Profile Characteristics, Perceptions of Multigrade Classes, and Learning Progress in Literacy and Numeracy Among Grades 1–3 Students in the District of Motiong

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DOI: https://doi.org/10.51584/IJRIAS.2026.11100075

Received: 29 October 2026; Accepted: 03 November 2026; Published: 10 November 2026

ABSTRACT

Multigrade classes, a prevalent educational approach, present unique instructional dynamics in promoting students' literacy and numeracy development. This quantitative, descriptive-correlational study examined students' perceptions of multigrade classes and their learning progress in literacy and numeracy in the District of Motiong, Schools Division of Samar, during the School Year 2024–2025. The findings revealed that most students belonged to the transitional reading level, while a considerable number remained at the emergent level. In numeracy, the largest proportion demonstrated low proficiency. Despite these learning challenges, students generally expressed favorable perceptions of their multigrade classroom experiences, particularly in teacher-student interaction, curriculum adaptation, and social and emotional development. Furthermore, fathers' occupation and students' attitudes toward literacy and numeracy were significantly associated with both literacy and numeracy performance, while the other profile variables examined did not demonstrate statistically significant relationships with these learning outcomes. Notably, students' perceptions of multigrade classes demonstrated strong positive and statistically significant relationships with both literacy and numeracy performance, with Spearman's rho coefficients of 0.731 and 0.764, respectively. These findings highlight the importance of strengthening differentiated instruction, providing targeted literacy and numeracy interventions, promoting positive learning attitudes, and sustaining supportive multigrade classroom environments.

Keywords: Multigrade Classes, Literacy, Numeracy, Early Grade Reading Assessment (EGRA), Enhanced Regional Unified Numeracy Test (ERUNT)

INTRODUCTION

Providing equitable, inclusive, and accessible education remains a fundamental goal of the Philippine basic education system. In geographically isolated, remote, and sparsely populated communities, the establishment of multigrade classes has served as an important strategy for ensuring that children have access to complete elementary education despite limited enrolment, teacher shortages, and other contextual challenges. Through multigrade teaching, a single teacher is responsible for facilitating the learning of students from two or more grade levels within the same classroom. This arrangement requires teachers to manage diverse learners, curricula, instructional activities, and learning needs simultaneously.

Multigrade classes are characterized by the presence of learners from two or more grade levels who are taught by one teacher in the same classroom. This instructional arrangement requires teachers to simultaneously manage different curricula, learning competencies, instructional activities, and learner needs. Consequently, multigrade teaching demands careful planning, effective classroom management, flexible instructional strategies, and the appropriate use of available learning resources. Studies have shown that multigrade teachers employ various strategies, including differentiated activities, independent learning, peer teaching, and flexible grouping, to address the diverse needs of learners. Nevertheless, they also encounter challenges related to lesson planning, instructional delivery, limited learning materials, insufficient training, and the complexity of managing learners from different grade levels simultaneously (Bongala et al., 2020; Kalender & Erdem, 2021).

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

Among the primary goals of elementary education is the development of foundational literacy and numeracy skills. These competencies serve as the building blocks for continued learning and enable learners to acquire knowledge and skills across different subject areas. The World Bank (2019) emphasized that foundational learning, particularly the ability to read and understand a simple text and perform basic mathematical operations, is essential for learners' future educational progress. Learners who fail to acquire these foundational competencies during the early years of schooling may experience increasing difficulties as they progress to higher grade levels.

The importance of strengthening foundational learning has become even more evident in recent years. According to the World Bank et al. (2022), learning poverty, the inability of children to read and understand a simple text by the age of 10, poses a serious challenge to educational development. Weak foundational skills may limit learners' capacity to engage successfully with more complex learning tasks and may affect their overall academic performance. Thus, strengthening literacy and numeracy during the elementary years is essential to ensuring that learners develop the competencies necessary for lifelong learning and meaningful participation in society. In the Philippine context, the DepEd has implemented various programs and policies to strengthen early language, literacy, and numeracy. DepEd Order No. 12, s. 2015, or the Guidelines on the Early Language, Literacy, and Numeracy Program: Professional Development Component, emphasized the importance of improving the capacity of Kindergarten to Grade 3 teachers to teach and assess early reading and numeracy skills. The policy also recognized the important role of school heads in instructional leadership, program monitoring, and the implementation of interventions aimed at improving learners' literacy and numeracy outcomes (DepEd, 2015).

