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FOREWORD



The COVID-19 Pandemic sent a very strong message to the public, but what instilled in our mind was amidst challenges, Education should not be sacrificed. Modalities have changed but learning must prevail, for it is through education that we are preparing and empowering the next generations to handle and overcome unprecedented and inevitable challenges.

In the field of medicine, doctors and chemists are busy in finding a cure to end this virus and how we can go back to our usual lives. Meanwhile in the education department, we are busy studying these advent modalities to know which one is better and which one is futile, which one is useful, and which one has a big potential to stay. We are also eager to test the readiness of the students to face this innovative way of learning, how they cope up in terms of physical, mental, emotional, and social.

With this, we proudly present the research digest of the Education Department which is entitled **EduCARE** that is battling with the current issue in education and finding ways to overcome and win the call for the betterment of our department, our institution, and our nation.

Shallee S. Escobar, PhD, LPT
Editor-in-Chief

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of the
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“Excellence Amidst Quarantine”

**Relationship of Reading Comprehension and Word Spelling Ability among
Grade 4 Students in San Jose Elementary School S.Y 2018-2019**

Flordeliza A. Ada, Monica Faye S. Alcaraz, Ailene J. Espiel,
Jazzilou R. Lorenzo, Maximo P. Maranan, and
Michie Diane L. Muyot

I. ABSTRACT

The study was conducted to determine the reading and spelling ability among Grade 4 pupils in San Jose Elementary School. This study utilized a Descriptive Quantitative Research Design. Data obtained were analyzed using the frequency distributions, percentage and Pearson R. Data were solely based on the 107 respondents from San Jose Elementary School. The study revealed that there was no significant relationship between the respondents' reading comprehension and spelling ability. This implies that the respondent can understand what he/she is reading but does not know the correct spelling or the respondent can correctly spell the word but does not know what the word means. The following recommendations were offered: (a) that the school may have daily scheduled activities of reading using the Project ARC (b) that the teacher may conduct spelling activities to improve the spelling ability of the respondents (c) similar study may be conducted by the future researchers to find other variables that affect the reading comprehension and spelling ability of the students and (d) to have an enhancement program: (Project Spark) is recommended to enhance the reading comprehension and spelling ability of the respondents.

Keywords: *Reading Comprehension, Word Spelling Ability, Grade 4 Students*

II. INTRODUCTION

Reading is one of the most fundamental skills a child needs to learn in order to succeed in life. Learning to read is a sequential process; each new skill builds on the mastery of previous learned skills. Reading regularly improves memory function by giving the brain a good workout.

While reading comprehension is the ability to process texts, understanding its meaning and integrating it with what the reader already knows is important. A fundamental skill required for inefficient reading comprehension is knowing the meaning of words, understanding its discourse context, identifying the main thought, and recognizing the literary devices for propositional structures.

The researcher observed and experienced that there are many students nowadays who are struggling with spelling and reading. There are many students who have reached a higher level of education, but they cannot actually spell nor read fluently. Some of them do not have the mastery in terms of reading and writing. As Cayubit (2013) reported, the Vocabulary and Reading Comprehension of Filipino Children was poor. He cited that poor reading skills is manifested in poor comprehension, wrong pronunciation among others. If no proper intervention is administered early, it could affect the academic, social, and psychological development of the child. Moreover, Cabardo (2015) revealed that the present situation of most Filipino children was that the majority belonged to frustration or low level in reading comprehension and proficiency in silent reading as well as oral reading; majority of the males are less proficient in reading compared to females.

Nowadays, some students do not know the correct structure of a word, sometimes they abbreviate it to a shorter one which is not applicable. Spelling is one of the components in writing. Without it, one will not have a good comprehension skill. Some kids struggle with their spelling words and to the repetition of writing the word or letters over and over. Spelling is also connected to language proficiency. Some children find spelling very hard compared to other subjects, because they did not know the correct form of words and they got confused with the correct order of letters to form the words. As students go through their adolescent years, students

need to develop spelling skills that will help improve their reading fluency and comprehension. Once students develop these skills, students will be able to recognize words quicker to improve their reading fluency. Once their reading fluency improves, these students will then be able to comprehend the material because they are not stumbling over unknown words. This will help the students to increase their knowledge of writing the correct spelling of words while they are at an early age to further develop their academic performance until they complete their study.

It has been observed in the Philippines that the youths who used shorthand texting (LOL, gudnyt, etc.) developed worse formal writing than those youths who rarely used shorthand texts. Those who used shorthand texts for communication were better “informal” writers (Rosen et al. 2013).

The researchers conducted this study to determine the level of reading comprehension and spelling ability of the Grade 4 students. The researchers aimed to develop students’ skills in writing the word correctly and enhance their spelling disability by knowing their reading comprehension.

III. METHODOLOGY

This study utilized the Quantitative Descriptive design to gather the necessary data and information needed in this study. Quantitative Descriptive design is the systematic empirical

investigation of observable phenomena via statistical mathematical or computational techniques. (Labaree, R. V 2013).

The researchers used Quantitative Descriptive Design to determine the relationship between reading comprehension and spelling ability among Grade 4 students at San Jose Elementary School in Tagaytay City.

IV. RESULT

Problem no. 1. What is the reading comprehension of the respondents?

Reading Comprehension	Frequency	Percentage
0-4 (Poor)	1	5%
5-8 (Low)	10	15%
9-12 (Moderate)	34	25%
13-16 (High)	39	35%
17-20 (Highly Acceptable)	23	20%
Total	107	100%
Mean Reading Score	13.15	

Legend: 0-4 Poor; 5-8 Low; 9-12 Moderate; 13-16 High; 17-20 Highly Acceptable

Table 1 shows the reading comprehension score of the respondents. Thirty-nine or 35% of the respondents' reading comprehension was in the score range of 13-16; thirty-four or 25% of the respondents' reading comprehension was in the score range of 9-12 with a verbal interpretation of moderate; Twenty-three or 20% of the respondents' reading comprehension was in the score range of 17-20 with a verbal interpretation of highly acceptable; ten or 15% of the respondents' reading comprehension was in the score range of 5-8 with a verbal interpretation of

“low”; and one or 5% of the respondents have a reading comprehension score range of 0-4 with a verbal interpretation of “very poor”.

The data indicated that most of the respondents have high reading comprehension. This implied that the reading comprehension of the students was above average, and they could read independently. This finding is supported by Johnson (2013), who concluded in his study that once students’ reading fluency improves, these students will then be able to comprehend the material because they are not stumbling over unknown words.

Spelling Ability	FREQUENCY	PERCENTAGE
0 – 9 (Poor)	13	5%
10-18 (Low)	19	10%
19-28 (Moderate)	24	25%
29-38 (High)	30	45%
39-48 (Highly Acceptable)	21	15%
Total	107	100%
Mean Spelling Score	26.21	

Legend: 0-9 Poor; 10-18 Low; 19-28 Moderate; 29-38 High; 39-48 Highly Acceptable

Problem No. 2. What is the spelling ability of the respondents?

Table 2 is the spelling ability of the respondents. Thirty (30) or 45% of the respondents’ spelling ability was in the score range of 29-38 with a verbal interpretation of “High”;

twenty-four (24) or 25% of the respondents' spelling ability was in the score range of 19-28 with a verbal interpretation of "moderate"; twenty-one (21) or 15% of the respondents' spelling ability was in the score range of 39-48 with a verbal interpretation of "highly acceptable"; nineteen (19) or 10% of the respondents' spelling ability was in the score range of 10-18 with a verbal interpretation of "low"; and thirteen or 5% of the respondents' spelling ability was in the score range of 0-9 with a verbal interpretation of "poor". The data indicated that most of the respondents got a score ranging from 29 – 38 and 19 – 28 with the frequency of 30 and 24, or 45% and 25% with the verbal interpretation of "high" and "moderate", respectively. In general, the mean score of the respondents is 26.21 with the verbal interpretation of "moderate". This implied that respondents could spell words with average difficulty, independently.

According to Critten (2016), while traditional models of spelling describe the skills and knowledge required for development, the underlying cognitive processes that drive spelling success are often overlooked. Using a combination of performance measures and self-explanations, the relationship between children's performance on both the recognition and procedural tasks were assessed.

Problem No. 3. Is there a significant relationship between the respondents' reading comprehension and word spelling ability?

Description	Pearson-R	Decision
Reading Spelling	0.93346	Accept Null Hypothesis

Basis for decision: P-Value <0.05 Reject Null Hypothesis.

