

Teaching Strategies: Effects to The Performance of Multigrade Teachers in The New Normal Education

Precy R. Erilla^{a,a}

^a*precy.rama@deped.gov.ph*

^aElcano Elementary School, Gandara I District, 6706, Philippines

Abstract

The COVID-19 pandemic has reshaped education, posing unique challenges for multigrade classrooms in the District of Gandara I during the 2023–2024 school year. This study assesses the effectiveness of teaching strategies in this "new normal" environment using surveys and questionnaires from multigrade teachers. The findings highlight both strengths and areas for improvement. Teachers, school leaders, and students generally viewed multigrade teaching positively. Teachers effectively used provided methods, such as technology integration and parent-teacher partnerships. Students appreciated learning from older peers and receiving individualized attention. Collaboration among teachers, school heads, and parents was seen as beneficial, and technology was valued for enhancing engagement. However, the study identified areas needing attention. Teachers could benefit from more professional development in differentiated instruction and managing workloads. Some students struggled with concentration due to noise or the challenges of focusing on other grade levels. Additionally, there is a need to enhance student awareness of parent-teacher partnerships and better integrate technology into students' lives outside school. The study recommends targeted professional development, improved student focus, and strategies to strengthen relationships and collaboration within multigrade settings.

Keywords: Multigrade Teaching, Professional Development, Technology Integration

1. Introduction

Multigrade schools are purposely established to cater to the less fortunate children living in a far-flung place who cannot afford to go to the big schools in urban barangays. Most multigrade teachers disclosed that teaching multigrade classes become very challenging because their training during their practice teaching years does not focus on multigrade teaching. These challenges are heavily felt by these teachers during the pandemic as their effort in module preparation and other distance learning activities are doubled as compared to their monograde teacher-counterparts. Hence, they have to choose the most suitable teaching strategies to meet the different learning needs of their multi-level students.

Teaching multigrade classes is very challenging. Multigrade teachers complained of a lack of significant time in handling classes with children with children of different age, grade level and skills in one classroom at the same time. In Africa, Turkey and Netherlands, multigrade teachers experience challenges such as transportation, illiteracy of parents, poor economic backgrounds, excessive effort of the teacher, lack

of time, language problems, and teacher challenges in the actual teaching, and learning process (Engin, 2018). The parents' lack of interest to their children's education, insufficient funds from the government, insufficient resources, underqualified multigrade teachers are some barriers in effective multigrade education (Plessis and Mestry, 2019).

Republic Act 9155 (2001) also known as the Governance of Basic Education Act is a law that serves as a legal basis of the study. Following the provisions of this act, education is free and compulsory for all Filipino children. Thus, the education department mandates the establishment of complete elementary schools in every barangay forming multigrade classes in remote barangays.

Enhancing DepEd Order Number 81 series of 2009 (2010) entitled "Strengthening the Implementation of the Multigrade Education Program in the Philippine Education," the multigrade Program in Philippine Education (MPPE) is one of the viable mechanisms for increasing access to quality elementary education.

In the Philippines, some of the teachers' problems in the elementary schools, especially in rural and remote areas, are lack of training and insufficient resources and fundings. Moreover, multigrade schools in most regions of the country are situated in remote and far-flung barangays. Multigrade teachers then find ways to serve their students better. They even gave part of their salary to purchase learning materials for their students (Castigador, 2019). During the practice teaching years of elementary teachers, their mentors trained them to be ready in the actual world of teaching, yet this training does not focus on multigrade teaching. The teachers' ability to deliver lessons well to be crucial to the students (Cadosales, 2017).

Moreover, the limitations and challenges that the teachers and students encountered in multigrade schools, they strive hard and tried their best to make their teaching-learning process meaningful and productive and be competitive with their counterpart monograde students. There are a lot of successful techniques and strategies that these multigrade teachers use to enhance the learners' skills and abilities.

Furthermore, like other public schools in the country, particularly in the countryside, multigrade classes are part of the best education curriculum in the Schools Division of Samar even before the implementation of the K-12 Enhanced Basic Education Program. However, the adoption of distance learning and the prohibition of the traditional face-to-face teaching caused by the COVID-19 pandemic has resulted to a change in the teaching-learning process. Although teachers conduct home visitation to monitor students' progress and determine their learning needs, they still have to choose the most effective teaching strategies that can promote desired learning outcomes for their pupils especially in the new normal education scenario.

In addition, there are a variety of teaching strategies that were proven to be effective by the teachers for several decades, some of them are useful in today's teaching-learning situation, such as modular approach, visualization, use of technology-based lessons and parent-teacher partnership. These strategies can be used singly or can supplement each other.

Being an effective multigrade teacher requires the implementation of creative and innovative teaching strategies in order to meet the children's heterogeneous individual needs. Regardless of the number of years in handling multigrade pupils, it can still be difficult to know which teaching strategies will work best with the learners. As a teacher, there is no "one size fits all" solution, thus, there is a range of effective teaching strategies a multigrade teacher can use to improve his/her instructional practice and teaching performance, (Quizalize, 2018). He mentioned that visualization is one of the effective teaching strategies

that brings dull academic concepts to life with visuals and practical learning experiences. This strategy helps learners to understand how their schooling applies in the real world.

Moreover, incorporating technology-based lessons into teaching practices is a great way to effectively engage learners, especially as digital media surrounds young people in the 21st century. Mobile devices can be used to display images and videos which helps children's new academic concepts (Isave, 2018).

Meanwhile, the issuance of Department of Education Order (DO) Number 007, series of 2020, regarding the School Calendar and Activities for Academic Year 2020-2021, highlights DepEd's dedication to educational continuity during a crisis. The Basic Education Learning Continuity Plan (BE-LCP) demonstrates this commitment by ensuring the health and safety of students and the school community are always prioritized. The Learning Continuity Plan (LCP), divided into two components, is outlined in DepEd Order Numbers 12 and 13, series of 2020. It details the implementation of home-based learning through a combination of modular and online education. The plan includes information on students' addresses, enrollment numbers from previous years, and staff employment figures. Notably, there has been a significant reduction in current enrollment in most private primary schools compared to the previous two years' statistics. This decline is primarily due to many children transferring to public schools.

The academic performance of multi-grade students in the District of Gandara I shows a trend over three school years: an overall MPS of 72.46 percent in 2019-2020, 72.67 percent in 2020-2021, and 73.47 percent in 2021-2022 (District BEDP, 2023). These figures indicate that significant efforts are needed from teachers and school administrators to improve the academic standing of multi-grade learners, as current performance levels fall short of national standards.

In view of the foregoing scenario, the researcher is prompted to conduct this particular study with the hope that the teachers' use of the identified teaching strategies can improve not only their performance as a teacher but also the status of multigrade education not only in the public elementary school of the District of Gandara I but also in other multigrade schools within the division.

1.1. Research Questions

This study assessed the teaching strategies of multigrade teachers and their effects to their performance in the new normal education in the District of Gandara I, Schools Division of Samar during the School Year 2022 - 2023. Specifically, it sought to answer the following questions:

1. What is the profile of the multigrade teacher-respondents in terms of the following personal variates:

- 1.1. age and sex;
- 1.2. civil status;
- 1.3. highest educational attainment;
- 1.4. number of years in teaching multigrade classes;
- 1.5. teaching position;
- 1.6. gross monthly family income;
- 1.7. performance rating based on the latest IPCRF;
- 1.8. number of relevant in-service training attended, and
- 1.9. attitude toward multigrade teaching?

2. What is the profile of the multigrade student-respondents in terms of the following personal variates:

- 2.2 age and sex;
- 2.3 parent's highest educational attainment;
- 2.3 gross monthly family income;
- 2.4 parents' occupation;
- 2.5 attendance during School Year 2023-2024;
- 2.6 final grade during School Year 2023-2024; and
- 2.7 attitude toward multigrade teaching?

3. What is the perception of the teacher –, school administrator –, and student respondents as regard to the multigrade utilization of teaching strategies of the teachers themselves in the new normal education in terms of the following areas:

- 3.1. modular approach;
- 3.2. visualization;
- 3.3. use of technology-based lessons; and
- 3.4. parent-teacher partnership?

4. What is the perception of the teacher-, school administrator-, and student respondents in terms of the effects of the teaching strategies to multigrade teachers' performance?