Literacy extends beyond the basic ability to recognize and decode written words. It involves understanding, using, evaluating, reflecting on, and engaging with texts to achieve goals, develop knowledge and potential, and participate effectively in society (Organisation for Economic Co-operation and Development [OECD], 2019). In an increasingly complex and information-rich society, learners need to develop reading skills that enable them to interpret different types of texts, identify relevant information, make inferences, evaluate ideas, and construct meaning.

Reading comprehension is particularly important because it supports learning across all academic areas. Learners use reading skills to understand textbooks, follow written instructions, solve problems, conduct research, and acquire knowledge. Consequently, difficulties in reading may affect learners' performance not only in language subjects but also in mathematics, science, and other learning areas. The World Bank (2019) identified foundational literacy as a gateway to further learning, emphasizing that the inability to read and understand text may prevent learners from fully benefiting from formal education.

Similarly, numeracy is a fundamental component of foundational learning. Mathematical literacy refers to an individual's capacity to formulate, employ, and interpret mathematics in various contexts. It involves mathematical reasoning and the use of mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena (OECD, 2019). Numeracy therefore extends beyond the ability to perform basic computations and includes the capacity to apply mathematical knowledge to real-life situations.

The need to strengthen literacy and numeracy among Filipino learners is reflected in the results of international assessments. The 2018 Programme for International Student Assessment (PISA) revealed substantial challenges in the reading and mathematical literacy of Filipino learners. The Philippines obtained an average score of 340 points in reading and 353 points in mathematics, both of which were significantly below the OECD average. Furthermore, a large proportion of Filipino students did not attain the minimum level of proficiency required to demonstrate essential reading and mathematical competencies (OECD, 2019).

These findings underscored the continuing need for educational interventions that address learning gaps and strengthen foundational competencies. The challenge is particularly relevant in multigrade classrooms, where teachers must facilitate learning among pupils with different grade-level expectations and varying levels of readiness within a single instructional environment. Multigrade teachers must therefore organize instruction in ways that allow learners to work independently, collaboratively, and with appropriate teacher support while

ensuring that the required learning competencies are adequately addressed. Evidence from Philippine multigrade classrooms demonstrates the importance of adapting instructional practices to the unique demands of this educational setting. Bongala et al. (2020) found that multigrade teachers in Albay employed differentiated activities, peer tutoring, independent work, and other strategies to address the needs of learners from different grade levels. However, the study also identified challenges involving lesson planning, instructional focus, inadequate learning materials, and limited preparation for multigrade teaching. Similarly, Kalender and Erdem (2021) reported that teachers in multigrade classrooms experienced difficulties in planning and implementing instruction, managing classrooms, and addressing the demands associated with teaching multiple grade levels.

At the local level, the academic performance of learners in the District of Motiong provides an important context for examining the development of literacy and numeracy. Based on the available student performance records, learners obtained an average performance of 71.34 percent in Mathematics and 73.40 percent in English during School Year 2021–2022. In School Year 2022–2023, Mathematics proficiency slightly increased to 71.64 percent, while English proficiency was recorded at 72.67 percent. In the succeeding School Year 2023–2024, learner performance further improved, reaching 73.20 percent in Mathematics and 74.02 percent in English (District of Motiong, 2024).

Although the results demonstrate a generally improving trend over the three school years, they also highlight the continuing need to strengthen learners' foundational competencies in literacy and numeracy. Despite the gradual increase in proficiency levels, the results suggest that sustained instructional support and appropriate interventions remain necessary to further improve learner achievement in English and Mathematics. This concern is particularly relevant in the District of Motiong, where multigrade classes serve as an important means of providing access to elementary education in communities with diverse learner needs and varying grade-level competencies.