Table 3 shows the relationship between the respondents' reading comprehension and spelling ability. The computed value of Pearson R was 0.93346 with a P-Value which was greater than .05, therefore the null hypothesis was accepted. There was no significant relationship between the reading comprehension and spelling ability of the respondents. This finding indicated that reading comprehension and spelling ability are independent variables and have no effect on each other. Therefore, the data may mean that high ability in spelling is not an assurance that comprehension is good. This observation is associated with Kiuru, Mäkihonko & Lerkkanen (2017) study which revealed that many students with reading and spelling problems have a lack of progress in reading and spelling skills after years of special education services,. The results showed that the reading and spelling skills had no significance in students with RSD lagged age level and that students with overlapping difficulties exhibited even slower development.

Problem No. 4. What enhancement program can be proposed based on the findings of the study?

PROJECT SPARK - Spelling Process and Reading Kits

Enhancement Program: (Project Spark)

Description: A reading intervention that aims to increase the reading proficiency and the word spelling ability of the students in the Grade 4 level and engage in activities such as reading short stories and answering comprehension questions and word spelling.

Rationale: Enables the students to develop their skills in spelling and reading.

Plan of Activities

Week	Lesson Title	Objective	Strategies	Activity	Assessment
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1	Lisa and the Pigpen	<p>To increase the spelling ability and reading comprehension of the students</p> <p>To develop strong spelling and word recognition skills</p> <p>To ensure that the students can spell the word correctly and understand the story.</p>	<p>Selection and classification of students who will undergo Program Spark.</p> <p>Providing a spelling chart for each story</p> <p>Provide a short story per week and 10 multiple choice comprehension. And 10 words to spell. Read the short story * Lisa and he Pigpen</p>	<p>Read each passage. Then answer each question carefully by choosing the best answer. The student will spell. 10 words with 1-2 syllables</p>	<p>The students need to develop their word spelling skills</p> <p>The students need to pass the reading comprehension and spell the word correctly.</p>
2	Wolves home again	<p>To increase the spelling ability and reading comprehension of the students</p> <p>To develop strong spelling and word recognition skills</p> <p>To ensure that the students can spell the word correctly and understand the story.</p>	<p>Selection and classification of students who will undergo on Program Spark</p> <p>Providing a spelling chart for each story</p> <p>Provide a short story per week and 10 multiple choice comprehension and 10 words to spell. Read the short story</p>	<p>Read each passage. Then answer each question carefully by choosing the best answer. The student will spell 10 words with 2-3 syllables</p>	<p>The students need to develop their word spelling skills</p> <p>The students need to pass the reading comprehension and spell the word correctly.</p>
3	Walking on the moon	<p>To increase the spelling ability and reading</p>	<p>Selection and classification of students who</p>	<p>Read each passage. Then answer each question</p>	<p>The students need to develop their</p>

		<p>comprehension of the students</p> <p>To develop strong spelling and word recognition skills</p> <p>To ensure that the students can spell the word correctly and understand the story.</p>	<p>will undergo on Program Spark</p> <p>Providing a spelling chart for each story</p> <p>Provide a short story per week and 10 multiple choice comprehension. And 10 words to spell. Read the short story</p>	<p>carefully by choosing the best answer.</p> <p>The student will spell. 10 words with 3-4 syllables</p>	<p>word spelling skills</p> <p>The students need to pass the reading comprehension and spell the word correctly.</p>
4	Living off the Earth	<p>To increase the spelling ability and reading comprehension of the students</p> <p>To develop strong spelling and word recognition skills</p> <p>To ensure that the students can spell the word correctly and under the story.</p>	<p>Selection and classification of students who will undergo on Program Spark</p> <p>Providing a spelling chart for each story</p> <p>Provide a short story per week and 10 multiple choice comprehension. And 10 words to spell. Read the short story</p>	<p>Read each passage. Then answer each question carefully by choosing the best answer.</p> <p>The student will spell. 10 words with 4-6 syllables</p>	<p>The students need to develop their word spelling skills</p> <p>The students need to pass the reading comprehension and spell the word correctly.</p>

V. DISCUSSION

The study aimed to determine the reading comprehension and spelling ability of the Grade 4 students in San Jose Elementary School AY 2018-2019. The researcher utilized quantitative descriptive research. Data were collected using standardized tests: Philippine

Reading Inventory (Phil-Iri) was used to determine the reading comprehension of the respondents; and South Australian standardized test was used to determine the spelling ability of the respondents. Consent from the Grade 4 parents was secured since the respondents were not of legal age to decide. The data gathered were analyzed using frequency distributions, percentage, mean, and Pearson R using Statistical Package for Social Sciences (SPSS). The researchers conducted the reading comprehension and spelling ability assessment from November 26 to December 6, 2018, with the presence of their respective Adviser and Guidance Counselor.

In general, the reading comprehension of the Grade IV students was above average, and they could read independently and could spell words with average difficulty independently. Reading comprehension and spelling ability were independent variables and had no effect on each other. Maybe there are other factors that affect reading comprehension and spelling ability.

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**Effective of Integrating Games in Teaching Mathematics among Grade 2 Students
of Tagaytay Central School AY 2018-2019**

Gladys Alemania, Criselyn Calibayan, Lenny Joy Calicaran,
Nelita Laz, and Dexter Songaben

I. ABSTRACT

This study focused on the efficiency of integrating games in teaching Mathematics. This is how a student can fight their anxiety on Mathematics by enjoying their lessons through the help of games strategy. The goal of mathematics teaching in the Philippines is mathematical empowerment. Critical thinking and problem-solving are the twin-goals of Mathematics in basic education. As an aid to this situation, this study was held in Tagaytay Central School to study the efficiency of having games instead of traditional teaching. This study focused on the constructivist theory of Jean Piaget which is learning by doing. Z-Test was applied to the quantitative data of the pre-test and post-test to have the decision on the effectiveness of the study. The results indicated that there was a significant difference between the respondents' scores in mathematics. This study shows that the integration of games in teaching mathematics was effective. The effectiveness of integrating games in teaching Mathematics is advanced.

Keywords: *Integrating games, Teaching Mathematics, Grade 2 Students,*

II. INTRODUCTION

As pedagogical devices, games are extremely useful; they can enliven teaching topics and are especially effective for dealing with problem solving and key concepts. Research shows that “games have a special role in building students’ self-confidence “and “they can reduce the gap

between quicker and slower learners “(Fuscuard, 2015). In higher mathematics, each topic can be made more interesting while students can play, and they are motivated to think. Teachers’ task is to find the right games bringing abstract concepts closer to the real world. Also, if teachers share their findings in papers, then many of them can profit and improve their teaching methods to make teaching and learning more effective.

The goal of mathematics teaching in the Philippines is mathematical empowerment. Critical thinking and problem-solving are the twin-goals of Mathematics in basic education (Elena R. Ruiz 2017). Statistics show that the school performance last 2014 on the National Achievement test (NAT) the Mean Percentage Score (MPS) was only 69.75% which was far from their target of 75% average (DEPED 2014). The low mathematics performance of the pupils indicates that they did not fully learn through traditional way of teaching. The research suggests ways of integrating games as a tool for teaching mathematics. The best practice of mathematics instruction, such practices that can estimate and sustain students’ interest in mathematics teaching (Chinyere F. Okafor, Uche S. Anaduaka (2013).

Math Worksheet Center (2017) stated that Math is the one skill you need to master in your life, even if it is the only one, you will at least be able to live without being cheated, robbed, or abused. You see, without math, we just cannot live or survive. We need math in our everyday lives. Just doing the essentials is dependent on your ability to do the math.

But as years and generations passed, it seems like we have a hard time taking the Subject math. According to Phillips, M. (2017), Research confirms that pressure of timed tests and risks of public embarrassment have long been recognized as sources of unproductive tension among many students.

Phillips, M. (2017) noted that Mathematics anxiety has been defined as feelings of tension and anxiety that interfere with the manipulation of numbers and the solving of mathematical problems in a wide variety of ordinary life and academic situations. Math anxiety can cause one to forget and lose one's self-confidence. This issue about students who take Mathematics in their course never gets old. It's an expanding issue, because the number of students who have this case is increasing, and even generations passed, it will not fade.

Math Anxiety is a phenomenon that is often considered when examining students' problems in Mathematics. It is the feeling of being anxious about a math subject. Some of the students encountered this feeling. As a result, they choose to drop their math subject because they feel that they can't pass because it's not their passion. It can also cause one to forget and lose one's self-confidence. In addition, math anxiety affects the students' performance in school. When they have some activities, they are afraid to solve the equation and when they take exams or homework, they don't know where to find the answers because of their math anxiety so they choose to be absent whenever they have a math class.