5. Is there a significant difference in the perception of the three groups of respondents as regard to the following:

- 5.1 utilization of teaching strategies; and
- 5.2 effect on teaching strategies?

6. Is there a significant relationship between the multigrade teachers' utilization of teaching strategies and the following:

- 6.1. teacher-related variates;
- 6.2. student-related variates; and
- 6.3. teacher-respondents' perception in terms of the effect of their teaching strategies?

7. What intervention program may be proposed based on the findings of the study?

1.2. Conceptual Framework

Figure 1 portrays a detailed schematic of the study's conceptual framework, capturing the vital components crucial to achieving our outlined objectives. At the heart of the inquiry lies the respondents and locale of the study – the multigrade teachers, students, and school administrators within the District of Gandara 1, Schools Division of Samar, for the School Year 2022-2023. This partnership is symbolized by an upward-pointing arrow, denoting the convergence of various research elements.

The study appraised the personal variates of the teacher respondents in terms of age and sex, civil status, highest educational attainment, number of years in teaching multigrade classes, teaching position, gross monthly family income, performance rating based on the latest IPCRF, number of relevant in-service

trainings attended, and attitude toward multigrade teaching. It also appraised the personal varieties of the student respondents along their age and sex, parent's highest educational attainment, gross monthly family income, parents' occupation, attendance during School Year 2022-2023, final grade during School Year 2022-2023, and attitude toward multigrade teaching. These elements are positioned in the upper and lower left corner of the schema.

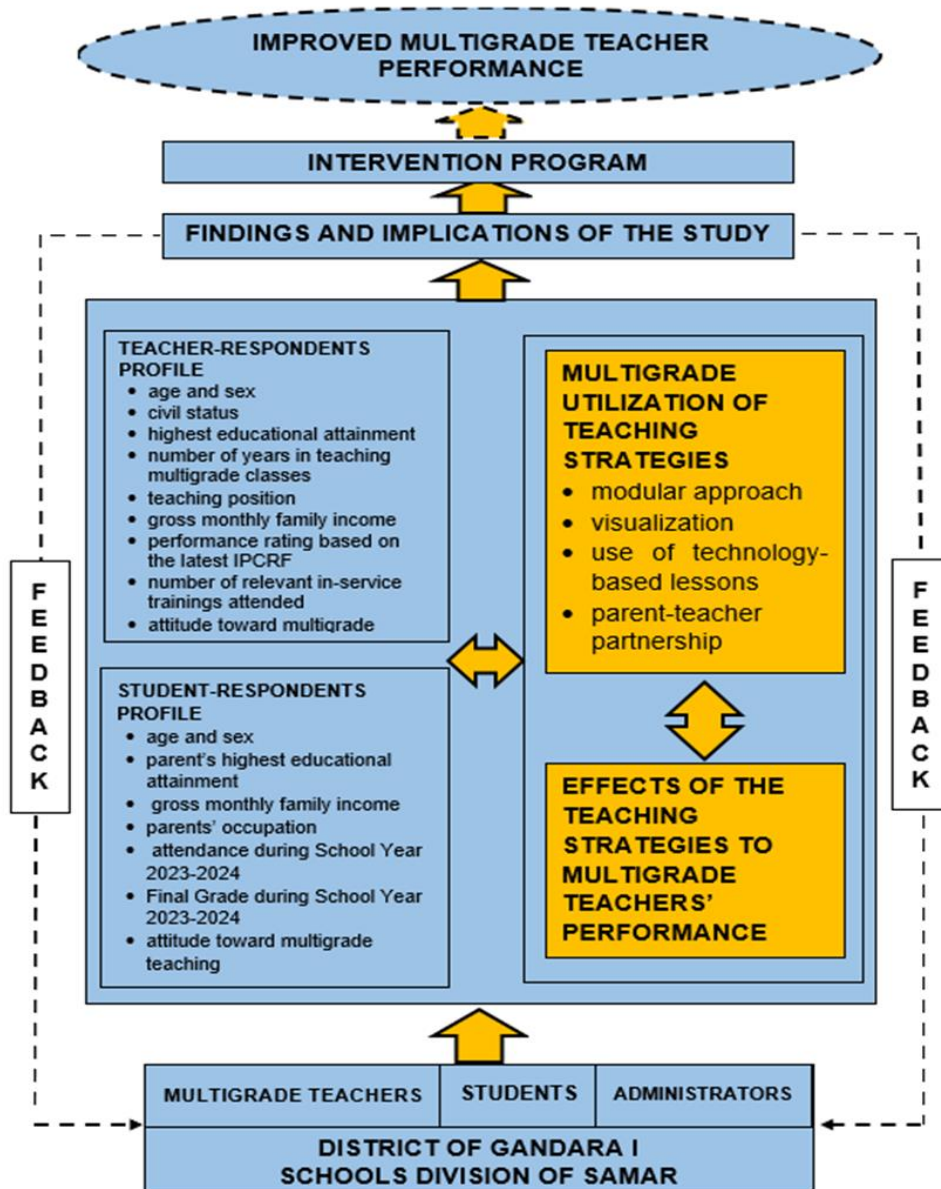


Fig. 1. Research Paradigm

The study investigated the perception of the teacher –, school administrator – and student respondents regarding the multigrade utilization of teaching strategies of in the new normal education along modular approach, visualization, use of technology-based lessons, and parent-teacher partnership.

These elements are outlined in the upper right quadrant. Moreover, it also analyzed the perception of the teacher-, school administrator-, and student respondents in terms of the effects of the teaching strategies to multigrade teachers' performance. This aspect is positioned in the lower right quadrant. The framework facilitated correlation analyses, linking these segments through double-headed arrows to explore the interrelationships between relationship between the multigrade teachers' utilization of teaching strategies, teacher-related variates, student-related variates, and teacher-respondents' perception in terms of the effect of their teaching strategies. Primary data collection occurs through a structured research questionnaire.

Ultimately, the research findings and their extensive implications, depicted in the third tier, are pivotal in shaping a targeted intervention program showcased in the fourth tier. This program is central to the mission of enhancing the performance of multigrade teachers, symbolized by the apex in the schema.

Feedback mechanisms, represented by broken loops on either side of the larger frame, continuously assess and refine these efforts, ensuring the successful achievement of the research aims.

1.3. Theoretical Framework

This study was anchored on the following three theories: Social Constructivism Theory by Piaget (1936), Behaviorism Theory by Watson (1913), and the Performance Theory by Edger (1988). These theories try to develop efficient learning programs and study the psychology involved in an individual's ability to learn.

The Social Constructivism Theory by Piaget emphasis on both the role of the teacher and the student and sees learning as a collaborative process; learning happens through shared experience of social interaction and languages (Avis, et al., 2018).

Hence, multigrade teachers should guide their pupils from different grade levels and scaffold their development through tasks and activities suitable to them that are designed in their teaching strategies to bridge the gap between what is already known and can be done, and what is new, unfamiliar concepts to be learned. The strategies must focus on learning by experience, and activities which allow children of different age, level, skill and readiness to understand what is being taught.

The Social Constructivism Theory is supported by the Behaviorism Theory by Watson (Avis, et al., 2018). The Theory is based on the idea that all learning is a reaction to stimuli. In this sense, learning becomes a system of rewards and targets whereby students change their behavior over time indicating new learning owing to positive and negative reinforces.

While learners are thought to be passive, the instructional practices are centered on what the teacher does to impact on and influence the learners. Thus, a behavioralist multigrade teacher ought to arrange environmental conditions with the help of parents from home-based learning so that children can make the response to stimuli. Physical variables like light, temperature, arrangement of furniture, size and quantity of

visual aids have to be controlled to get desired response from the learners. Teachers' ought to make the stimuli clear and interesting to capture and hold the learners' attention. They ought to employ appropriate teaching strategies to reinforce positive responses and weaken or eliminate the negative ones.

Another theory of relevance to the study is the Theory of Performance (ToP) developed by Edger (2016). The Theory expounds that the current level of performance depends holistically on six components: context, level of knowledge, level of skills, level of identity, personal factors, and fixed factors. Effective performance improvements involve a performer's mindset, immersion in an enriching environment, and engagement in reflective practices. To perform is to take a complete series of actions (teaching strategies) that integrate skills and knowledge to produce a valuable result (quality teaching performance).