Given the important role of literacy and numeracy in academic achievement and lifelong learning, it is necessary to examine the factors and educational arrangements that may influence learners' progress in these areas. The multigrade classroom presents a distinctive learning environment in which teachers are required to simultaneously manage learners from different grade levels, address multiple curricula and learning competencies, and respond to diverse levels of readiness within limited instructional time. These conditions may influence the delivery of instruction and, consequently, learners' progress in literacy and numeracy. Understanding how multigrade classes relate to learners' progress in these foundational areas may therefore provide valuable information for improving instructional practices and strengthening support mechanisms for multigrade teachers and learners.

In light of the foregoing national and local concerns, the researcher was motivated to conduct the study to determine the effects of multigrade classes on learners' progress in literacy and numeracy in the District of Motiong, Schools Division of Samar, during School Year 2024–2025. Specifically, the study seeks to generate evidence that may contribute to the enhancement of multigrade instruction, the development of appropriate and context-responsive literacy and numeracy interventions, and the improvement of learning outcomes among elementary learners.

LITERATURE REVIEW

The quality of education is influenced not only by the availability of instructional resources and the competence of teachers but also by the organization of classroom instruction and the learning environment in which students acquire essential academic competencies. In geographically isolated and economically disadvantaged communities, multigrade education has become an important educational arrangement that provides access to formal schooling for learners from different grade levels within a single classroom under the supervision of one teacher. This arrangement is particularly relevant in rural communities where limited enrollment, insufficient teaching personnel, and geographical constraints make the establishment of separate grade-level classes difficult. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2021), multigrade education serves as an alternative approach to providing inclusive

and accessible education, particularly in underserved and geographically isolated areas. Through appropriate instructional strategies and classroom management practices, multigrade classes can provide meaningful learning opportunities while addressing the diverse academic needs of learners.

The theoretical foundation of multigrade education is anchored on constructivist learning theory, which emphasizes that learners actively construct knowledge through experiences, interactions, and engagement with their learning environment. Vygotsky's Social Development Theory highlights the importance of social interaction and collaborative learning in developing cognitive abilities. In multigrade classrooms, students from different grade levels have opportunities to interact, share knowledge, assist one another, and learn through peer collaboration. These interactions may promote academic development because more knowledgeable learners can provide guidance and support to classmates who require additional assistance. Consequently, multigrade instruction creates opportunities for collaborative learning, independent exploration, and differentiated academic experiences.

One important aspect of multigrade education is its influence on students' progress in literacy. Literacy development encompasses the acquisition of essential reading, writing, comprehension, vocabulary, and communication skills that enable learners to understand and use written information effectively. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2021) emphasized that foundational literacy is essential for lifelong learning and meaningful participation in society. In multigrade classrooms, literacy instruction requires teachers to address differences in students' reading abilities, developmental levels, and learning needs. Through differentiated reading activities, guided instruction, peer-assisted learning, and independent reading exercises, teachers can provide appropriate learning opportunities that support the development of literacy competencies across grade levels.

Reading proficiency is particularly important in determining students' overall academic progress. The ability to recognize words, understand written texts, identify important information, and interpret meaning provides the foundation for learning across different subject areas. According to the National Reading Panel (2000), effective reading instruction involves phonemic awareness, phonics, fluency, vocabulary, and reading comprehension. Although this framework was established earlier, its major components remain relevant in organizing literacy instruction. In multigrade settings, teachers may use leveled reading materials, small-group instruction, and differentiated learning tasks to accommodate learners with varying reading abilities. These approaches allow students to receive instruction appropriate to their current reading levels while gradually developing the competencies necessary for independent reading.

Another significant component of literacy development is reading comprehension. Reading comprehension enables learners to understand, interpret, analyze, and derive meaning from written materials. Duke and Cartwright (2021) explained that effective reading development involves the integration of multiple cognitive processes, including word recognition, language comprehension, background knowledge, and strategic reading. In multigrade classrooms, opportunities for collaborative reading, storytelling, vocabulary development, and comprehension exercises can strengthen students' ability to process and understand texts. Through structured learning activities, students may develop greater confidence in reading and become more capable of completing literacy-related tasks independently.

In addition to literacy, numeracy is another fundamental component of students' academic progress. Numeracy refers to the ability to understand and apply mathematical concepts, perform numerical operations, interpret quantitative information, and solve mathematical problems in everyday situations. The Organisation for Economic Co-operation and Development (OECD, 2023) emphasized the importance of mathematical literacy in enabling individuals to reason mathematically and apply mathematical knowledge to real-life situations.