Phillips, M. (2017) said that, given the fact that many students experience math anxiety in the traditional classroom; teachers should design classrooms that will make children feel more successful. Why? Because the atmosphere of the classroom can be a way to motivate them, because most of the students are ashamed of being wrong, they should motivate everyone to try again so they can't be anxious about themselves.

Today, teaching Mathematics should be child – centered; meaning, the first consideration is the willingness and eagerness of a student to learn. Mathematics' anxiety is one of the struggles of the teachers, but it can be solved by integrating useful games. Students can enjoy learning math by practicing joyful and meaningful activities using games.

William Paul Thurston stated that “Mathematics is not about numbers, equations, computations, algorithms: it is about understanding”, integrating games can make students understand mathematics clearly setting aside their anxieties. Teaching mathematics is hard for a teacher and difficult to exercise for the students.

This study focused on the efficiency of integrating games in teaching Mathematics. This is how a student can fight their anxiety on Mathematics by enjoying their lessons through the help of games strategy.

III.METHODOLOGY

This study used the descriptive quasi experimental design method. A descriptive quasi experimental design aims to describe the status of a variable or phenomenon of the study through experiments conducted both in the laboratory and in real life situations. The research does not begin with a hypothesis, but typically develops one after the data is collected. And the data collection is mostly observational in nature. And quasi- experimental design was used to establish a cause-effect relationship between two or more variables. The researchers do not assign groups and do not manipulate the independent variable. Control groups are identified and exposed to the variable. Results are compared with results from groups not exposed to the variable. Through this descriptive quasi experimental design method of research, variables (such as effectiveness of Integrating Games in Teaching Mathematics among Grade 2 pupils in Tagaytay City Central Elementary School S.Y. 2018-2019) to support the study and relationship were recognized and illustrated. (Campbell, D. T., & Stanley, J. C. (2015)).

The respondents of the study were the Grade 2 students from Tagaytay City Central Elementary School, during the school year 2018-2019.

Table 1

Respondents of the study

Group	Grade level /Section	Male	Female	Total
Experimental	Matiyaga	21	14	35
Control	Mapagbigay	22	13	35
	Total	43	27	70

Problem no. 1. What are the pre-test scores of the respondents in Mathematics using traditional learning?

Table 2

Pre-test Scores of the respondents in Mathematics using traditional learning

Verbal Interpretation	Frequency	Percentage
1-6 (Beginning)	2	5.71 %
7-12 (Developing)	27	77.14 %
13-18 (Approaching)	4	11.43 %
19-24 (Proficiency)	2	5.71 %
25-30 (Advanced)	0	0
Average Score	35	100 %

Table 2 shows the scores of the respondents in pre-test using traditional learning. 27 or 77.14% of the respondents' scores were in the bracket of 7-12 with a verbal interpretation of Developing; 4 or 11.43% of the respondents' scores were in the bracket of 13-18 with a verbal interpretation of Approaching; 2 or 5.71% of the respondents' scores were in the bracket of 1-6 and 19-24 respectively. The data showed that most of the respondents' scores in pre-test were in the bracket of 7-12 with a verbal interpretation of Developing.

This may mean that the respondents had prior learning of the topic. According to Vygotsky, 1978, Socio cultural frameworks regard learning as a social process, and hold that culture provides tools and resources to mediate thinking.

Problem no. 2. What are the scores of the respondents in pre-test using games integration?

Table 3
Pre-test Scores of the respondents in Mathematics using Games Integration

Verbal Interpretation	Frequency	Percentage
1-6 (Beginning)	0	0
7-12 (Developing)	21	60%
13-18 (Approaching)	13	37.14%
19-24 (Proficiency)	1	2.86%
25-30 (Advanced)	0	0
Average Score	35	100 %

Table 3 shows the scores of the respondents in pre-test using integrating games. 21 or 60% of the respondents' scores were in the bracket of 7-12 with a verbal interpretation of Developing; 13 or 37.14% of the respondents' scores were in the bracket of 13-18 with a verbal interpretation of Approaching; 1 or 2.86 % of the respondents' scores were in the bracket of 19-24 with the verbal interpretation of proficiency and no one among the respondents' score is in the bracket of 1-6 and 25-30 respectively. The data showed that most of the respondents' scores in pre-test were in the bracket of 7-12 with a verbal interpretation of Developing.

This may mean that the respondents had prior learning of the topic. According to Sadler and Graham (2007) knowledge about the topic, intended audience, genre, task, and linguistic elements. It was this knowledge about the task that helped identify which students were going to be successful and which ones were not going to be successful when approaching a new learning task.

Problem no. 3. What is the score of the respondents in post-test using traditional learning?

Table 4
Post-test Scores of the respondents in Mathematics using traditional learning

Verbal Interpretation	Frequency	Percentage
1-6 (Beginning)	0	0%
7-12 (Developing)	8	22.86%

13-18 (Approaching)	20	57.14%
19-24 (Proficiency)	7	20%
25-30 (Advanced)	0	0
Average Score	35	100 %

Table 4 shows the scores of the respondents in post-test using traditional learning. 20 or 57.14% of the respondents' scores were in the bracket of 13-18 with a verbal interpretation of approaching; 8 or 22.86 % of the respondents' scores were in the bracket of 7-12 with a verbal interpretation of developing; 7 or 20 % of the respondents' scores were in the bracket of 19-24 and 0 or 0% is in the bracket of 1-6 and 25-30 respectively. The data showed that most of the respondents' scores in post-test were in the bracket of 13-18 with a verbal interpretation of approaching proficiency.

This may mean that the respondents had prior learning of the topic. According to Joyce et al., 2011. Direct instruction is a teaching model that consists of the teacher's explanation of the concept or skill of the students followed by asking the students to test their understanding by doing practice under the guidance of teachers (practice controlled) and encouraging them to continue to practice under the guidance of a teacher.

Problem no. 4. What are the post-test scores of the respondents in integrating games in Mathematics?

Table 5
Post -test Scores of the respondents in integrating games

Verbal Interpretation	Frequency	Percentage
1-6 (Beginning)	0	0%

7-12 (Developing)	0	0%
7-12 (Developing)	13	37.14%
19-24 (Proficiency)	21	60
25-30 (Advanced)	1	2.86
Average Score	35	100%

Table 5 Shows the scores of the respondents in post-test using integrating games 21 or 60% of the respondents' scores were in the bracket of 19-24 with a verbal interpretation of proficiency; 13 or 37.14 % of the respondents' scores were in the bracket of 13-18 with a verbal interpretation of approaching; 1 or 2.86 % of the respondents' scores were in the bracket of 25-30 and 0 or 0% is in the bracket of 1-6 and 7-12 respectively. The data showed that most of the respondents' scores in post-test were in the bracket of 19-24 with a verbal interpretation of proficiency.

This may mean that the respondents had prior learning of the topic. According to Chang Lee Ng and Moon (2003) noted that students found simulation. Helpful in developing team building, decision making, planning and managerial skills. In the other study, Scalzo and Turner (2014) found that the use of experiential learning methods with managerial skills resulted in provision of practical knowledge for the students that they later required in their practical lives.

Problem no. 5. Is there a significant difference between the respondent pre-test score in traditional learning and integrating games in teaching Mathematics?

Table 6
Significant difference between the respondent pre-test score in traditional learning and integrating games in teaching Mathematics

Indicator (Traditional)	Mean Score	Critical Value	Z-test	Decision
Pre-test score	10.60	1.96	-1.85	ACCEPT NULL

(Traditional)	11.97			
Pre-Test (Integrating Games)				

Table 6 shows the difference between the respondents' scores in Mathematics. The data showed that the computed value of z-score is -1.85 with the number of observations of 35 is greater than the z critical value of ± 1.96 at 95% confidence level, the null hypothesis was accepted. There was no significant difference between the respondents' scores in mathematics.

Foster, Nathaniel L.; Was, Christopher A.; Dunlosky, John; Isaacson, Randall M. Metacognition and Learning, v12 n1 p1-19 Gregorian calendar month 2017 students usually re confident once they predict their performance on room examinations, and their accuracy usually doesn't improve across exams. One contributor to cocksureness could also be that students failed to have enough expertise, and another is that students might under-use their information of previous communicating performance to predict performance on their approaching exams. To gauge the previous, we tend to examine students' prediction accuracy across thirteen exams in associate degree introductory course on academic scientific discipline. For the latter, we have a tendency to compute measures that estimate the extent to that students' "use" the previous communicating score once predicting performance and whether or not students "should" use the prior exam scores.