So, as a multigrade teacher advances his/her level of performance in teaching, he/she is able to produce deeper levels of learnings, improved levels of skills development, and more connection with the discipline for larger combination classes while spending less time doing this.

The cited theories are significant to the present study as they place emphasis on what multigrade teachers can do to achieve better learning for the students. So, the teachers' choice of teaching strategies both in traditional classroom instruction and in distance learning is intended to produce the desired learning outcomes among multigrade students with consequent improvement in teachers' performance in the new normal education.

2. Methodology

This section outlines the methodology used in this study, detailing the research design, locale, instrumentation, instrument validation, sampling procedures, and data gathering methods.

2.1. Research Design

This study was a quantitative method using the descriptive-assessment method of research design used to assess the teaching strategies and its effect to the performance of multigrade teachers in the new normal education. This type of research design, according to Sternstein (2017), is used to secure evidences concerning existing situations or current conditions. It also attempts to evaluate the perception of a group of respondents towards a particular topic or issue.

In this study, it determined the profile of the teacher-respondents such as age and sex, civil status, highest educational attainment, number of years in teaching multigrade classes, teaching position, gross monthly family income, performance rating based on the latest IPCRF, number of relevant in-service trainings attended, and attitude toward multigrade teaching. It also determined the profile of student-respondents such as age and sex parent's highest educational attainment, gross monthly family income, parents' occupation, attendance during School Year 2022-2023, final grade during School Year 2022-2023, and attitude toward multigrade teaching.

The perception of school administrators, teachers, and student themselves on the teaching strategies utilized by multigrade teachers in the District of Gandara I, Schools Division of Samar was assessed on the areas of modular approach, visualization, technology-based lessons, and parent-teacher partnership as

criteria variables. It also determined the performance of multigrade teacher based on the latest classroom observation tool (COT).

To achieve the purpose of the study, the descriptive–correlational method of research was used to determine the teaching strategies and its effect to the performance of multigrade teachers in the new normal education. This type of educational research is most suitable to use in this study because accordingly to Sternstein (2017), it is used to secure evidences concerning existing situations and current conditions of a group of people, things and other important issues. It also attempts to evaluate the correlation of non-manipulative variables. Descriptive statistical tools, both parametric and non-parametric such as Frequency Count, Percentage, Arithmetic Mean, Standard Deviation (SD), Weighted Mean, were used to answer the descriptive questions of the study, Inferential statistical tool both parametric and non-parametric such as Fisher's t-Test, and Chi-square test were used.

2.2. Locale of the Study

Figure 2 presents the map showing the locale of the study. This study was conducted in all the multigrade schools in Gandara I District. These multigrade schools include the following: Arong Elementary School, Balocawe Elementary School, Bislig Elementary School, Bunyagan Elementary School, Carmona Elementary School, Giaboc Elementary School, Jasminez Elementary School, Macugo Elementary School, Nalihugan Elementary School, Napalisan Elementary School, Purog Elementary School, San Isidro Elementary School, and Sidmon Elementary School.

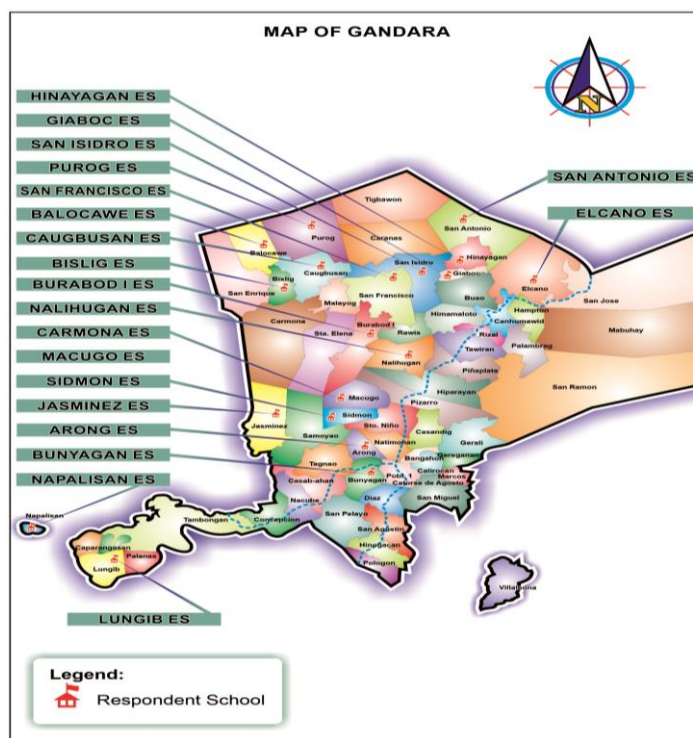


Fig. 2. Map Showing the Locale of the Study

2.3. Sampling Procedure

Table A shows the number of respondents per school per category. As reflected in the table, the respondents of the study were composed of 20 school heads, 52 teachers, and 281 students from the 20 multigrade schools of the District of Gandara I District, Schools Division of Samar. They were made to answer the questionnaires as the means of gathering the needed data for the study.

Table A
The Number of Respondents by School

Elementary Schools in Gandara 1 District	No. of Respondents		
	Students	Teachers	Administrators
	N	N	N
Arong Elementary School	25	2	1
Balocawe Elementary School	5	3	1
Beslig Elementary School	5	2	1
Bunyagan Elementary School	30	3	1
Burabod Elementary School	4	1	1
Carmona Elementary School	4	3	1
Caugbusan Elementary School	5	3	1
El Cano Elementary School	60	3	1
Giaboc Elementary School	3	2	1
Hinayan Elementary School	10	3	1
Jasminez Elementary School	35	3	1
Lungib Elementary School	5	1	1
Macugo Elementary School	25	3	1
Nalihugan Elementary School	20	3	1
Napalisan Elementary School	5	3	1
Purog Elementary School	5	3	1
San Antonio Elementary School	5	3	1
San Francisco Elementary School	5	2	1
San Isidro Elementary School	4	3	1
Sidmon Elementary School	21	3	1
TOTAL	281	52	20
Response Rate	100%		

The universal sampling technique was used in the selection of the teacher- administrator-respondents, and student-respondents. All the multigrade teachers and their school heads, and students in the 20 multigrade schools in the District of Gandara 1 District, Schools Division of Samar as participate as respondents.

2.4. Instrumentation

A researcher-made questionnaire was used as the main research instrument. Three sets of questionnaires were prepared – one for the multigrade teachers, one for the school heads, and another one for students.

The questionnaire for the multigrade teachers has four major parts. Part I contains the profile of the teacher-respondents in terms of their age and sex, civil status, highest educational attainment, number of years in teaching multigrade classes, teaching position, gross monthly family income, performance rating based on the latest IPCRF, number of relevant in-service trainings attended, and attitude toward multigrade teaching.

Part II elicited responses on the attitude of teacher- and student respondents toward multigrade teaching. They were provided with ten (10) attitudinal statements and was instructed to put a checkmark on the box that best represent their answer using a five point Likert scale where 5 means “Strongly Agree”, 4 means “Agree”, 3 means “Undecided”, 2 means “Disagree”, and 1 means “Strongly Disagree”.

Part III is a checklist of their perception on the frequency of their utilization of teaching strategies in handling multigrade classes in the District of Gandara 1, Schools Division of Samar using modular approach comprised of ten (10) statements, visualization with ten (10) statements, use of technology-based lessons with ten (10) statements, and parent-teacher partnership with ten (10) statements as criteria variables. They were instructed to put a checkmark on box that correspond to their answer using a five point Likert-scale in which 5 means “Always (A)”, 4 means “Often (O)”, 3 means “Sometimes (S)”, 2 means “Rarely (R)”, and, 1 means “Never (N)”. The items in this part of the questionnaire were taken from the researchers’ reading of books, journals, and from the Internet. This part was answered by the teacher-, student-, and school administrator-respondents themselves.