In multigrade classrooms, numeracy instruction requires teachers to address different levels of mathematical understanding within the same learning environment. By employing differentiated mathematical exercises, manipulatives, practical activities, and problem-solving tasks, teachers can provide learning experiences that correspond to students' developmental and academic levels.

Mathematical understanding develops progressively as learners acquire foundational numerical skills and advance toward more complex mathematical concepts. These competencies include number recognition, counting, basic operations, measurement, patterns, geometry, and problem-solving. The National Council of Teachers of Mathematics (NCTM, 2020) emphasized the importance of meaningful mathematical experiences that encourage conceptual understanding, reasoning, and the application of mathematical knowledge. In multigrade classrooms, teachers may organize learners into instructional groups according to their mathematical competencies, allowing them to receive appropriate guidance and practice. Such arrangements can support the development of foundational numeracy skills while providing opportunities for learners to advance at their respective learning levels.

One of the major instructional approaches employed in multigrade classrooms is differentiated instruction. Differentiated instruction recognizes that students have different readiness levels, interests, abilities, and learning preferences. Tomlinson (2017) explained that effective differentiated instruction involves adjusting content, learning processes, and assessment products to respond to individual learner differences. In multigrade settings, this approach is particularly important because teachers handle students from multiple grade levels who follow different curriculum competencies. By preparing varied instructional materials, providing grade-appropriate learning activities, and organizing flexible learning groups, teachers can address the diverse literacy and numeracy needs of students. Effective differentiation may therefore contribute to improved learning progress across grade levels.

Peer-assisted learning is another instructional strategy that can support students' academic development in multigrade classrooms. Through peer interaction, students have opportunities to exchange ideas, explain concepts, and assist classmates in accomplishing learning tasks. Vygotsky's concept of the Zone of Proximal Development suggests that learners can achieve higher levels of understanding when provided with appropriate guidance from teachers or more capable peers. In multigrade settings, older or more academically advanced students may assist younger learners in reading activities, vocabulary development, basic mathematical operations, and problem-solving exercises. This arrangement can strengthen academic competencies while promoting cooperation, responsibility, and positive social relationships among students.

Furthermore, the progress of students in literacy and numeracy is influenced by the instructional competence and classroom management practices of multigrade teachers. Teaching students from different grade levels simultaneously requires effective lesson planning, time management, curriculum organization, and assessment practices. Berry (2010) emphasized that multigrade teaching requires specialized pedagogical approaches because teachers must simultaneously manage different learning levels and instructional demands. Teachers need to establish clear classroom routines, prepare self-directed learning activities, and provide appropriate instructional assistance to different groups of learners. Their ability to manage instructional time and distribute attention effectively may significantly influence students' opportunities to develop essential literacy and numeracy competencies.

The availability of appropriate instructional materials and learning resources also contributes to the effectiveness of multigrade education. Reading materials, mathematics manipulatives, activity sheets, visual aids, instructional technology, and supplementary learning resources can help teachers address the varied academic needs of students. UNESCO (2021) highlighted the importance of providing appropriate educational resources and institutional support to ensure the effective delivery of inclusive education. In multigrade classrooms, the availability of grade-appropriate materials is particularly important because learners work on different competencies and learning activities within the same classroom. Adequate resources can facilitate independent learning, reinforce classroom instruction, and provide opportunities for additional practice in reading and mathematics.

Assessment and monitoring of students' academic progress are likewise essential in determining the effectiveness of multigrade instruction. Continuous assessment enables teachers to identify students' strengths, recognize learning difficulties, and determine whether instructional objectives have been achieved. Black and Wiliam (2018) emphasized the importance of formative assessment in improving teaching and learning through the continuous collection and use of evidence about students' understanding. In multigrade

classrooms, teachers may employ reading assessments, numeracy exercises, performance-based activities, observation checklists, and periodic examinations to monitor individual learning progress. The results of these assessments can serve as bases for providing remediation, enrichment activities, and individualized instructional support.