Problem no. 6. Is there a significant difference between the respondent post-test score in traditional learning and integrating games in teaching Mathematics?

Table 7
Significant difference between the respondent post-test score in traditional learning and integrating games in teaching Mathematics

Indicator (Traditional)	Mean Score	Critical Value	Z-test	Decision
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Post-test score (Traditional)	15.48	1.96	-5.41	REJECT NULL
Post-Test (Integrating Games)	19.14			

Table 7 shows the difference between the respondent score in Mathematics. The data showed that the computed value of z-score is -5.41 with the number of observations of 35 being greater than the z critical value of ± 1.96 at 95% confidence level; the null hypothesis was rejected. There was a significant difference between the respondents' scores in mathematics.

Students represent associate degree acknowledged potential for instruction wherever users will observe information and skills, because of they're ready to powerfully inspire learners of all ages and backgrounds with their immersive game-like environments. Whereas Students potential for teacher education has been noted (De Gloria, Bellotti, & Berta, 2014).

7. Problem no.7 Based on the result of the study, what teaching exemplar can be proposed?

Based on the findings of the study, integrating games in Motivation and Application in teaching Mathematics was found to be effective.

IV. DISCUSSION

The study aimed to determine the effectiveness of Integrating Games in Teaching Mathematics among Grade 2 pupils in Tagaytay City Central Elementary School SY 2018-2019.

Specifically, this study sought answers to the following questions:

1. What is the score of the control group in pre-test?
2. What is the score of the experimental group in pre-test?
3. What is the score of the control group in post-test?
4. What is the score of the experimental group in post-test?
5. Is there a significant difference between the score of the control group and experimental group in pre-test?
6. Is there a significant difference between the score of the control group and experimental group in post-test?
7. Based on the result of the study, what teaching example can be proposed?

To determine the effectiveness of integrating games in teaching Mathematics, we gave pre-test and post-test to gather data among Grade 2 pupils in Tagaytay City, Central Elementary School to know how integration of games in teaching Mathematics was effective. The researchers secured permission from the principal of the school.

In the analysis of the data gathered, the statistical tests used were frequency, percentage, mean and z-test.

1. The data showed that most of the respondents' scores using Traditional Learning in pre-test were in the bracket of 7-12 with a verbal interpretation of Developing.
2. The data showed that most of the respondents' scores using Integration of Games in pre-test were in the bracket of 7-12 with a verbal interpretation of Developing.
3. The data showed that most of the respondents' scores using Traditional Learning in post-test were in the bracket of 13-18 with a verbal interpretation of approaching proficiency.

4. The data showed that most of the respondents' scores using Integration of Games in post-test were in the bracket of 19-24 with a verbal interpretation of proficiency.
5. There was no significant difference between the score in the Pretest of the control group and the experimental group.
6. There was a significant difference between the score in the Post-test of the control group and experimental group.

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**E-learning, Mental Well-being, and Academic Performance of Students
Amidst COVID-19 Pandemic**

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I. ABSTRACT

The Commission on Higher Education (CHED) advised institutions of higher education in the Philippines to implement distance learning education methods for its classes, such as the use of educational technology, to maximize the academic term despite the suspension in line with the public health emergency measures issued. The outbreak of COVID-19 results in the digital revolution in the higher education system through online lectures, teleconferencing, digital open books, online examination, and interaction at virtual environments (Strielkowski, 2020). Students with different goals, motivations, and preferences can exhibit different behaviors when accessing this material. Thus, these behavioral differences can further affect their learning performance. This study sought to determine the extent of implementation of E-learning, the state of the students' mental wellbeing and academic performance of students during the pandemic. Descriptive-correlation research design was used in this study to assess feedback from the respondents in data gathered through Google Form. The 100 respondents were drawn from the third-year students enrolled in different programs of Olivarez College-Tagaytay. The researchers utilized a self-report survey questionnaire to obtain the information needed for the study. Mean and Pearson's R were utilized to analyze the data. The study revealed that there was a significant relationship between the extent of implementation of e-learning and mental well-being of the students amidst COVID-19 Pandemic. However, there was no significant relationship between the extent of implementation of e-learning and academic performance of the students, same with

the mental well-being and academic performance of the students amidst COVID-19 Pandemic at Olivarez College-Tagaytay. Furthermore, results showed that there was a great extent of implementation of e-learning among students at Olivarez College-Tagaytay. The result proposed that the school should not only focus on the continuous e-learning but also consider and give attention to the mental well-being of their students and plan a strategy that could adequately meet every student's needs.

Keywords: *COVID-19, e-learning, mental well-being, academic performance*

II. INTRODUCTION

Education plays a vital role in acquiring essential knowledge and skills. With the continued rise of COVID-19 cases in the country up to date, a possible alternative to continue education while preventing potential infection spread is through online learning. In line with the public health emergency measures issued, the Commission on Higher Education (CHED) advised institutions of higher education in the Philippines to implement distance learning education methods for its classes, such as the use of educational technology, to maximize the academic term despite the suspensions.

The shift to online virtual teaching modality leads to an unprecedented impact on education. The outbreak of COVID-19 results in the digital revolution in the higher education system through online lectures, teleconferencing, digital open books, online examination, and interaction at virtual environments (Strielkowski, 2020). Students with different goals,

motivations, and preferences can exhibit different behaviors when accessing this material. These behavioral differences can further affect their learning performance.

Furthermore, according to Edutopia's article Covid-19's Impact on Students' Academic and Mental Well-Being, school closures and social isolation have impacted all students, especially those who are living in poverty. Terada (2020) describes how a student mental health crisis is becoming more pervasive as students are unable to access the resources at schools that they had depended on. In this light, mental health and academic achievement are linked, research shows. As mentioned by Terada (2020), Chronic stress changes the chemical and physical structure of the brain, impairing cognitive skills like attention, concentration, memory, and creativity of students.

As the researchers, more than the access to technological devices and the internet, it is significant to investigate the journey of learners who were prematurely immersed in a distant learning context. This motivated the researchers to conduct the study to find out how e-learning would affect their academic performance and mental wellbeing.

The purpose of the study was to develop a greater understanding of the extent of implementation of E-learning, to determine the state of the students' mental wellbeing, the level of students' academic performance during the pandemic, and to find out if there was a significant relationship between and among the variables. Consequently, the findings of the study would be towards the development of concrete action plans that center around the implementation of e-learning and students' mental wellbeing that could adequately meet every student's needs of Olivarez College-Tagaytay.

III. METHODS

Descriptive-Correlation research design was utilized in this study to obtain information concerning the extent of implementation of e-learning, the level of mental wellbeing, and academic performance of students amidst COVID-19 pandemic. It would see if dependent variables relating to E-learning, Mental Well-being, and Academic performance of students amidst COVID-19 have significant relationships.

The respondents were taken from the third-year students of Olivarez College Tagaytay during the period of the study, second semester of S.Y. 2020-2021. Non-Probability Sampling through Total Enumeration Sampling in the selection of the respondents was employed to select the sample. Out of 163 students, 63 students did not answer the survey questionnaires; hence, it left the researchers with 100 responses.

The researchers utilized a self-report survey questionnaire through Google Form to obtain the information needed for the study. It contained indicators to determine the extent of implementation of e-learning, mental wellbeing, and academic performance of students amidst COVID-19 Pandemic on the following areas: Gadgets and Application, Acquiring Knowledge, Internet Connection, Self-Management Strategies, Self-Care Practices, and General Weighted Average of the students. For validation, the questionnaires were submitted to researchers' professors and panelists to ensure its validity.

A permission to conduct the research study was obtained from authorities. The researchers fully oriented clear instructions to the respondents of this study to ensure clarifications and all needed information will be retrieved immediately. The questions were formulated in simple language for clarity and ease of understanding. After answering the survey tool, the information was gathered and sorted out according to its function in the study.

Appropriate statistical treatment was administered, presentation and interpretation of data were done thereafter.

The data and information that were gathered from the questionnaire were tabulated and statistically treated based on the following statistical treatments: Mean was utilized to determine the extent of implementation of e-learning, the state of the students' mental wellbeing, and the level of the students' academic performance as rated by the respondents. Finally, to find out if there was a significant relationship between and among the variables, Pearson Correlation (Pearson's r) was used.

