significant variances in teacher competence were observed based on length of service, with those over 6 years showing higher competence levels in rubric technicalities. Additionally, seminar attendance correlated positively with competence levels in crucial aspects like choosing rubric types and defining criteria but it was observed that nearly 75% of teachers had not attended any seminars or training related to rubric creation and utilization.

Educational attainment, length of service, and seminar attendance significantly influenced teachers' competency in rubric technical components. This provides insights into the demographic and experiential factors influencing teachers' competence in the development and implementation of performance-based assessment rubrics, highlighting specific areas where additional training and support may be beneficial.

RECOMMENDATIONS

Some recommendations were disclosed for improving the utilization of performance-based rubrics in Technology and Livelihood Education (TLE) and enhancing the overall assessment practices within the subject. Both public and private school institutions may:
1. conduct subject-specific workshops focusing on the unique needs of the Technology and Livelihood Education (TLE) subject;
2. create a repository of resources, examples, and templates specifically designed for TLE performance -based assessment rubrics;
3. implement regular feedback mechanisms for TLE teachers regarding their rubric development and implementation;
4. encourage teachers to attend seminars and training workshops related to rubric creation and utilization;
5. conduct regular institutional audits to ensure that performance-based assessment rubrics are at use when needed in PBL;
6. provide ongoing support and mentorship for TLE teachers, especially those in the early stages of their careers; and,
7. offer differentiated training paths by recognizing the diverse needs of teachers based on their profiles (educational attainment, length of service, seminar attendance).

For future researchers, they may:
8. conduct qualitative research for TLE teachers' needs assessment surveys to explore their challenges in developing and implementing rubrics for performance-based learning activities, and,
9. implement a suggestion box system during the research where teachers can submit anonymous suggestions and can collectively contribute to a growing list of needs, challenges, and potential solutions related to rubric development for PBL.

ACKNOWLEDGMENT

role in the study's success. Personal gratitude goes to friends, relatives, and supportive parents and grandparents and acknowledge the Almighty God for constant inspiration.

The authors appreciate all contributors, carrying their wisdom into the next academic and professional chapter.

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A DESCRIPTIVE COMPARATIVE STUDY ON PRE- AND POST-PANDEMIC LEARNING SET-UP FOCUSING ON TECHNOLOGY INTEGRATION SELECTED PUBLIC ELEMENTARY SCHOOLS IN CAMARINES-NORTE

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ABSTRACT

The pandemic's exigencies have necessitated an immediate shift in educational pedagogy and teaching methodologies, precipitating a departure from traditional systems toward a new teaching and learning paradigm. While the shift to remote education and the utilization of Information and Communication Technology (ICT) in teaching became imperative due to the impact of COVID-19, the integration of technology in education had been underway for some time. Moreover, educators and learners must embrace a more advanced form of technology-integrated learning after the pandemic. Despite many studies exploring technology integration post-pandemic, a notable gap exists in research comparing integration before and after the pandemic. Thus, this paper compares pre- and post-pandemic learning setups, specifically focusing on technology integration. A sample size of 30 teachers was selected using the purposive sampling method. Data collection was done using questionnaires. The research instrument for this study will be a researcher-designed questionnaire tailored to the research objectives. The respondents are educators actively engaged in teaching before and after the pandemic, specifically those who integrate technology into their teaching practices. The result shows that During pre-pandemic learning setup, technology is rarely integrated into goal-setting, while it is frequently integrated into content, teaching-learning situations, and assessment. Also, the findings suggest that technology is frequently integrated into goal-setting during post-pandemic learning setup. In contrast, it is always integrated into content, teaching-learning situations, and assessment.

INTRODUCTION

The onset of the global COVID-19 pandemic has wrought significant disruptions across various facets of human existence, catalyzing an unparalleled transition from conventional education to online learning (UN, 2020). This sudden and far-reaching alteration has impacted nearly half of the world's student population, underscoring the imperative for swift and effective technology integration in education (UNESCO, 2020).