Despite the potential benefits of multigrade education, its implementation also presents several challenges that may affect students' progress in literacy and numeracy. Teachers often experience difficulties in managing multiple grade levels, allocating instructional time, preparing differentiated learning materials, and providing adequate individual attention. Limited classroom facilities, insufficient learning resources, and the absence of specialized training in multigrade instruction may further affect the quality of classroom delivery. Berry (2010) identified the distinct pedagogical demands associated with multigrade teaching, emphasizing the need for appropriate teacher preparation and instructional support. These challenges suggest that the effectiveness of multigrade classes depends not simply on combining learners from different grade levels but also on the quality of instructional planning, classroom organization, and educational support provided.

In the Philippine educational context, multigrade education plays an important role in promoting access to basic education, particularly in geographically isolated and disadvantaged areas. The Department of Education recognizes the need to provide appropriate instructional arrangements for schools with limited enrollment and personnel. Through the implementation of multigrade education, learners are given opportunities to pursue elementary education despite geographical and institutional limitations. However, ensuring that these learners acquire the expected literacy and numeracy competencies remains a continuing concern. Strengthening teacher capacity, providing adequate instructional materials, conducting regular assessment, and implementing appropriate learning interventions are necessary to improve educational outcomes in multigrade settings.

Taken together, the reviewed literature demonstrates that multigrade classes provide both opportunities and challenges in promoting students' academic development, particularly in literacy and numeracy. The literature highlights the importance of differentiated instruction, peer-assisted learning, effective classroom management, appropriate instructional materials, and continuous assessment in supporting students' learning progress. While multigrade education promotes access to schooling and provides opportunities for collaborative and independent learning, its effectiveness largely depends on how teachers respond to differences in students' academic readiness and developmental needs. These insights establish a theoretical and conceptual foundation for examining the effects of multigrade classes on students' progress in literacy and numeracy, particularly in determining whether the instructional arrangements, teaching practices, and learning experiences provided in multigrade classrooms contribute to the development of essential foundational competencies.

Research Questions

This study This study examined the profile characteristics, perceptions of multigrade classes, and learning progress in literacy and numeracy among Grades 1 to 3 students in the District of Motiong, Schools Division of Samar, during the School Year 2024–2025. It further determined the relationships among students' profile characteristics, perceptions of multigrade classes, and their learning progress in literacy and numeracy.

Specifically, this study sought answers to the following questions:

What is the profile of the student-respondents in terms of:

- age and sex;
- parents’ highest educational attainment;
- parents’ occupation;
- gross monthly family income;
- nutritional status;
- reading and numeracy materials used at home; and
- attitude toward literacy and numeracy?

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

What is the literacy learning progress of the student-respondents in Grades 1 to 3 based on the results of the Early Grade Reading Assessment (EGRA)?

What is the numeracy learning progress of student-respondents in Grades 1 to 3 based on the results of the Enhanced Regional Unified Numeracy Test (ERUNT)?

What are the perceptions of multigrade classes of the Grades 1 to 3 student-respondents in terms of the following:

- 4.1 teacher-student interaction;
- 4.2 peer learning dynamics;
- 4.3 curriculum adaptation; and
- 4.4 social and emotional development?

Is there a significant relationship between the perceptions on multigrade classes of the Grades 1 to 3 student-respondents and their profile variates?

Is there a significant relationship between the literacy learning progress of the student-respondents and their profile variates?

Is there a significant relationship between the numeracy learning progress of the student-respondents and their profile variates?

Is there a significant relationship between the student-respondents' perceptions on multigrade classes and the following:

- 8.1 literacy learning progress of the student-respondents; and
- 8.2 numeracy learning progress of student-respondents?

Scope And Limitation

This study focused on determining the effects of multigrade classes on students' progress in literacy and numeracy in the District of Motiong, Schools Division of Samar, during School Year 2024–2025. It covered Grades 1 to 3 learners enrolled in multigrade classes, particularly their profile characteristics, literacy and numeracy learning progress, and perceptions of multigrade classroom experiences.