For the purpose of arriving at a definite interpretation of the findings, the researchers set hypothetical scores and mean ranges for the scale. The following hypothetical mean and score ranges were assigned for the scale indicating the extent of implementation of e-learning:

Score Ranges	Verbal Interpretation
3.26 – 4.00	Very Great Extent
2.26 – 3.25	Great Extent
1.76 – 2.25	Least Extent
1.00 - 1.75	Very Least Extent

The following hypothetical mean and score ranges were assigned for the scale indicating the state of the students' mental wellbeing:

Score Ranges	Verbal Interpretation
3.26 – 4.00	Highly Manifested
2.26 – 3.25	Manifested
1.76 - 2.25	Least Manifested
1.00 - 1.75	Not Manifested

Olivarez College-Tagaytay Grade Equivalent:

Grade Point Equivalence	Description
1.00 - 98-100	Exceptional
1.25 - 95-97	Excellent
1.50 – 92-94	Highly Superior
1.75 – 89-91	Superior
2.00 – 86-88	Very Good
2.25 – 83-85	Good
2.50 – 80-82	Average
2.75 – 77-79	Passed
3.00 – 75-76	Passed
4.00 – 70-74	Failed
5.00 – lower than 70	Failed

IV. RESULTS

The Extent of Implementation of E-learning amidst COVID-19 Pandemic

Table 1
The Extent of Implementation of E-learning amidst COVID-19 Pandemic

A. Gadgets and application	Mean Score	Verbal Interpretation
A1. I have sufficient equipment and facilities (computer/laptop/Internet/software) to participate in online lectures.	3.16	Great Extent
A2. I am having a smooth use of my gadget while having our synchronous and asynchronous class.	2.10	Least Extent
A3. I have enough skills in the applications that we are using during synchronous and asynchronous class.	3.09	Great Extent
A4. I have enough phone/laptop storage for online activities.	2.88	Great Extent
A5. I use tools to create my notes and learning materials.	3.15	Great Extent
Extent of implementation of eLearning as to gadgets and application	2.88	Great Extent

B. Acquiring knowledge		
B1. I enjoyed learning in the online class.	2.64	Great Extent
B2. I found that online learning is more effective than traditional classroom learning.	1.93	Least Extent
B3. I can concentrate on e-learning because of no distraction from my family members.	1.85	Least Extent
B4. I can focus on e-learning alone.	2.81	Great Extent
B5. I find an online class as an excellent tool for me to easily understand the lesson.	2.28	Great Extent
Extent of implementation of eLearning as to acquiring knowledge	2.30	Great Extent
C. Internet connection		
C1. I can access the internet easily as needed for my class.	2.59	Great Extent
C2. I have not struggled connecting whenever having a synchronous class.	2.26	Great Extent
C3. I have a strong internet connection	2.30	Great Extent
C4. I use the internet for information sources.	3.29	Very Great Extent
Extent of implementation of eLearning as to Internet Connection	2.61	Great Extent
Overall extent of implementation of E-learning amidst COVID-19 Pandemic	2.60	Great Extent

Legend:

Scale	Range	Verbal Interpretation
4	3.26 – 4.00	Very Great Extent
3	2.26 – 3.25	Great Extent
2	1.76 – 2.25	Least Extent
1	1.00 - 1.75	Very Least Extent

Table 1 presents the extent of implementation of e-learning amidst COVID-19 pandemic. Data showed that the overall extent of implementation of e-learning amidst COVID-19 pandemic got the rating of 2.60 verbally interpreted as great extent. Among the three categories under the implementation of e-learning amidst COVID-19 pandemic, the used of gadgets and application got the highest ratings of 2.88 verbally interpreted as great extent, followed by the internet connection with the ratings of 2.61 verbally interpreted as great extent and acquiring knowledge with the rating of 2.30 verbally interpreted as great extent. Among the items in the categories, it was the use of the internet for information sources that got the highest ratings of 3.29 verbally interpreted as very great extent.

While the statement under gadgets and application “I am having a smooth use of my gadget while having our synchronous and asynchronous class” got the lowest rating of 2.10 verbally interpreted as least extent, followed by the statement under acquiring knowledge “I can concentrate on e-learning because of no distraction from my family members” got the lowest rating of 1.85 verbally interpreted as least extent, then the statement under internet connection “I have not struggled connecting whenever having a synchronous class” got the lowest rating of 2.26, verbally interpreted as great extent. This may imply that the presence of a favorable learning environment to study is important for students to have better access to E-learning.

Previous research indicates, with the ease of internet access, students can quickly get information from online sites (Pibriana & Ricoida, 2017). Access to the Internet, with sufficient bandwidth, is essential for the development of an information society. Lack of broadband connectivity is preventing widespread use of the Internet in education. Moreover, continuing education and lifelong learning for adults, including adult literacy, have a crucial part to play in Internet-enabled education (Souter, 2017).

Students Mental Wellbeing amidst COVID-19 Pandemic

Table 2
Students Mental Wellbeing amidst COVID-19 Pandemic

D. Students self-management strategies	Mean Score	Verbal Interpretation
D1. I always plan and produce a daily schedule.	3.13	Manifested
D2. I always keep a weekly schedule.	3.17	Manifested
D3. I always practice essential time management.	3.18	Manifested
D4. I always set personal and collective goals.	3.33	Highly Manifested
D5. I always demonstrate perseverance and resilience to overcome obstacles.	3.29	Highly Manifested
D6. I often do my studies in advance.	2.04	Least Manifested
D7. I often felt that I could cope with all the things I needed to do.	1.96	Least Manifested
D8. I am optimistic about my studies even during transition to online learning.	1.85	Least Manifested
Students Mental Wellbeing amidst COVID-19 Pandemic as to Students Self-Management Strategies	2.74	Manifested
E. Students self-care practices		
E1. I always create space to recharge and decompress	3.20	Manifested
E2. I always prioritize healthy choices (e.g., good nutrition and regular physical activity)	3.14	Manifested
E3. I always get regular sleep routine	3.14	Manifested
E4. I always practice acts of gratitude	3.38	Highly Manifested
E5. I always surround myself with positive people	3.38	Highly Manifested
E6. I am affirmative in concentrating in my studies	1.81	Least Manifested

E7. I am stress-free with my studies even during COVID-19 Pandemic	1.81	Least Manifested
Students Mental Wellbeing amidst COVID-19 Pandemic as to Students Self-care practices	2.84	Manifested
Overall state of students' mental wellbeing amidst COVID-19 Pandemic	2.73	Manifested

Legend:

Scale	Range	Verbal Interpretation
4	3.26 – 4.00	Highly Manifested
3	2.26 – 3.25	Manifested
2	1.76 - 2.25	Least Manifested
1	1.00 - 1.75	Not Manifested

Table 2 presents the extent of implementation of students' mental well-being amidst COVID-19 pandemic. Data projected that the level of students' mental well-being amidst COVID-19 pandemic got a rating of 2.73, verbally interpreted as “manifested”. Between the categories, the one under the student self-care practices got the highest rating of 2.84, verbally interpreted as “manifested”, followed by the student’s self-management strategies with the rating of 2.74, verbally interpreted as manifested. Among the items in the categories, the statements “I always practice acts of gratitude” and “I always surround myself with positive people” got the highest rating of 3.38, verbally interpreted as “highly manifested”.

While the statements under students’ self-management strategies “I am optimistic about my studies even during transition to online learning” got the lowest rating of 1.85, verbally interpreted as “least manifested”, followed by the statements under students’ self-care practices “I am affirmative in concentrating in my studies” and “I am stress-free with my studies even

during COVID-19 Pandemic” rated the lowest of 1.81, verbally interpreted as “least manifested”. This may imply that the transition to online learning makes the students worried about their studies. Stress is inevitable at this time of the pandemic; thus, they need support from other people who can help them manage and overcome stress.

In a recent study, it was stated that high levels of stress and anxiety are natural responses towards any sort of unnatural situation (Royand Tripathy, 2020). Strategies for managing students to control their feelings effectively and suitably during general well-being crises and stay away from misfortunes brought about by emergency occasions have become a pressing issue for colleges and universities (Cao et al., 2020).