Numerous research studies emphasize the pivotal role played by technology integration within classrooms, recognizing it as a fundamental factor in addressing the evolving needs of learners in a knowledge-driven society (Martins et al., 2019). The success of this integration extends beyond merely adding excitement to the learning process; it emerges as a substantial predictor of academic performance and learner motivation (Hanafi et al., 2017; Xu et al., 2021). Educators, cognizant of the potential of technology integration, stress its critical role in optimizing educational outcomes and meeting learners' needs within the dynamic landscape of a knowledge society (Martins et al., 2019). While the shift to remote education and the utilization of Information and Communication Technology (ICT) in teaching became imperative due to the impact of COVID-19, the integration of technology in education had been underway for some time. The advancement of technology has facilitated the development of diverse educational applications, providing students with an immersive and interactive learning experience (Hwang et al., 2015). In recent years, significant emphasis has been placed on recognizing the ad-

vantages that technology integration can bring to educational institutions' learning and teaching processes. Empirical evidence indicates that incorporating technology into the classroom can significantly augment learning outcomes (Chauhan, 2017; Zhu & Urhahne, 2018). This underscores the importance of digital skills as essential competencies for educators and teachers, necessitating even during the pandemic (Koehler & Mishra, 2009; Martin, 2015; Tondeur et al., 2012).

The post-COVID-19 era has prompted institutions worldwide to embark on a digital transformation journey, with the Philippines serving as a noteworthy example of an accelerated pace of change. The pandemic's exigencies have necessitated an immediate shift in educational pedagogy and teaching methodologies, precipitating a departure from traditional systems toward a new teaching and learning paradigm (Roy, 2020). After the pandemic, educators and learners must embrace a more advanced form of technology-integrated learning. The prevailing trend has paved the way for e-learning, employing various tools such as websites, telecommunication, radio, and video recording for activities ranging from delivering lectures to providing study materials and assignments (Masrom, 2007; Young et al., 2008). This modality mirrors face-to-face learning, wherein classroom teaching and live interactions between teachers and students occur online at specific times to facilitate direct communication (Kalpana, 2010; Buzzetto-More, 2015).

Against this evolving educational landscape, the present study delves into the ramifications of the inevitable shift from face-to-face learning to a technology-supported model. It seeks to elucidate the outcomes of this transformation, with a particular emphasis on integrating technology to facilitate seamless and structured online learning amid the nationwide lockdown. Despite many studies exploring technology integration post-pandemic, a notable gap exists in research comparing integration before and after the pandemic. Hence, this research compares pre- and post-pandemic learning set-ups, with a specific focus on technology integration.

Statement of Objectives

This study aims to describe the comparison of pre- and post-pandemic classroom set-up focusing on Technology Integration.

However, specifically, it aims to:
1. Determine the demographic profile of the respondents in terms of:
   1.1 Age
   1.2 Sex
   1.3 Level of Technological Capability
2. Determine to what extent does the technology integrated in teaching-learning process before the pandemic in terms of:
   2.1 Objective (setting of goals)
   2.2 Content (materials and resources)
   2.3 Learning and Teaching situation (discussion and concept building)
   2.4 Assessment (evaluating learnings)
3. Determine to what extent does the technology integrated in teaching-learning process after the pandemic in terms of:
   3.1 Objective (setting of goals)
   3.2 Content (materials and resources)
   3.3 Learning and Teaching situation (discussion and concept building)
   3.4 Assessment (evaluating learnings)
4. Determine whether there is a significant difference among the extent of technology integration before and after the pandemic?
5. Determine whether there is a significant relationship among the profile of the respondents and extent of technology integration in post-pandemic learning set-up?

METHODOLOGY

Research Design

This research adopts a descriptive comparative design utilizing quantitative methods, aiming to comprehensively describe and compare various aspects of technology integration before and after the pandemic in the context of classroom setups.

Participants and Sampling Techniques

This research adopts a purposive sampling method, strategically selecting participants based on specific criteria relevant to the study's objectives. The participants are educators actively engaged in teaching before and after the pandemic, specifically those who integrate technology into their teaching practices.

A total of 30 participants have been chosen for this study, ensuring a sufficiently representative sample size to draw meaningful conclusions. In which, all of these participants are secondary education educators, providing a consistent educational context for the study. Moreover, the participants are exclusively drawn from schools within the 5th district of Camarines Sur, ensuring a localized and specific geographical focus.