Part IV is a checklist of their perception on the effects of the teaching strategies utilized to their performance in the new normal education. Respondents were provided with fifteen (15) statements on this aspect. Their responses were rated using the 5-point Likert scale in which 5 means “Strongly Agree (SA)”, 4 means “Agree (A)”, 3 means “Undecided (U)”, 2 means “Disagree (D)”, and 1 means “Strongly Disagree (SD)”. This part was answered by the teacher- and school-administrator respondents.

The questionnaire for student-respondents bore the same content with the questionnaire of the teacher-respondents except for the profiling part.

2.5. Validation of the Instrument

The researcher developed a comprehensive questionnaire, which underwent a rigorous validation process by a panel of experts. This expert validation focused on three critical areas: face validity, content validity, and construct validity. During this phase, the experts provided detailed feedback and suggestions for improvement. The researcher carefully considered these recommendations and made the necessary corrections to enhance the questionnaire’s overall quality and accuracy.

Subsequently, during the pre-oral defense, the panel of examiners offered additional suggestions. These recommendations were also thoroughly evaluated and incorporated into the questionnaire to ensure it

met the highest standards of academic rigor and relevance. Once all modifications were made, the revised questionnaire was submitted for final approval.

After receiving approval, the validated questionnaire was piloted with a selected group of multigrade teachers and school heads in the Gandara 2 District, Schools Division of Samar. This trial aimed to test the instrument's validity and reliability in a real-world educational setting. To assess the reliability of the questionnaire, a Cronbach's alpha test was conducted on the pilot data. The resulting Cronbach's alpha coefficient was 0.89, indicating high internal consistency and reliability of the questionnaire.

The feedback from this trial, along with the high reliability score, confirmed that the questionnaire was both effective and reliable for gathering data in the context of this study. Any final adjustments based on the trial feedback were made, ensuring the questionnaire's readiness for full-scale deployment in the research.

2.6. Data Gathering Procedure

Before commencing the study, the researcher sought and obtained permission from the Schools Division Superintendent of Samar Division. This was done through formal transmittal letters, which were duly noted and signed by both the research adviser and the Dean of the College of Graduate Studies at Samar College. The approval process involved several steps, including submitting the research proposal and detailed explanations of the study's objectives and methodologies to ensure compliance with institutional and ethical standards.

Upon receiving the necessary approval, the researcher proceeded to distribute copies of the validated questionnaires to the identified respondents, consisting of multigrade teachers and school heads in the Gandara 2 District. To ensure the timely collection of data, the questionnaires were accompanied by clear instructions and a cover letter explaining the purpose of the study and the importance of their participation.

The researcher allowed a period of two weeks for the respondents to complete the questionnaires. To achieve a high response rate and ensure the completeness of the data collected, personal follow-ups were conducted. This involved visiting schools, meeting with respondents individually, and providing assistance where needed. These follow-ups were crucial in addressing any questions or concerns the respondents had about the questionnaire, which helped in securing their full cooperation.

During the data gathering phase, the researcher encountered various challenges, such as coordinating schedules with busy teachers and traveling to remote areas. Despite these obstacles, the persistent efforts paid off, resulting in a hundred percent retrieval rate of the distributed questionnaires. The personal interactions not only facilitated data collection but also provided the researcher with deeper insights into the respondents' experiences and the contextual nuances of multigrade teaching in the new normal.

Overall, the hands-on approach in data gathering ensured the reliability and completeness of the data, thereby strengthening the study's findings and conclusions. The researcher's dedication and thoroughness in this process underscore the commitment to achieving high-quality research outcomes.

3. Results and Discussion

This section presents the findings of the study:

1. The data reveals a relatively young teaching population with a concentration of educators between 27 and 36 years old. Specifically, the largest group (30.77%) falls within the 32-36 age range, closely followed by the 27-31 age bracket (26.92%). A median age of 33 further highlights this youthful trend, indicating that half the teachers are younger than 33 and the other half older. While the mean absolute deviation of 4.99 years suggests some spread in ages, it's not a vast difference, implying a decent number of teachers cluster around the median age. Interestingly, the data also shows a greater number of female teachers (39) compared to males (13).
2. The data on marital status suggests a relatively even split between married and single teachers among the respondents. Roughly half (50.00%) are married, while nearly the same proportion (48.08%) are single. There's only one widowed teacher (1.92%).
3. The data reveals a strong emphasis on advanced education among the teachers. The largest group (46.15%) has completed some coursework towards a Master's degree. There are also a significant number of teachers (6, representing 11.54%) who already hold a Master's degree. This means over half (57.69%) of the teachers have some form of Master's education. The remaining 42.31% of teachers hold a Bachelor's degree.
4. The analysis of multigrade teaching experience reveals a concentration of teachers in the 6–10-year range. Nearly half (46.15%) have this level of experience. A significant number of teachers (34.62%) also fall within the 1–5-year bracket. While smaller groups exist for other experience levels, it's interesting to note that some teachers (9.62%) have less than a year of experience and a few (7.69%) have between 11-15 years. There's only one teacher (1.92%) with over 20 years of experience.
5. The data shows a clear hierarchy among the teachers, with Teacher I being the most dominant position. A substantial portion (36 teachers, or 69.23%) falls under this category. The next step up, Teacher III, is held by a considerably smaller group (14 teachers, or 26.92%). It's interesting to note that there's only one teacher each in the positions of Teacher II and Master Teacher I (both 1.92%). This suggests that there might be a bottleneck or a significant gap between Teacher I and the higher positions.
6. The income distribution among the teachers surveyed leans heavily towards the Php 20,000–29,000 brackets. A large majority (80.77%) of teachers fall within this range. The next income group, Php 30,000–39,000, is considerably smaller but still significant, with 15.38% of teachers earning in this range. Only a very small portion of teachers (1.92%) earn Php 40,000–49,000, and another teacher (1.92%) earns Php 50,000 and above. This suggests that the majority of teacher respondents are concentrated in the lower income bracket.
7. The results of the Individual Performance Commitment and Review Form (IPCRF) paint a positive picture of the teacher-respondents' performance. The vast majority (78.85%) received a rating of "Very Satisfactory," indicating a high level of accomplishment meeting expectations. While a smaller

group (21.15%) achieved the top rating of "Outstanding," it's still noteworthy that a significant portion exceeded expectations.

8. The data on international training attendance reveals that the vast majority of teachers (98.08%) have not participated in any international trainings. Only one teacher (1.92%) has attended less than 3 international trainings.
9. The data on national training attendance reveals a very low participation rate. The vast majority of teachers (98.08%) haven't attended any national trainings. Out of all the teachers surveyed, only one (1.92%) has participated in 3-5 national trainings.
10. The data on regional training attendance shows a limited participation among teachers. The vast majority (84.62%) haven't attended any regional trainings. A small portion (13.46%) have attended a limited number (less than three), and only one teacher (1.92%) has participated in 3-5 regional trainings.
11. Division training attendance seems to be somewhat more prevalent compared to regional or national trainings. While a significant portion (46.15%) of teacher-respondents haven't attended any division trainings, a good number have participated to some extent. Nearly a third (28.85%) have attended less than three trainings, and another sizeable group (13.46%) have participated in 3-5 trainings. Encouragingly, there's also a small group (11.54%) who have attended six or more division trainings.
12. District training attendance appears to be spread more evenly across different participation levels compared to other training programs. While a significant portion (28.85%) of teachers haven't attended any district trainings, there's also a substantial group (28.85%) who have participated in six or more trainings. This indicates a strong commitment to professional development among some teachers through district programs. In between these two extremes, there's a decent number of teachers who have attended a moderate number of trainings: 25% with less than three and 17.31% with 3-5 trainings.
13. The data suggests a generally positive attitude among teachers towards multigrade teaching, with an overall average rating of 4.12 which falls within the "agree" range. The statement with the highest agreement (4.60) is that professional development focused on multigrade teaching would improve their effectiveness as educators. This suggests that teachers are open to and potentially interested in further training to help them excel in this type of teaching environment. On the other hand, the data reveals some uncertainty about the social aspects of multigrade teaching. The statement with the lowest rating (3.35) is that multigrade teaching fosters a strong sense of community and cooperation among students, and the average response falls within the "undecided" range. This might indicate a need for further investigation into how to implement multigrade teaching in a way that strengthens student relationships and collaboration within the classroom.
14. This data describes the age distribution and gender breakdown of a group of students. The most common age is 10 years old, with 68 students falling into that category. Ages 9, 11, and 12 follow closely behind. Interestingly, the median age (10.0 years old) is slightly lower than the average age (10.38 years old), suggesting a slight skew towards younger ages in the data set. The average student

deviates from the mean age by about 1.34 years. There are slightly more female students (147) than male students (134).