Students Level of Academic Performance amidst COVID-19 Pandemic

Table 3
Students Level of Academic Performance amidst COVID-19 Pandemic

Grade Point Equivalence	Equivalence	Description	Face to Face	Online
1.00	98-100	Exceptional	2	2
1.25	95-97	Excellent	7	4
1.50	92-94	Highly Superior	33	35
1.75	89-91	Superior	31	32
2.00	86-88	Very Good	20	16
2.25	83-85	Good	4	7
2.50	80-82	Average	3	4
2.75	77-79	Passed	0	0
3.00	75-76	Passed	0	0
4.00	70-74	Failed	0	0

5.00	Lower than 70 failed	Failed	0	0
Mean Score of Students Level of Academic Performance			1.71	1.73

Table 3 shows the students' level of academic performance during face-to-face classroom learning and e-learning. The study revealed that the level of students' academic performance during face- to-face classroom learning obtained an average mean of 1.71. It observed that 33 students had a "Highly Superior academic performance while 31 students had a "Superior" performance, 20 students had a "Very Good" performance, and 7 students had an "Excellent" performance. Whereas only 4 students had a "Good" performance, 3 students had an "Average" performance and only 2 students had an "Exceptional" in academic performance.

On the other hand, the students' level of academic performance during e-learning obtained an average mean of 1.73. It can be observed that 35 students had a "Highly Superior" and "Superior" academic performance while 15 students had a "Very Good" performance, and 6 students had a "Good". Whereas only 4 students had an "Excellent" performance, 3 students had an "Average" performance, and 2 students had an "Exceptional" in academic performance.

This is consistent with the findings by Kemp and Grieve (2014) when he found that both online and F2F learning for students led to similar academic performance. Ali (2013) exemplifies that the learning outcomes and educational performance of students are strongly affected by the type of educational institution where they received their education. In a previous study S.P Singh (2016), students' academic performance can be improved by providing them with appropriate learning facilities and management taking steps to organize the class, because it affects the educational institution where the students receive education. The peer influence also has a big

impact on the academic performance of students, it can be either negative or positive. As indicated by Caisip (2012) in his article about the academic performance in the Division of Cavite discussed that the study habit is the tendency of a student to learn in a systematic and efficient way. The keys to better learning and better academic performance in schools are good teachers, good study environment, course of study, parents' cooperation, high quality books and the most important study habits.

Correlation between the Extent of Implementation of E-Learning and Mental Well-Being of Students

Table 4
Correlation between the Extent of Implementation of E-Learning and Mental Well-Being of Students

		Mental Well-Being	Decision
Extent of implementation of eLearning	Pearson Correlation	.460**	
	Sig. (2-tailed)	.000	Reject Null
	N	100	

Legend: P-value < 0.05 reject null

Table 4 is the relationship between the extent of implementation of e-learning and mental well-being of students amidst COVID-19 pandemic. The data showed that the computed P-value 0.000 which was less than 0.05 the null hypothesis was rejected, therefore there was a significant relationship between the extent of implementation of e-learning and mental well-being of students amidst COVID-19 pandemic. Since the Pearson correlation was positive .460 this means that there was a moderate positive correlation. This means that as the extent of implementation of e-Learning goes higher, the mental well-being also goes higher and vice versa.

Many studies agree that students doing well often have a good level of independent learning and high levels of communication skills which can be deployed. Those that thrive have high levels of intrinsic motivation and well-structured local support through families. They hold well-structured and resourced care plans supported by external agencies such as counseling or mental health workers (Rimmer, n.d.). In addition, colleges have moved support services into the digital space with virtual student council meetings, peer-to-peer well-being support, increasing communication posts on social media, online anxiety groups and wellbeing checks and ‘virtual coffees.’”

Studies have shown (Suteja et al.,2011) that e-learning will allow students to play a more active role in their learning because it focuses on personalization, which includes the ability to adapt to the level of learners' skills and collecting knowledge resources as mutual support. Also, students’ adaptive attitude will provide space and flexibility in regulating themselves, which might lead to success and achievement in learning. Clinging to purpose, with small goals as well as large ones, may make the experience easier (Bintliff, 2020).

Correlation between the Extent of Implementation of E-learning and Academic Performance of Students

Table 5

Correlation between the Extent of Implementation of E-learning and Academic Performance of Students

		Academic Performance	Decision
Extent of implementation of eLearning	Pearson Correlation	.004	
	Sig. (2-tailed)	.969	Accept Null
	N	100	

Legend: P-value < 0.05 reject null

Table 5 is the relationship between the extent of implementation of e-learning and academic performance of students amidst COVID-19 pandemic. The data showed that the computed P-value 0.969 was greater than 0.05 which means that the null hypothesis was accepted, there was no significant relationship between the extent of implementation of e-learning and academic performance of students amidst COVID-19 pandemic. This may imply that regardless of the extent of implementation of e-learning, it has no correlation with academic performance.

This suggests that students who engage more with learning do so in a holistic manner, with raised participation across a variety of learning activities.

Correlation between the Mental Well-Being and Academic Performance of Students amidst COVID-19 Pandemic

Table 6
Correlation between the Mental Well-Being and Academic Performance of Students amidst COVID-19 Pandemic

		Mental well-being	Decision
Academic Performance	Pearson Correlation	.012	
	Sig. (2-tailed)	.905	Accept Null
	N	100	

Legend: P-value < 0.05 reject null

Table 6 is the relationship between the academic performance and mental well-being of students amidst COVID-19 pandemic. The data showed that the computed P-value 0.905 which was greater than 0.05 means that the null hypothesis was accepted, there was no significant

relationship between the academic performance and the mental well-being of students amidst COVID-19 pandemic. This may imply that regardless of the academic performance, the mental well-being of the students has nothing to do with it.

The findings align with the hypothesis forwarded by Petegem, Creemers, Aelterman & Rosseel (2010), illustrated that there was no significant relationship between wellbeing and academic achievement measured at the same point of time. As indicated by (Geelong Grammar School, 2016), students are motivated to use their own strengths to achieve positive outcomes for themselves and for others.

V. DISCUSSION

The purpose of the current study was to develop a greater understanding of the extent of implementation of e-learning, the state of the students' mental well-being and academic performance of students during the COVID-19 pandemic.

This study has shown that the extent of implementation of E-learning due to COVID-19 pandemic as to Gadgets and Application, Acquiring Knowledge, and Internet Connection was greatly enforced to the 3rd year college students at Olivarez College Tagaytay to access E-learning. Moreover, the state of students' mental well-being as to self-management strategies and self-care practices was manifested and was done frequently by students. In addition, a greater part of the respondents was academically good as the level of their academic performance was evaluated. The study of Kemp and Grieve (2014) also confirmed that both online and face to face learning for students led to similar academic performance. The findings suggested that there was a significant relationship between the extent of implementation of e-learning and mental well-being of students amidst COVID-19 pandemic. Furthermore, it was found out in the study

that there was no significant relationship between the implementation of e-learning and mental well-being of students, even the mental well-being and academic performance of students.

The results of this study indicated that the presence of a good learning environment is important for students to have better access to E-learning as well as strengthen the categories for each key result area with the lowest ratings. The findings suggested that there was a significant relationship between the extent of implementation of e-learning and the mental well-being of students amidst COVID-19 pandemic. This may imply that students can manage the stress and anxiety that they are experiencing at this time of pandemic. However, they still need support from school to consistently monitor the students' mental state and have an early intervention when something happens. The mental well-being of the student could be a top priority.

The study contributes to our understanding of the challenges related to the students and their responses to the implementation of e-learning, the students' mental well-being, and the evaluation of students' academic performance amidst the COVID-19 pandemic. The findings of the study have given us a clearer picture about the demands under COVID-19 pandemic which serves as a basis for the schools' administrators' development of uniform academic plans, strategies, and support from the institution that could adequately meet every student's needs. Research findings of Mishra, et. al (2020) emphasized that in the face of COVID-19, the shared vision of the education system realized that during the pandemic period, teachers and students are motivated to adapt online teaching-learning platforms in fulfilling the current educational needs.

At this juncture, limitations of this study need to be presented. First, the findings of the study were purely from the responses of the 100 respondents in a survey questionnaire. Thus, a

more comprehensive study can be undertaken utilizing other instruments and larger sample size for the data observation. Secondly, to fully give more in-depth study related to e-learning, mental well-being, and academic performance of students, researchers recommend to the future researchers to expand more the scope of the study.

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Lived Experiences of Teachers Implementing Multi-Grade Level Instructions

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I. ABSTRACT

This study aimed to explore the lived experiences of Multi-Grade Teachers in the Municipality of General Emilio Aguinaldo regarding how they handled and faced the difficulties. Qualitative phenomenological research design was used in the study to evaluate subjective life experiences and to understand a phenomenon from individuals' perspective. Data were gathered through face-to-face interviews using semi-structured guide questions. The researchers utilized the thematic analysis of Braun and Clarke (2006) by using the six phases.