Research Instrument

The research instrument for this study will be a researcher-designed questionnaire tailored to the objectives of the research. This questionnaire will serve as a vital tool in gathering quantitative data to support the descriptive comparative design employed in the research.

Procedures

The data collection process for this study involves a systematic and ethical approach to gather comprehensive information from the participants. Initially, participants are identified through an initial screening process that considers their active engagement in teaching and their utilization of technology integration practices. Eligible participants are then formally invited to participate in the study, wherein the research objectives and requirements are thoroughly explained, ensuring a clear understanding of the study's scope and purpose. Before actively engaging in the study, participants are requested to provide informed consent, underlining the voluntary nature of their involvement and emphasizing the confidentiality and privacy of their personal information. Subsequently, the data collection phase commences, where demographic information such as age, gender, level of technological capability is systematically gathered. Additionally, participants are asked to respond to a survey designed to assess the extent of technology integration both before and after the pandemic, exploring various dimensions such as goal-setting, content utilization, learning and teaching situations, and assessment methods. This meticulous data collection process aims to ensure the reliability and validity of the gathered information.

Data Analysis

The following statistical tools were utilized in analyzing the data gathered:

Frequency distribution and percentage were applied to present and describe the data gathered in terms of the socio demographic profile of the respondents.

Ranking and Likert Scale was used to show the ranking of the rating of the respondents. 4-point Likert scale was utilized for high accuracy of description.

Weighted Mean was used to describe the data scale on the questionnaire. WM has interpretation based on its corresponding legends.

Pearson Coefficient was used to test the relationship between the profile and their perceived technology integration.

T-test is a statistical test that was used to compare the means of two groups.

RESULTS AND DISCUSSIONS

This chapter present analyzed, and interpreted the data gathered using appropriated statistical tools. This presentation is sorted with the specific questions presented on the rationale of this study. The data were presented in the tabular form.

Table 1: Profile of the Respondents
1.1 By Age

Age	Frequency	Percentage	Rank
21-30 years old	12	40 %	2
31-40 years old	14	46.67 %	1
41-50 years old	3	10 %	3
51 years old above	1	3.33 %	4
Total:	**30**	**100 %**	

The age bracket of 31-40 years old had the largest frequency count, with a total of 14 persons or 46.67%, ranking first among the respondents who actively included technology into their teaching, as shown in Table 1.1. Conversely, those aged 51 years and beyond had the lowest frequency count, with only one person or 3.33%, ranking it fourth. Younger instructors are more inclined to use technology into their teaching methods compared to older ones. Typically, younger instructors, who have been raised in an era dominated by digital advancements, tend to possess greater knowledge and ease when it comes to technology. Consequently, they may be more willing to investigate and apply inventive teaching techniques, such as the flipped classroom. It is advisable to select educators who belong to the demographic of digital natives, namely those born between 1980 and 1994. This population is distinguished by a profound inclination towards technology, possessing proficient computer abilities, and exhibiting complete assurance in using information and communication technology (ICT).

1.2 By Sex

Sex	Frequency	Percentage	Rank
Male	14	46.67 %	2
Female	16	53.33 %	1
Total:	**30**	**100 %**	

Table 1.2 presents the demographic distribution of respondents based on gender. The majority of participants in the study are female, constituting the highest frequency with 18 individuals, equivalent to 53.33 %. In contrast, the rest, 46.67 %, are male. This shows that a substantial portion of the individuals who participated in the study identify as female. A recent study by Mercader (2021) suggests that more women than men use technology for teaching purposes. The findings revealed a higher mean response for females than males in terms of perception on training, competence and importance of technology integration. The difference was however statistically insignificant ($p>0.05$). The result depicted a gradual closure of the gender technology gap.