15. The survey results reveal interesting trends in the educational attainment of the students' parents. For fathers, the most common educational backgrounds are elementary level (31.67%) and elementary graduate (30.60%). Mothers, on the other hand, tend to have slightly higher educational attainment, with the majority having completed elementary school (31.32%) followed by those who did not complete high school (27.05%).
16. The survey results suggest that most of the students come from families with a monthly income between 1,000 and 9,999 pesos. Over half of the students (50.53%) fall into the 1,000 – 4,999 brackets, with another 41.64% having a family income between 5,000 and 9,999 pesos. Only a small portion of the students (around 3.91% each) come from families with a monthly income of 10,000 pesos or higher.
17. The survey results reveal that the vast majority of the students' fathers are employed in farming (83.27%), while the mothers are primarily housewives (91.46%).
18. The survey results show a positive trend in student attendance during the 2023-2024 school year. The majority of students (77.22%) achieved a high attendance rate of 179 days present. There's a gradual decrease in the number of students with slightly lower attendance, with 32 students attending for 178 days, followed by 16 (177 days), 10 (176 days), and finally 6 students attending for 175 days.
19. The survey results are promising in terms of student academic performance. The majority of students (71.89%) achieved a general weighted average (GWA) between 85 and 89, indicating a strong overall performance. While a smaller portion scored in the 80-84 GWA range (14.95%), it's noteworthy that a commendable 13.17% of students scored between 90 and 95, demonstrating a significant number of high achievers.
20. Students generally have a positive attitude towards multigrade teaching according to the survey results. The overall average weighted mean is 4.03, which leans towards the "agree" range. Statements with the highest agreement are "Being in a multigrade classroom helps me learn from older or more advanced students" (4.36) and "I feel that my individual learning needs are met in a multigrade classroom" (4.35), both within the "agree" range. The lowest weighted mean is for the statement regarding difficulty concentrating due to teaching other grade levels (3.00), which falls within the "undecided" range. This suggests that while some students find it challenging to focus when the teacher is teaching another grade level, the overall sentiment towards multigrade teaching is positive.
21. The survey results indicate that teachers reported frequent utilization of teaching strategies suited for multigrade classrooms along with a modular approach. The overall average weighted mean is 4.39, which falls within the "often" range. This suggests that teachers regularly implement these strategies in their classrooms. Among the specific strategies, teachers reported using them most frequently to give students the necessary skills to express themselves (4.52, "always" range). On the other hand, teachers reported the least frequent use of strategies that allow students to have control over their learning (4.19, "often" range).

22. The survey results indicate that teachers reported frequent use of visual aids alongside multigrade teaching strategies (average weighted mean of 4.40, "often" range). Among these techniques, teachers reported using visuals most effectively to help students understand reading materials on a deeper level (4.52, "always" range) and to attract and motivate students (4.50, "always" range). Interestingly, teachers reported using diagrams to explain the learning process slightly less frequently (4.23, "often" range) compared to the other visual strategies.
23. The survey results indicate that teachers reported frequent use of technology-based lessons alongside multigrade teaching strategies (average weighted mean of 4.47, "often" range). While technology is a valuable tool for these classrooms, teachers reported some variation in its effectiveness depending on the learning objective. The most effective uses of technology, according to teachers (all "always" range), were to create engaging and challenging activities (4.58), provide opportunities for self-expression (4.56), and strengthen relationships among parents, teachers, and students (4.56). Interestingly, teachers reported using technology slightly less frequently to supplement real-world interaction at home (4.31, "often" range).
24. The survey results are very positive regarding teacher-parent partnerships in multigrade classrooms. The overall average weighted mean (4.60) falls within the "always" range, indicating a strong emphasis on collaboration between teachers and parents. Among the strategies used, teachers reported the highest effectiveness in encouraging students to perform well both in school and at home (4.65, "always" range) and in developing social skills and adaptability among students (4.65, "always" range). Even the lowest-rated statement regarding fostering parental involvement (4.52, "always" range) remains very positive. This suggests that teachers prioritize a strong partnership with parents in these multigrade classrooms and see their efforts as successful in motivating students, fostering social development, and overall promoting parental engagement.
25. The survey results from school heads paint a very positive picture of teachers' multigrade teaching with a modular approach. The overall average weighted mean (4.88) falls within the "always" range, indicating a strong belief in the effectiveness of this method as utilized by the teachers. School heads seem particularly impressed with the impact on learning outcomes, with a perfect mean score (5.00) for the statement "The teacher enhances learning outcomes among children." They also value the clear guidelines provided by the modular approach for setting teaching goals in various subjects (another perfect mean of 5.00). Interestingly, the lowest-rated statement regarding student learning pace (4.65, "always" range) still reflects a positive perception.
26. School heads hold an overwhelmingly positive view of how teachers utilize visual aids alongside multigrade teaching strategies. The overall average weighted mean (4.93) falls within the "always" range, indicating a strong belief in the effectiveness of visuals in these classrooms. Among the specific strategies, school heads were most impressed with how teachers use visuals to enhance reading comprehension. Statements regarding deeper understanding through visuals (5.00), making reading more enjoyable with colorful pictures (5.00), and choosing descriptive books to foster comprehension (5.00) all received perfect scores. Even the lowest-rated statement regarding using video clips to capture attention (4.80, "always" range) remained very positive.
27. School heads are incredibly enthusiastic about the integration of technology into multigrade teaching strategies of teacher-respondents, with an overall average weighted mean of 4.97 falling within the

"always" range. This suggests a strong belief in technology's value for these classrooms. The survey highlights several perceived benefits, all scoring a perfect 5.00: increased access to learning opportunities, engaging activities, supplementing real-world interaction at home, improved readiness skills for multigrade students, exposure to new cultures, and even strengthened relationships between parents, teachers, and students. Technology is also seen as a valuable tool for language development through educational videos. Interestingly, the lowest-rated statement regarding technology (4.85, still within the "always" range) focused on providing opportunities for self-expression without replacing other materials.

28. School heads are incredibly impressed with how parent-teacher partnerships function in multigrade classrooms. The overall average weighted mean (4.99, "always" range) indicates a near-perfect belief in the effectiveness of this collaboration. The survey results highlight a multitude of perceived benefits, with a remarkable nine statements receiving perfect scores (5.00, all within the "always" range). These positive outcomes include improvements in student work habits, attitudes, and academic performance. Additionally, parent-teacher partnerships are seen to encourage student success at home and school, increase parental engagement, and foster a collaborative learning environment where students are supported to reach their full potential. Furthermore, these partnerships are believed to contribute to positive social development, emotional well-being, and a reduction in behavioral problems among students. Interestingly, the statement with the lowest rating (4.90, "always" range) focused on teachers keeping parents informed about important aspects of their children's learning. Even this score remains very positive, suggesting that communication might be a slightly less emphasized aspect of the partnership. However, the overwhelmingly positive scores paint a clear picture: school heads view strong parent-teacher partnerships as essential for the success of multigrade classrooms. These partnerships appear to significantly contribute to a positive learning environment, improved student performance, and overall well-being.
29. Students' perceptions of multigrade classrooms with a modular approach are generally positive, but there's room for improvement. The overall average weighted mean (4.35) falls within the "often" range, indicating a general acceptance of this teaching style. Interestingly, the aspect students seem to appreciate most is not directly related to the multigrade aspect. The highest-rated statement (4.50, "always" range) is that their teacher encourages creating materials for independent study. This suggests that students value the opportunity to work independently with engaging learning materials. On the other hand, the statement with the lowest rating (4.03, "often" range) is that their teacher helps them learn at their own pace. While still positive, this suggests that some students might feel their individual learning pace isn't emphasized enough in these multigrade classrooms, thus, students might feel their individual needs are not fully addressed.
30. Students in multigrade classrooms find visuals to be a valuable tool for learning, with an overall average rating of 4.55 (always range). They seem to particularly appreciate how teachers use visuals to enhance reading comprehension. Strong preference for visuals in reading: Students value teachers who use visuals strategically to support reading. This is evident in the high ratings for teachers who choose books with rich descriptive language (4.63) and colorful pictures (4.62) to aid comprehension (both always range). These findings suggest students find visuals engaging and effective for understanding reading materials. Animations are less popular: While animations are still used "often" (4.42), they received the lowest rating compared to other visual aids.