Findings revealed that teachers implementing multi-grade level of instruction experienced continuous professional development through seminars and training, there were available instructional materials provided and there were a variety of teaching methodologies in handling multi-grade level instruction. It also revealed that teachers implementing multi-grade level instruction faced numerous challenges in handling multi-grade level instruction in teaching and learning process, classroom management, reports and ancillary works, emotional health and stability, social life interaction and soft skills attitudes in handling multi-grade level instruction. Furthermore, study showed that even though teachers implementing multi-grade level instruction faced numerous challenges, teaching is still their profession of choice, teaching is their passion, and vocation. Multi-grade teachers' dedication in teaching has been fulfilling and teaching in multi-grade levels is valuable to them.

II. INTRODUCTION

A classroom that has two or more grade levels of children is referred to as a multi-grade classroom. Multi-grade classes are also called multi-age groups, it is a term used commonly to describe a mixed-age group. Multi-age means two or more grade levels that have been intentionally blended to improve learning. Multi-age grouping may be implemented for institutional or pedagogical reasons by the administration of the school, but the outcome is that students are able to interact across age groups and have long-term relationships with other students and teachers (Binondo, 2014). Children with different skills and abilities, developmental levels, and needs are mixed in a class under the guidance of one teacher.

The Philippine Department of Education says that more than one million students are enrolled in multi-grade classes, where two or more grade levels are taught by a single teacher. In the Philippines, public schools' systems with two grade levels inside a single classroom taught by the same teacher are called multi-grade classes. Education secretary Armin Luistro explains that "This is part of our thrust to democratize access to education and make the learning experience inclusive to as many sectors. In effect, we are bringing more students to school," (2012)

Multi-grade classes exist due to the small number of students for each grade level, insufficient numbers of teachers, the distance from the community to the nearest school, and the inadequacy of funds and classrooms. Most of the students attending multi-grade classes belong to isolated and financially challenged communities, are indigenous peoples, and reside in far-flung mountains and islands where schools are far apart from each other. There are several challenges for multi-grade teachers cited by Mascarenas, (2014). Multi-grade classes require

more preparation of curriculum learning materials. It requires more careful study of learner's developmental characteristics across the age levels involved in the class, approaches and strategies that are effective and variable within a multi-grade class. More investment in organization of the classroom as a learning environment. Share responsibility for facilitating learning with pupils, parents, other community members. And more opportunities for activity-centered, experience-based approaches rather than whole group, lecture, drill, rote methods of teaching. There are many challenges for teaching multi-grade classrooms such as preparation of instruction, classroom organization, time management and developmental differences of students.

This study sought to explore the lived experiences of teachers implementing multi-grade level instructions. The study also aims to explore the challenges of the teachers in a multi-grade class. The researchers observed that the majority of the multi-grade teachers are having difficulty in handling a multi-grade class.

III. METHODOLOGY

The preceding page shows how the researchers used thematic analysis to identify themes such as patterns in the data that are important or interesting and used these themes to address the research issue. The full study involved four teachers in the municipality of General Emilio Aguinaldo participating schools such as Kaymiskas Elementary School, Dao Elementary School, Lumipa Elementary School and Gen. Emilio Aguinaldo Central Elementary School. These were then transcribed verbatim. The researchers explored the lived experiences of teachers implementing multi-grade level instructions.

The researchers utilized the thematic analysis of Braun and Clarke (2006) by using the six phases.

1. Familiarization of data that is common to all forms of qualitative analysis. The researchers involved themselves and got familiarized with their data. The researchers read and re-read the data and listened to the audio recorded data.
2. The coding phase is also a common element of many approaches to qualitative analysis. It is an analytic process that captures both semantic and conceptual reading of the data. The researchers encoded every data item that was relevant and valid.
3. Researching for themes to serve as meaningful patterns in the data relevant to research questions. Themes are not hidden in the data. These can be discovered by the researchers who construct them. The researchers ended this phase by assembling all the coded data valid to each theme.
4. When reviewing themes, the researchers should reflect whether the themes are convincing and tell a story about the data. They began to define each individual theme and the relationship between the themes.
5. Defining and naming the themes wherein the researchers are required to conduct and write a detailed analysis of the theme. They identified the essence of each theme and constructed an informative name of each theme.
6. Interpretation and reporting process involves putting together the data and contextualizing it in relation to existing literature.

Theme 1: Training is Crucial in Handling Multi-grade

This theme pertains to the continuous professional development of teachers; they were oriented through seminars and training which is very important in handling multi-grade level instructions.

Participant 1: *“Pinaattend na ako ng seminar ng supervisor kasi ako nga daw ang magmu-multigrade”*

Participant 2: *“bago nila ako hiramín meroong nagconduct ng seminar”*

Participant 4: *“noon kami natututo ng ganun pala ang lesson planning ganoon pala ang technique para hindi sobrang hirap.”*

The participants verbalized that they were sent to seminars before they handled multi-grade class. In that seminar, they learned many things about lesson planning, techniques, and other important things in handling multi-grade. Seminar is the most important foundation of being a multi-grade teacher.

Al-Sheeb, Abdulwahed, et.al. (2018), mentioned that this first-year seminar proved effective in increasing positive perceptions toward higher education quality and the awareness of support available. Positive student attitudes toward the university in the first year can lay the foundation for future persistence and success; therefore, it is important for higher education to continue to explore high impact practices in order to make a real difference to students' lives.

Theme 2: Challenges in Handling Multi-grade Classes

This theme pertains to the difficulties faced by the teachers in implementing multi-grade level instruction. This includes pedagogy of multi-grade classes, reports and ancillary works, life work balance and low enrolment.

Subtheme 2.1 Pedagogy of Multi-grade Classes

This sub theme pertains to the teaching strategies and methodologies done by the teachers implementing multi-grade level instructions.

Participant 1: *“dapat creative dapat marunong kang umano sa mga bata kasi ang mga bata eh...iba’t-iba ang skills kaya iba’t-iba din ang gusto”*

Participant 2: *“syempre hindi mawawala jan ang groupings, groupings dapat meron niyan”*

Participant 4: *“naku napakaraming strategy doon ... ina adopt mo yung sinasabi ng DEPED, may mga sinasabi sa amin na mga strategy kung kayo ay may alam na strategy ninyo, gawin niyo rin i-apply niyo rin kung saan matututo ang mga bata”.*

The participants suggested being creative enough to teach and never forget the group activity wherein the students can collaborate with one another. It was also emphasized that the teacher can also share his/her own strategy in teaching multi-grade level of instructions.

According to Crous, Annelien (2012), from Cape Peninsula University of Technology. Education should be seen as a socializing process and learning in groups as a primary principle of learning. Through interaction, learners must improve their social, academic and literacy skills.

Teaching methods in multi-grade classes depend on teacher's capability, subject, lesson's objectives and class position so that in the study entitled "Investigating teaching methods in multi-grade classes in Austria and Finland", Beihammer and Hascher (2015) postulated that teaching methods were widely different in multi-grade classes and were related to the teacher's personality, teaching subjects and situations. Hence, it is not possible to identify the most common method.

Subtheme 2.2 Reports and Ancillary Works

This subtheme pertains to the additional workloads that teachers are obliged to do so. This includes reports regarding the two classes they handle, and the ancillary works assigned to them by the teacher-in-charged.

Participant 1: *"mahirap kasi sobrang dami ng report bukod pa yung mga ancillary na binibigay sa amin, parang mahirap talaga."*

Participant 4: *"Masasabi kong mahirap pagka yung may mga sabay- sabay na report."*

Participant 5: *"magmumultigrade ka nga ay edi dagdag lang na trabaho ang aming naging trabaho nga mas nadagdagan yung trabaho mo dahil doble doble (lesson plan, report etc.)"*

The participants verbalized their pressure on doing their variety of workloads and ancillaries they were required to attend seminars and other assignments some were assigned in canteens, feeding programs, community linkages and other ancillary.

Retubada (2014) mentioned that multiple ancillary functions of teachers is one of the problems encountered by the schools in Davao del Sur and Region XI. He cited that teachers,

while performing their main function as school adviser, are also given an extra non-teaching functions called ancillary functions as their additional workload since there is a need to assign these teacher as subject area coordinators, grade level head, canteen manager, sports coordinator, coordinator, club moderators, cluster subject area coordinator, coaches in different contests in cluster, division, regional and even at national levels which resulted into poor performance of teachers as well as students.