1.3 Level of Technological Capability

Level	Frequency	Percentage	Rank
Basic Innovative	3	10 %	4
Basic Operation	9	30 %	2
Intermediate Operation	14	46.67 %	1
Advanced Operation	4	13.33 %	3
Total:	**30**	**100 %**	

Table 1.3 displayed the level of technological capability of the respondents. According to the data, majority of the respondents with the highest frequency count of 14, which corresponds to 46.67% are in Level 3 competency, which means they have intermediate operational skills in using technological tool. On the other hand, 30 % has Level 2 skills which is basic operational; followed by 13.33 % which are on Level 4 meaning advance operational skills.

Lastly, with lowest frequency of 3 only 10 % have basic innovative technological skills. This shows that teachers, majority have adequate skills in using manipulating and utilizing technological tools.

Table 2: Technology Integration on Pre-pandemic learning set-up
2.1 In terms of Objective

Items	Weighted Mean	Verbal Interpretation	Rank
Use technology in setting illustrative example of expected outcome	2.54	Frequent	1
Use technology engaging learners to lesson objectives	1.73	Rarely	2
Overall Mean:	**2.14**	**Rarely**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 2.1 shows the level of technological integration in terms of goal setting during pre-pandemic learning set-up. Based on the data, respondents "frequently" utilize technology in setting illustrative example to set expected outcome, obtained the highest rank recording a Weighted Mean of 2.54. On the other hand, with WM of 1.73, teachers "rarely" use technology in engaging learners to the lesson objectives set. Overall, with quantitative measure of 2.14 WM, the teachers rarely used technology in terms of goal setting during the pre-pandemic learning set-up.

Table 2.2 presents utilization of technology in terms of content building and presenting during pre-pandemic context. Based on the highest statistic presented, teachers "always" use technological tools like web and application to provide vast amount of data and to present the data creatively to the class, with WM of 3.73 and 3.35 respectively.

2.2 In terms of Content

Items	Weighted Mean	Verbal Interpretation	Rank
Use technological media and tools to creatively present content and information	3.35	Always	2
Use web and applications to provide vast amount data found on internet	3.73	Always	1
Use technological media to conduct researches and validate the reliability of information	2.52	Frequent	3
Overall Mean:	**3.2**	**Frequent**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

A considerable proportion of educators, specifically 75%, have acknowledged the emergence of novel demands in their personal and professional lives as a result of the utilization of various digital tools. The sentiment expressed in the statement is in alignment with the consensus that these tools possess a significant influence by broadening the scope of content and proficiencies on their area of specialization. This observation implies that the integration of technology in education not only amplifies specific facets of teaching but also imposes additional obligations and anticipations on educators to remain well-informed about the ever-changing landscape of digital content and competencies.

Overall, in pre-pandemic context, technology was "frequently" utilized in gathering and presenting learning content in the educational program.

2.3 In terms of teaching learning situation

Items	Weighted Mean	Verbal Interpretation	Rank
Use tools like radio, laptops, projectors in making every activity more engaging	3.16	Frequent	1
Use social media platforms to engage learning into the online community and the world	2.57	Frequent	2
Use social media platforms to have educational interaction directly whenever face-to-face is not prefer	2.09	Rarely	3
Overall Mean:	**2.61**	**Frequent**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 2.3 presents utilization of technology in terms of teaching learning situation during pre-pandemic context. The highest WM was 3.16, the first item, highlighting teachers "frequently" using technological tools like radio, laptops, projectors in making every learning activity more engaging. This was followed by 2.57 WM, explaining teachers "frequently" use technological tools like social media platform to engage learning into online community and the world. A number of previous studies cited by Fu (2018) have shown that an appropriate use of ICT can raise educational quality and connect learning to real-life situations. Up to date technology in the classrooms allow both learner and teacher to interact simultaneously with ease and convenience.

2.4 In terms of Assessment

Items	Weighted Mean	Verbal Interpretation	Rank
Use applications to conduct quizzes, activities and examinations	2.37	Rarely	3
Use technology in monitoring outputs submitted online	2.40	Rarely	2
Use technology to properly organized records and assessment of learners	3.23	Frequent	1
Overall Mean:	**2.67**	**Frequent**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 2.3 presents the findings regarding using technology as an assessment tool during the pre-pandemic setting. According to the collected data, teachers with WM of 3.23 "frequently" use technology to organize records and assessment scores of the learners properly. As cited by the Learn-U article titled Technology as Recording, Analysis, and Communication Tool", teachers arrive at various forms of evaluative conclusions that shape and guide plans for future instruction. The recorded products of evaluative activity can take several forms but can generally be discussed in two chief categories: quantitative and qualitative data.