31. Students in multigrade classrooms generally have a positive perception of technology-based lessons (average rating of 4.56, "always" range). They seem to find technology engaging, but the survey also suggests there's room for improvement in how it connects to their lives outside of school. Students particularly enjoy technology-based lessons when they are fun and challenging (4.62, "always" range). This high rating suggests that teachers are effectively using technology to create engaging learning experiences. The survey identifies an area for improvement regarding technology's role in supplementing real-world interaction at home (4.48, "often" range). This was the lowest-rated statement, suggesting that students might see technology as less effective in reinforcing what they learn outside of school.
32. Students in multigrade classrooms perceive parent-teacher partnerships very positively (average rating of 4.66, "always" range). They seem to feel these partnerships contribute significantly to their well-being. Students value the impact of parent-teacher partnerships on various aspects. The highest-rated statement (4.68, "always" range) is that these partnerships help reduce behavioral problems and improve emotional well-being. This suggests students feel supported and experience a positive learning environment. Interestingly, the statement with the lowest rating (4.62, "always" range) is about teachers reinforcing the idea of collaboration between parents and teachers. While still very positive, this suggests that students might not always perceive teachers explicitly discussing this collaboration.
33. The survey results suggest that teachers in multigrade classrooms generally agree that the provided teaching strategies are helpful (average rating of 4.35, "agree" range). However, there's room for improvement in managing workload. The overall positive perception indicates that the teaching strategies are seen as valuable tools for multigrade classrooms. The aspect with the highest rating (4.67, "strongly agree") is maintaining good relations with colleagues. This highlights the importance of collaboration and teamwork for teachers in these settings. The lowest-rated statement (3.77, "agree" range) addresses the challenge of co-curricular activities interfering with instructional duties. This suggests that managing workload might be a concern for some teachers in multigrade classrooms.
34. School heads are incredibly enthusiastic about the impact of the provided teaching strategies on multigrade teachers (average rating of 4.71, "strongly agree" range). They believe these strategies significantly improve various aspects of a teacher's work in these unique classrooms. The survey highlights a wide range of perceived benefits, with a remarkable ten statements receiving perfect scores (5.00, all within "strongly agree"). School heads see these strategies as leading to: improved teaching skills, the ability to effectively teach students of different grade levels and abilities, enhanced management skills for teachers, a better work-life balance for teachers, efficient fulfillment of non-teaching duties, timely completion of paperwork, stronger relationships and teamwork among teachers, efficient facilitation of student schoolwork completion, open communication channels between teachers, school heads, and colleagues, and effective communication with parents regarding student learning. Interestingly, the only statement with a lower rating (disagree range) focused on co-curricular activities not affecting instructional duties. This suggests school heads might be concerned about potential workload overload for teachers.
35. Students in multigrade classrooms generally perceive the teaching strategies as helpful for teachers (average rating of 4.24, "agree" range). There seems to be a positive view of how these strategies impact teachers' ability to manage challenges and access support. Students seem to believe the

strategies help teachers cope with work-related challenges (4.51, "strongly agree"). This suggests they feel teachers have the resources they need to be effective. Also, students value the ability for teachers to consult with school heads and colleagues about teaching problems (4.51, "strongly agree"). This suggests they perceive open communication and collaboration as important for teachers' success. The lowest-rated statement (3.31, "undecided" range) is about co-curricular activities not affecting teachers' instructional duties. This suggests students might be unsure whether the workload allows teachers to manage both effectively.

36. The analysis found a statistically significant difference in how the three respondent groups perceived the utilization of teaching strategies in multi-grade teaching. The null hypothesis which states that "there is no significant difference in the perception of the three groups of respondents as regard to the utilization of teaching strategies in multi-grade teaching", was rejected. This is because the computed p-value is .00001, which is lower than a commonly used threshold for significance (0.05), meaning the chance of observing this difference by random chance is very small. Since the respondent groups had different perceptions of how teaching strategies were utilized, a single approach might not be effective for all ages within the classroom. This suggests a need for differentiated instruction, where teachers tailor their strategies based on the specific group they're addressing. Additionally, the findings might call for targeted professional development for teachers in multi-grade settings. This could focus on strategies that resonate better with certain age groups or address areas where some groups perceived a gap.
37. The study investigated how different groups perceive the effectiveness of teaching strategies in multi-grade classrooms. The researchers initially assumed there would be no significant difference in perception between the three respondent groups (this is the null hypothesis). However, their analysis found strong evidence to reject this assumption. The key piece of evidence is the p-value, which came in at a very low value (0.0006). This p-value tells us how likely it is to see such a difference by random chance if there truly was no difference in perception between the groups. In this case, the probability is incredibly small. Since the p-value is lower than a commonly used threshold for significance (0.05), we can be confident that the observed difference in perception is not likely due to chance. In other words, the different respondent groups likely have significantly different views on how effective the teaching strategies are in multi-grade classrooms.
38. The survey result shows that three main variables (civil status, number of relevant in-service trainings attended, and attitude toward multigrade teaching) have a significant correlation with multigrade teachers' utilization of teaching strategies. While the remaining variables (age, sex, number of years in teaching multigrade classes, teaching position, gross monthly family income, and performance rating based on the latest IPCRF) showed no significant correlation with multigrade teachers' utilization of teaching strategies, with strong to very weak correlations.
39. The survey results revealed a surprising link between teachers' strategy use and one student variable: mothers' occupation. Interestingly, the correlation was weak, though statistically significant. This means there might be a slight connection between a mother's profession and the strategies teachers use, but it's not a very strong one. For all other student variables examined, including age, sex, family background (education, income, father's occupation), attendance, grades, and even attitude towards multigrade teaching, the survey found no significant correlation with teacher strategy use. These

correlations ranged from moderate to very weak. In other words, these student characteristics seem to have little to no bearing on the strategies teachers use in their multigrade classrooms.

40. The study found a strong connection between how multigrade teachers use teaching strategies and their own perception of those strategies' effectiveness. This means teachers are likely using strategies they believe work well. The evidence for this connection is two-fold. First, the researchers rejected the null hypothesis, which assumed no relationship between these factors. The incredibly low p-value (0.000) indicates it's highly unlikely this connection is due to chance (the standard threshold is 0.05). Second, the strong positive correlation coefficient (0.767) suggests a substantial link. Teachers who perceive their strategies as more effective tend to report using them more often in their multigrade classrooms. This finding suggests that teachers' own beliefs about the effectiveness of strategies might influence how often they use them.

4. Conclusion

From the findings of the study, the following conclusions were drawn:

1. The data shows a young group of multigrade teachers. There seems to be a high emphasis on Masters' degrees, but limited participation in professional development programs beyond those provided by the division or district.
2. Teachers generally see the provided teaching strategies, along with the modular approach, visualization, use of technology-based lessons, and parent-teacher partnership, as valuable and report frequent use of them.
3. While teachers report frequent use of various strategies suited for multigrade classrooms, there is room for improvement in areas like student control over learning and catering to individual learning paces.
4. There is a positive perception of the provided teaching strategies for multigrade classrooms. However, managing workload, particularly regarding co-curricular activities, seems to be a challenge for some teachers. There is a need for differentiated instruction tailored to specific age groups within the classroom.
5. Teachers, school heads, and students all have a positive overall perception of multigrade teaching.
6. Students generally have a positive attitude towards multigrade teaching, particularly regarding learning from older students and having their individual needs met. However, some students report difficulty concentrating due to noise or the teacher focusing on other grade levels.
7. Some students feel their individual learning pace could be addressed more effectively within the multigrade environment.
8. School heads and parents hold a very positive view of teacher-parent partnerships and their impact on student achievement, well-being, and overall learning environment.