Knaub, Kristi Lynn (2016) states that multigrade teachers must take many factors into account when planning for education. The challenges of meeting content standards at various levels, teaching many subjects and managing student behavior contribute to a complex process. The teachers also relied on executive planning and management routines for their planning tasks. Teacher planning strategies could be used as a model for differentiating education for different student populations in general education settings.

Subtheme 2.3 Life-Work Balance

This sub theme pertains to the social life and work life of the teachers implementing multi-grade level instructions and how they manage and balance their life outside they workplace.

Participant 2: *“Ang dapat taglayin ng multi-grade teacher ay habaan pa dapat ang pasensya at kailangang mahabang mahaba pa hindi lang sa mga bata kundi pati sa trabaho”*

Participant 3: *“Mahaba ang pasensya, masipag, doble ang sipag at magaling ka mag disiplina ng bata”*

Participant 4: *“Abay tyaga... tsaka mahabang mahabang sobrabrang habang pasensya.. tsaka matapang, matyaga at mahaba ang pasensya.”*

Participant 5: *“sa akin yung pagiging matiyaga lalot pag kamalayo kagaya ko nakaranas ako na nung walang sasakyan pero talagang nilalakad lang naming.”*

The participants mentioned the qualities that a teacher must possess. It takes so much courage to be a multi-grade teacher yet by these qualities, teachers help them grow and surpass the challenges of being a multi-grade teacher.

Jennings and Greenberg (2009) claim that teachers’ social and emotional resources are prerequisites for effective teaching and especially for classroom management. Teachers with sufficient emotional resources are better capable of dealing with diverse challenges in their classrooms such as effectively managing their classrooms. It is assumed that effective classroom management leads to an optimal classroom climate with positive social, emotional, and academic outcomes for students.

According to Adib, et.al. (2015), multi - grade classes face problems such as lack of time, insufficient information and teacher experience, broad teacher responsibilities, low knowledge, and information.

Subtheme 2.4 Low Enrolment

This sub theme pertains to the low enrolment factor in which multigrade classes exist in remote areas like Gen. Emilio Aguinaldo. Where the number of students does not meet the standard size in mono-grade classes.

Participant 1: *“kapag konti ang enrolment konti lang binibigay nilang teacher”*

Participant 2: *“nagkakaroon ng multi-grade teacher kase sa kakulangan ng populasyon”*

Participant 3: *“Pagka yung kulang sa teacher at kokonti din ang enrollees hindi nabibigyan ng teacher yung iilan lang eh kaya ginagawang multi-grade”*

Participant 4: *“sa palagay ko dahil sa kulang sa bata.. yun ang no.1 na Factor (kung bakit nagkakaroon ng multi-grade class)”*

Participant 5: *“hindi mo naman pepwedeng dagdagan ng teacher dahil nakabase lang sa bilang ng bata na teacher na dapat nanduon”*

The participants verbalized that the number of teachers assigned in a school depends on the number of students. One of the factors that affect the number of students is the population in an area that is why it also affects the number of teachers assigned in every school.

According to Byron A Brown (2010), to understand the state of multi-grade teaching fully, and begin to investigate these critical questions, there is a need for much more accurate information on: (a) its magnitude in the different provinces, (b) how it is practiced in schools, (c) teacher-student ratios, and so on.

Theme 3: The Joy of Teaching Multi-grade Classes

This theme pertains to the fulfillment felt by the teachers implementing multi-grade level instruction in handling multi-grade classes.

Participant 2: *“mahal ko ang pagtuturo, mahal ko to, pinasok ko to, propesyon ko to kaya kahit sa anong grade kahit sa anong, kahit saan ako isabak, kaya ko yan diba.”*

Participant 3: *“Masaya kase marami kang naturuan na mga bata kase pag lumaki na sila matatandaan ka nila, at pagka napapatuto moa ng mga bata ay di masaya ka na din.”*

Participant 4: *“parang di ka yayaman talaga sa pagiging teacher kung saan iisipin mo na lang yung kalagayan nung mga bata.”*

Participant 5: *“masarap din naman maging multigrade na teacher kasi nga yung lalo nga ang dedication mo sa mga bata ay gusto mo nga silang matuto.”*

The participants verbalized that their dedication to the teaching profession and their affection to their students made them enjoy teaching multi-grade level instructions. This may imply that after the numerous challenges in handling multi-grade classes, they still experienced the joy in their teaching profession.

According to Hamdi Serin (2017), passion is a significant factor that can contribute to student achievement. Passionate teachers who are strongly committed to their work can make a positive difference in student achievement. In addition to being a motivating factor, passion can influence learning and teaching positively by creating excitement and action.

According to Eurydice (2015), there are very high standards set for teachers' profession, on the other side, the politics of the country is oriented towards a motivation of young specialists to choose a teacher's vocation. To train competent teachers, this is essential to explore the motivation of learners to acquire teaching professions and to decide to work at school and in kindergarten.

In the study about the “Lived Experiences of Teachers Implementing Multi-grade Level Instructions” three themes sprouted out namely (1) Training is crucial in handling multi-grade levels. This pertains to the continuous professional development, the teachers where oriented through seminars and training that allow them to enhance their teaching ability. The training and seminars are represented by the water sprinkler that made the plant that represents the

multi-grade teachers grow professionally. (2) Challenges in handling multi-grade classes which are best represented by the thorns of the plant, falling leaves and the roots. This includes (a) Pedagogy of Multi-grade Classes, this includes the teaching strategies, techniques and methodologies done by the teachers in handling multi-grade classes (b) Reports and Ancillary Works, and this pertains to the additional workloads that were given to the teachers that become a burden to them. (c) Life-Work Balance, this pertains to the life of teachers outside classroom instruction. This includes how the teachers manage the stress from the workplace and their social life. (d) Low enrolment is considered as the major cause why multigrade classes exist. Multi-grade classes depend on the population of the students that are residing on a specific barangay. (3) The Joy of Teaching Multi-grade Classes, this best represents the rose plant where in despite the numerous challenges faced by teachers implementing multi-grade level instruction they still sprouted to grow beautifully and inspire people. The fulfillment felt by the teachers made them grow professionally.

IV. DISCUSSION

The major purpose of this study was to explore the lived experiences of teachers implementing multi-grade level instructions in the municipality of General Emilio Aguinaldo, Province of Cavite. The researchers used qualitative phenomenological design, face to face interview for data gathering and Clarke and Braun thematic analysis to analyze the data gathered.

After careful analysis of data in the study, it was revealed that teachers implementing multi-grade level instructions experience continuous professional development through seminars and training, there were available instructional materials provided and there were variety of teaching methodologies in handling multi-grade level instructions. It was also revealed that teachers implementing multi-grade level instruction faced numerous challenges in handling

multi-grade classes such as in teaching and learning process, classroom management, reports and ancillary works, emotional health and stability, social life interaction and soft skills attitudes in handling multi-grade level instruction. It was further revealed that even though teachers implementing multi-grade level instruction faced numerous challenges, teaching is still their profession, passion, and vocation. Multi-grade teacher's dedication in teaching and the fulfillment they feel in teaching is valuable.

Multi-grade teachers were sent to training and seminars before they went to actual teaching of multi-grade class. Wherein they were taught on how to handle multi-grade classes, strategies, lesson planning and methods. Being a teacher of a multi-grade class was based on the availability of students. If the number of students in school does not reach the target population to be a mono-grade class, they will be set as a multi-grade class. Seminars and training are a big help for them in conquering their uncertainty to handle multi-grade classes. They were provided by modules for the teachers to follow in doing their instructional materials and their methods to be able to lighten their teaching and learning process.

Multi-grade teachers faced many challenges in handling multi-grade classes. They struggled in managing class because they were teaching two grade levels at the same time; same subjects but differ in complexity. They also struggled due to additional workload like reports or ancillary even though they faced much pressure they tend to be positive with regards to their emotion. They managed to possess qualities of a professional teacher through their dedication to their professions. In addition, they also managed to have a social life outside the classroom especially with their families.

Multi-grade teachers embraced their profession wholeheartedly even if they were assigned in a multi-grade class, they accepted it. They were not only devoted with their work but

also in teaching their students, at first, they found it hard but after the long run they became used to dealing with the process of teaching and learning and they were also comfortable with the setup. Despite the struggles, their only goal was to teach children and for them to be able to learn academically with values and camaraderie.

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