Table 3: Technology Integration on Post-pandemic learning set-up
3.1 In terms of Objective

Items	Weighted Mean	Verbal Interpretation	Rank
Use technology in setting illustrative example of expected outcome	2.52	Frequent	2
Use technology engaging learners to lesson objectives	2.61	Frequent	1
Overall Mean:	**2.57**	**Frequent**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 3.1 shows the level of technological integration in terms of goal setting during the post-pandemic learning set-up. Based on the data, respondents "frequently" utilize technology in setting illustrative example to set expected outcome, obtained the highest rank recording a Weighted Mean of 2. 542. Following closely, with a Weighted Mean of 2.61, is the use of technology by teachers to engage learners with the lesson objectives. This indicates that technology is frequently employed as a tool to actively involve students in the learning process, aligning with the instructional goals set by the educators.

The overall measure of technological integration in goal setting during the pre-pandemic learning setup is quantified with a Weighted Mean of 2.57. This suggests a consistent and frequent use of technology across various aspects of goal setting before the pandemic, emphasizing its role in shaping instructional strategies.

3.2 In terms of Content

Items	Weighted Mean	Verbal Interpretation	Rank
Use technological media and tools to creatively present content and information	3.71	Always	3
Use web and applications to provide vast amount data found on internet	3.94	Always	1
Use technological media to conduct researches and validate the reliability of information	3.80	Always	2
Overall Mean:	**3.82**	**Always**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 3.2 presents utilization of technology in terms of content building and presenting during post-pandemic context. Based on the highest statistic presented, teachers "always" use technological tools like web and application to provide vast amount of data found on the internet. This is followed by still a high WM of 3.80 and 3.71, with the same verbal interpretation of "always", directs into idea that educators "always" use technological tool like media to conduct researches, validate the reliability of an information and present content to students creatively.

3.3 In terms of teaching learning situation

Items	Weighted Mean	Verbal Interpretation	Rank
Use tools like radio, laptops, projectors in making every activity more engaging	3.70	Always	3
Use social media platforms to engage learning into the online community and the world	3.98	Always	1
Use social media platforms to have educational interaction directly whenever face-to-face is not prefer	3.89	Always	2
Overall Mean:	**3.86**	**Always**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 3.3 presents utilization of technology in terms of teaching learning situation during post pandemic context. The highest WM was 3.98, with verbal interpretation of "always", directing to the idea that educators "always: use social media platform to engage learning into the online community and the world. Based on Yan chan. Et al (2016) study on the use of social media for Blended Learning, there is a growing trend among educators and teachers to utilize social media platforms as a means of actively involving learners in the online community and facilitating connections with the wider global society. In the contemporary era characterized by widespread digitalization, educators have increasingly acknowledged the immense potential of social media platforms as a dynamic and versatile tool for enhancing the educational process. The term "always" denotes an unwavering dedication to incorporating these platforms into their pedagogical approaches with regularity. Through the utilization of social media platforms, educators are able to establish virtual environments that transcend the limitations of traditional classroom settings. This practice facilitates the cultivation of a communal atmosphere among learners, thereby enhancing their overall educational experience.

3.4 In terms of Assessment

Items	Weighted Mean	Verbal Interpretation	Rank
Use applications to conduct quizzes, activities and examinations	3.03	Frequent	3
Use technology in monitoring outputs submitted online	3.27	Always	2
Use technology to properly organized records and assessment of learners	3.66	Always	1
Overall Mean:	**3.32**	**Always**	

Legend: 1.00- 1.74 (Never) 1.75- 2.49 (Rarely) 2.50-3.24 (Frequent) 3.25-4.00 (Always)

Table 3.4 presents the findings regarding the utilization of technology as an assessment tool during pre-pandemic setting. According to the collected data, teachers, with WM of 3.66 "always" use technology to properly organized records and assessment scores of the learners.