9. The results show a strong emphasis on collaboration between teachers, school heads, and parents. This collaboration is perceived to be beneficial for student success, well-being, and overall positive learning environment.
10. Although collaboration is seen as important, students might not always perceive teachers explicitly discussing the importance of parent-teacher partnerships.
11. Technology is viewed as a valuable tool for engagement, learning opportunities, communication, and strengthening relationships between parents, teachers, and students.
12. Teachers reported frequent use of technology for various purposes, and school heads and students view technology as a valuable tool for engagement, learning opportunities, and communication. However, there is room for improvement in how technology can connect to students' lives outside of school.
13. The study revealed a fascinating connection between teachers' perceptions and their actions in multigrade classrooms. Teachers are more likely to implement strategies they believe are effective. This conclusion is statistically significant, with researchers rejecting the initial assumption of no link between these factors. The strong positive correlation coefficient further emphasizes this connection. In simpler terms, teachers tend to use the strategies they have faith in more frequently. This highlights the potential impact of professional development programs that focus on building teacher confidence and knowledge around effective multigrade teaching strategies. By equipping teachers with a strong understanding of impactful strategies, these programs could lead to a more consistent and effective implementation of these methods in multigrade classrooms.
14. Professional development programs focused on building teacher confidence and knowledge around effective multigrade teaching strategies, differentiated instruction techniques, and workload management could be beneficial.
15. Additionally, the findings suggest that incorporating student voices and addressing their concerns about individual learning pace and concentration could further enhance the multigrade learning experience.
16. Further investigation into how to implement multigrade teaching in a way that strengthens student relationships and collaboration within the classroom might be valuable.
17. Strategies that allow students more control over their learning could be explored and implemented.

5. Recommendations

Based on the conclusions drawn from the findings of the study, the following recommendations are offered:

1. For teachers, provide ongoing professional development programs specifically focused on effective multigrade teaching strategies, including differentiated instruction techniques for catering to individual learning paces and student control over learning.

2. Offer additional programs beyond those provided by the division or district to address workload management challenges, particularly regarding co-curricular activities.
3. Implement strategies that allow students more control over their learning, fostering a sense of ownership and engagement.
4. Explore ways to more effectively address individual learning paces within the multigrade classroom setting. This could involve small group instruction, differentiated learning materials, or independent learning activities.
5. Continue to utilize the provided teaching strategies, emphasizing those that are perceived as most effective, such as visualization and technology integration.
6. Make a conscious effort to explicitly discuss the importance of parent-teacher partnerships with students, fostering a sense of shared responsibility for learning.
7. For School Leaders, collaborate with the district to offer targeted professional development programs for multigrade teachers, as outlined above for teachers.
8. Investigate and implement best practices for multigrade classroom management to address student concerns about noise and concentration difficulties.
9. Provide additional training and resources for teachers on integrating technology in a way that connects with students' lives outside of school.
10. Continue to foster a strong collaborative environment between teachers, school heads, and parents. This collaborative spirit is seen as a significant benefit for student success and well-being.
11. Actively incorporate student voices into the planning and implementation of multigrade teaching strategies. Consider their concerns about individual learning pace and concentration to further enhance the learning experience.

6. Acknowledgement

The researcher would like to express with sincere gratitude and appreciation, the distinct individuals who contributed much for the fulfillment of this study:

To the ever-supportive thesis adviser **Dr. Natalia B. Uy** for her continuous support, guidance and mentorship throughout the entirety of this research project her expertise, and encouragement have been instrumental in steering me towards the successful completion of this thesis.

To **Dr. Nimfa T. Torremoro**, Dean of the Graduate Studies of Samar College, for the gentle reminders to finish her research at the exact duration.

To the distinguished Panel Members for their insightful comments and suggestions, which have greatly improved the quality of this work.

To **Baselia V. Rama and Hilario A. Rama Sr.**, the researcher ever supportive parents for their unconditional love, support and encouragement throughout the academic journey.

To **Rolando M. Erilla**, the researcher supportive better half for his encouragement listening ears, and belief in her capabilities have been a source of comfort and inspiration that sustained through this long and challenging journey of thesis writing.

To **Precious Kate and Ma. Princess**, the beloved daughters, her motivation, and the reason behind everything to do. To all supportive siblings for their prayers and all-out support.

To all those who have been a part of this academic journey and have supported in the completion of this thesis, for support, guidance and encouragement have been invaluable.

Above all to our **Almighty God** for His guidance, grace and blessings that have given me strength and wisdom to overcome the obstacles and challenges that I encountered during the writing of this thesis. His divine presence and inspiration. Have been a guiding light throughout this

References

- Ali and Al-Mutairi, W.R. (2021). The use of reciprocal teaching strategies in developing mutual visualization among kindergarten students in the subject of theater for young audiences, university of kufa, Iraq, Retrieved on 7/23/2022 at [https://rigeo.org/download – PDF](https://rigeo.org/download-PDF)
- Ambayon, Cristobal M. (2020), Modular-Based Approach and Students' Achievement in Literature, Retrieved on 7/23/2022 at <https://www.journals.aluc.org/au>vi>
- Anvaci, A. (2015). The role of visual representation in the learning of Mathematics. Educational Studies in Mathematics, (52), p. 215.
- Anilkumar, A. (2019). The most effective teaching strategies to use in your students: evidence based and proven to work, Retrieved on 7/23/2022 at <https://thridspacelearning.com.blog...>
- Arnseth, H.C. (2017), Challenges in Aligning Pedagogical Practices and Pupils' Competencies with the Information Society, (Hershey: IGI Global, Inc.).
- Aryal, P. (2013). A study on Multi-grade/multi-class teaching: Status and issues. Research Center for Educational Innovation and Development, Tripureshwar, Kathmandu, Nepal. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0738059307000302?via%3Dihub>
- Avis, J., Fisher, R. and Thompson, R. (2018), Teaching in Lifelong Learning: A Guide to Theory and Practice, 3rd Edition, (Berkshire, UK: Open University Press).
- Biorklund, K. Liski, A. and Santalahte, p. (2014), A School-based Intervention Program, retrieved on 8/17/2022 at <https://bmcpublihealth.biodecentral.com>...>
- Bishop, F., Zagerman, I., and Anderson G (2021), Construct in Exploring the Free Form Visualization Process of Children, St. Andrews University, Retrieved on 7/23/2022 at <https://research-repository.st.andrews.ac>uk...> PDF
- Brown, J. (2012). The integration of technology in multigrade classrooms: Enhancing student engagement and personalized learning. Journal of Educational Technology & Society, 15(2), 231-241.
- Brown, B. A. (2010). Teachers' accounts of the usefulness of multigrade teaching in promoting sustainable human development related outcomes in rural South Africa. Journal of Southern African Studies, 36(1), 189-207. <https://doi.org/10.1080/03057071003607428>
- Cadosales, M.N. (2017). Teaching efficiency of elementary student teachers. Journal of Research in Administrative Science, 6 (1), p. 12, Retrieved on 7/23/2022 at <https://jraspublication.com/index.php/JRAS>artcile>view>
- Casiple, Rex (2020), Modular Instruction, Retrieved on 7/23/2022 at <https://dailyguardian.com.ph>...>
- Casiple, R. (2020). Modular teaching as an effective teaching-learning process in basic education during the COVID-19 pandemic. Journal of Education and Learning, 14(1), 78-85.
- Castigador, B. (2019). Level of experience of multigrade teachers. The PASCHR Journal, 1 (1), p. 1010, Retrieved on 7/23/2022 at <https://ejournals.ph>article>