Overall, the integration of digital platforms in the assessment process empowers educators to streamline their workflow, gain valuable insights, and enhance the learning experience for their students. Furthermore, within the domain of online education, the utilization of technology enables the effective supervision and evaluation of academic deliverables submitted by students. Digital platforms and learning management systems have been developed to provide educators with the ability to effectively monitor and evaluate various forms of student work, including assignments, projects, and other submissions. These technological tools offer a streamlined and transparent process for assessing student performance, thereby enhancing the overall educational experience.

Table 4: Significant difference between Pre- and Post-pandemic technology integration in 4 components

Components	t-value	p-value	Decision
Objectives	2.08	.046796	**significant** at p <.05
Content	2.34	.02664	**significant** at p <.05
Teaching-Learning situation	2.61	. 014376	**significant** at p <.05
Assessment	3.92	.00684	**significant** at p <.05

It was found that there was a significant difference between the mean of the technological integration during the pre- and post-pandemic learning set-up. Looking at the based data of the mean, utilization of technology in teaching is notably high in the post-pandemic learning set-up compared to the pre-pandemic. Moreover, as tested statistically, this is a significant difference at <0.05. This revealed that technology integration in the four educational components is higher during the post-pandemic learning set-up.

Nevertheless, the study shows that it is imperative to acknowledge that the trajectory of technological progress has yet to reach a state of stagnation. The ongoing advancement of technology is readily apparent, as evidenced by the emergence of various tools and innovations that are significantly influencing the educational domain. The increasing significance of generative AI tools has garnered considerable attention within educational institutions worldwide, as emphasized by Yeo's (2023) scholarly work. The potential ramifications of generative artificial intelligence (AI) on the processes of learning and assessment highlight the continuous development of technology within education, alluding to additional changes and prospects for augmenting the overall educational encounter.

In table 5 it was found that age and sex as modifying variables do not affect the teacher's utilization of technology under the post-pandemic learning set-up. However, significantly at <0.05, it was found that the teacher's technological skills affect their utilization of technology in the four educational components.

Table 5: Significant relationship between profile of respondents and their perceived post-pandemic learning set-up

Relationship of:	R-value	P- value	Decision
Age			
Objectives	0.36	.05069	**Not Significant** at p > 0.05
Content	0.44	.014968	**Significant** at p <0.05
Teaching-Learning Situation	0.21	.265357	**Not Significant** at p > 0.05
Assessment	0.46	.010538	**Significant** at p <0.05
Sex			
Objectives	0.22	.242739	**Not Significant** at p > 0.05
Content	0.18	.341192	**Not Significant** at p > 0.05
Teaching-Learning Situation	0.31	.095485	**Not Significant** at p > 0.05
Assessment	0.26	.165269	**Not Significant** at p > 0.05
Level of technological Skills			
Objectives	0.41	.024436	**Significant** at p <0.05
Content	0.69	.000025	**Significant** at p <0.05
Teaching-Learning Situation	0.53	.002592.	**Significant** at p <0.05
Assessment	0.72	.00001	**Significant** at p <0.05

CONCLUSIONS

The study was able to generate the following conclusions:
1. During pre-pandemic learning, technology is rarely integrated into goal-setting, while it is frequently integrated into content, teaching-learning situations, and assessment.
2. During post-pandemic learning setup, technology is frequently integrated into goal-setting, while it is always integrated into content, teaching, learning situations, and assessments.
3. There is a significant difference in technology integration in pre- and post-pandemic learning setups. Specifically, technology is much more integrated during the post-pandemic learning set-up.
4. The educators' technological capabilities have a significant relationship with how frequently they integrate technology into educational components.

RECOMMENDATIONS

Based on the summary of findings and conclusion mentioned above, the researchers recommend the following:
1. Propose an educational plan on developing the level of technological capabilities of educators, a step toward promoting technology integration into educational components.
2. Continue to improve technology integration into educational components, more so on goal setting, which gets the least WM out of the four components.
3. Conduct an in-depth study on the inhibiting factors directly affecting educators' extent of technology integration into educational components.

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