- Debbage, Eve (2019), Why are Parent-teachers Important? Retrieved on 7/23/2022 at <https://e-today.co.uk>>comment
- Dejen. Wondifraw (2019), The Practice of Modularized Curriculum in Higher Educational Institutions, Retrieved on 7/23/2022 at <https://www.tandfonline.com>>full...
- DepEd Memorandum No. 8, s. 2023. Multi-Year Guidelines on the Result-Based Performance Management System-Philippine Professional Standards for Teachers.
- Diwan, R. (2015). Small schools in rural areas exclusion and inequality hierarchical school system. Retrieved from <https://doi.org/10.1177/1478210315579971>
- Hilberg, R. S., Chang, J. M., & Epaloose, G. (2003). Designing effective activity centers for diverse learners: A guide for teachers at all grade levels and for all subject areas. Center for Research on Education, Diversity, and Excellence.
- DepEd (2020), DepEd Commons becomes the “new normal”, Retrieved on 7/23/2022 at <https://depdroxi.ph>>deped-omm...
- DepEd Order No. 81, s. 2009 (2010). Strengthening the Implementation of the Multigrade Education Program in Philippines Education. Retrieved on 8/17/2022 at <https://www.deped.gov.ph>>do-63-5...
- Kraft, R. M., & Dougherty, S. M. (2017). The effect of teacher-family communication on student engagement. Retrieved from <https://bit.ly/3oxynl>
- Du, Plessis P. and Mestry, R. (2019). Teachers for rural schools, a challenge for South Africa. South African Journal of Education, 39 (1), (Google Scholar).
- Edger, Don (2016), Theory of Performances, Retrieved on 7/23/2022 at <https://www.perest2.com>>full...
- Engin, G. (2018), “The opinion of the multigrade classroom on multigrade class teaching practices- Multiple case analysis. International Journal of Progressive Education, 14 (1), p. 177, (Google Scholar).
- Gangwer, T. (2019), “Shifting to Visual Teaching”, Topic presented at the International Conference of Creativity, Thinking and Education, (University of St. Thomas in Minnesota).
- GHavifelen, S. and Rosdy, W. (2017). Teaching and learning with Technology: Effectiveness of ICT Integration in Schools. International Journal of Research in Education and Science, 1 (2), p. 175.
- Halili, C.C. and Villajuan, G.S. (2021), Implementation of modular approach in teaching and learning: basis for program enhancement, Retrieved on 7/23/2022 at <https://zessjournal.com>>... PDF
- Ibyatova, I., Rakova, E., and Oparina K. (2018), Modular approach to teaching and learning english grammar in technical universities, Semara State Technical University, Retrieved on 7/23/2022 at <http://www.researchgate.net>>73253-
- Isave, S.G. (2018). Technology in Education, New Jersey, (Prentice-Hall, Inc.).
- Janitor, Joseph, et al. (2020), “Visual learning tools for teaching and learning computer networks”, Paper presented at the 6th International Conference at Networking and Service.
- Jorge, C.M., Guterrez, E.R., and Diaz, M.B. (2018). Use of icts and the perception on e-learning among university students. Interactive Educational Multimedia, (7), p. 13.
- Kraft, M.A. and Dougherty, S.M. (2017), The effect of teacher-family communication on student engagement, Harvard Graduate School of Education, Retrieved on 7/23/2022 at <https://scholar.harvard.edu>>...
- Lapuz (2020). Delights and Difficulties Multi-Grade Teachers in Rural Schools. Retrieved from www.erppublication.org
- Little, A. (2005). Multi-grade teaching: A review of research and practice. Education Research Paper, (12)63. <https://files.eric.ed.gov/fulltext/EJ1245296.pdf>
- Little, A. (2006). Education for all and multigrade teaching: Challenges and opportunities. Springer Science & Business Media.
- Llego, Mark Anthony (2021), DepEd RPMS Tools for SY 2021 – 2022, Retrieved on 8/17/2022 at <https://www.teacherph.com>>downl...
- Mathayo, M. (2017), Teachers’ experience on the use of ict to facilitate teaching: a case of ilala district secondary schools, university of tanzania, Retrieved on 7/23/2022 at <https://core.ac.uk>> PDF.
- Membreve, L. (2017). Challenges and adaptability of new teachers in multigrade classrooms in the Philippines. Philippine Journal of Teacher Education, 2(1), 45-59.
- Membreve, Daria C. (2017), The life of Teachers in a Multigrade Class, Retrieved on 7/23/2022 at <https://www.teacherph.com>>lfe-tea-...
- Merlo, Andrea (2022), How Teachers can improve their performance in class, Retrieved on 7/23/2022 at <https://www.teachersacademy.ey>>blog
- Merriam-Webster (2015), Effect: Definition and Meaning, Retrieved on 7/23/2022 at <https://www.merriam-webster.com>>...
- Moriente, C.D. (2018), Teachers and parents need to work together for the best learning experience, Retrieved on 7/23/2022 at <https://www.researchgate.net>>article>view
- Mulaudzi (2016). Challenges experienced by teachers of multi-grade classes in primary schools at nzhelele east circuit. Retrieved from https://www.researchgate.net/publication/345728836_Opportunities_and_Challenges_in_Multigrade_Teaching_Using_Direct_and_Indirect_Teaching_Methods_with_Zurashi_and_Watari_Approaches_in_the_Philippines_Kagay_Anon_RIA_Schools_Experiences/link/5fabf3ab92851cf7dd0e08c9/download
- Munyengabe, S., Yiyi, Z. and Hitimana, S. (2017). Primary teachers’ perception on ict integration for enhancing teaching and learning through the implementation of one laptop per child (olpc) program in primary schools of kwanda, beijing institute of technology, China, Retrieved on 7/23/2022 at <https://www.ejmste.com>>pri-... PDF
- Naparan, Genesis B. and Alinsug, Vivian G. (2021), Classroom strategies for multigrade students, st. columbian college, zamboanga del sur, Retrieved on 7/23/2022 at <https://www.sciencedirect.com>>pi
- Opila, J. (2019). Role of visualization in a knowledge transfer process, Business Systems Research Journal, 10 (1), p. 164.

- Perrs, C. (2017), Effective parent-teacher relationships: consideration for educators, Retrieved on 7/23/2022 at <https://www.idatchool.ca/effective...>
- PhilAtlas (2021) Gandara, Samar Profile, Retrieved on 8/17/2022 at <https://www.phiatlas.com/Visayas>
- Punzalan, Twila G. (2016), Statistics: A Simplified Approach, Revised Edition (Manila: Rex Bookstore, Inc.)
- Quizalize, (2018), Effective teaching strategies for the classroom, Retrieved on 7/23/2022 at <https://www.quizalize.com/blog/t...>
- RA 9155 (2001), "Governance of Basic Education Act," Retrieved on 8/17/2022 at www.official.gazette.gov.ph
- Rodriguez, M. (2018), Effects of teaching strategies on student success, persistence, and achievement, Retrieved on 7/23/2022 at <https://files.eric.ed.gov/fullt...>
- Sampson, C. (2016). One teacher's experiences of teaching reading in an urban multi-grade foundation phase class: Perspectives in Education. Retrieved from <https://bit.ly/3oxynl>
- Selanio, Perla B. (2020) Modular Teaching and learning: guidebook for implementation, (Quezon City: Rex Publishing House).
- Shatri, K. and Buza, K. (2017). The use of visualization in teaching and learning process for developing critical thinking of students, University of Prishtina, Retrieved on 7/23/2022 at <https://journal.euser.org/view...> PDF
- Sheridan, Susan, L.M. (2018), Establishing healthy parent-teacher relationship for early learning success, Retrieved on 7/23/2022 at <https://earlylearningnetwork.com.edu>
- Sternstien, Martin (2017), Barron's AP Statistics, (New York: Barron's Educational Series).
- Taneja, R. (2019), Dictionary of Education, (New Delhi: Ammol Publications).
- Taylor, E.S. (2016), What is teacher performance?. Retrieved on 7/23/2022 at scholar.harvard.edu PDF
- Thieman, Gayle Y. (2017), Using technology as a tool for learning and developing 21st citizenship skills: an examination of the nets and technology use by pre-service teachers with their k-12 students, portland state university, Retrieved on 7/23/2022 at <https://citjournal.org/social-studies>
- Valencia, Marsha, R. (2020), Modular approach in teaching science 10, Retrieved on 7/23/2022 at <https://www.ijtsrd.com/papers...> PDF
- Valentine, J. (2019). Developing a strong parent-teacher relationship: Impact on students' academic performance. Retrieved from <https://bit.ly/3oxynl>
- Van Der Wal, L. (2020). Parent-teacher relationships and the effect on student success, Northwestern College, Retrieved on 7/23/2022 at <https://nwcommons.nwciowa.edu> PDF
- Van Der Wal, T. (2020). Parent-Teacher Relationships and the Effect on Student Success. Retrieved from <https://bit.ly/3oxynl>
- Vicente, R. (2016). Introduction: Multigrade School Education, Retrieved on 7/23/2022 at <https://www.ea.gme/meth-introduction>