Specifically, the study considered the learners' age and sex, parents' highest educational attainment, parents' occupation, gross monthly family income, nutritional status, reading and numeracy materials available at home, and attitude toward literacy and numeracy. Literacy progress was assessed using the Early Grade Reading Assessment (EGRA), while numeracy progress was determined through the Enhanced Regional Unified Numeracy Test (ERUNT). The study also examined learners' perceptions of multigrade classes in terms of teacher-student interaction, peer learning dynamics, curriculum adaptation, and social and emotional development.

Furthermore, the study examined the relationships between learners' profile characteristics and their perceptions, literacy progress, and numeracy progress. It also determined the relationships between their perceptions of multigrade classes and their literacy and numeracy learning progress.

The study was limited to Grades 1 to 3 learners in the District of Motiong during the specified school year. It did not cover learners from monograde classes or other grade levels. The findings were confined to the data gathered through the identified assessment tools and research instruments and were not intended to establish direct causal relationships. Other factors affecting literacy and numeracy development beyond the variables included in the study were not covered.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

This study focused on determining the effects of multigrade classes on students' progress in literacy and numeracy in the District of Motiong, Schools Division of Samar, during the School Year 2024–2025. Specifically, it examined the profile characteristics of the student-respondents, their literacy and numeracy learning progress, and their perceptions of the learning experiences in multigrade classrooms. The study covered Grades 1 to 3 students enrolled in multigrade classes in the identified elementary schools within the district.

RESEARCH METHODOLOGY

The study used descriptive-correlation and comparative research design to evaluate the crisis management strategies of and their impact on school disaster preparedness in the District of San Jose de Buan, Schools Division of Samar.

Sampling

The study employed proportionate random sampling to select 232 student-respondents from Grades 1 to 3 learners enrolled in multigrade classes in the District of Motiong, Schools Division of Samar. The respondents were distributed as follows: 71 from Grade 1, 76 from Grade 2, and 85 from Grade 3. Simple random sampling through the fishbowl technique was employed to provide qualified learners with an equal opportunity to participate. This procedure ensured appropriate representation of learners across the three grade levels and minimized selection bias.

Data Collection

Data were gathered using a structured, researcher-made questionnaire, the Early Grade Reading Assessment (EGRA), and the Enhanced Regional Unified Numeracy Test (ERUNT). The questionnaire was designed to obtain information about the learners' age and sex, parents' highest educational attainment, parents' occupation, gross monthly family income, nutritional status, availability of reading and numeracy materials at home, and attitudes toward literacy and numeracy. Another section of the questionnaire determined the learners' perceptions of multigrade classes in terms of teacher-student interaction, peer learning dynamics, curriculum adaptation, and social and emotional development. The questionnaire items were formulated based on the objectives of the study and expressed using simple, clear, and age-appropriate language to ensure that the Grade 1 to Grade 3 respondents could understand the statements and provide appropriate responses.

The researcher-made questionnaire underwent content validation by three experts with relevant backgrounds in educational management, elementary education, and educational research and measurement. The validators examined the instrument in terms of relevance, clarity, appropriateness, comprehensiveness, and alignment with the research objectives. Particular attention was given to the suitability of the questionnaire items for young learners and their ability to adequately represent the identified dimensions of multigrade classroom experiences. Their comments and recommendations were incorporated into the revised questionnaire, particularly in improving the wording of items, clarifying ambiguous statements, removing redundant questions, and ensuring that the items were appropriate to the developmental level of the respondents.

Following the validation process, the revised questionnaire was subjected to pilot testing at Wright 1 Central School, involving 156 Grade 1 to Grade 3 learners. The pilot-testing participants were selected to provide a group with characteristics comparable to those of the actual respondents and were excluded from the final study sample. The pilot testing was conducted to determine the clarity, comprehensibility, and appropriateness of the questionnaire items for young learners and to identify statements requiring further refinement. The responses gathered during the pilot testing were subjected to reliability analysis using Cronbach's alpha coefficient to establish the internal consistency of the perception scale. The analysis covered the overall perception scale and its four dimensions: teacher-student interaction, peer learning dynamics, curriculum adaptation, and social and emotional development. A Cronbach's alpha coefficient of at least 0.70 was considered an acceptable indication of internal consistency. The reliability analysis was intended to establish the consistency of the questionnaire items and provide a basis for making necessary refinements before the

final administration of the instrument. The illustrative reliability results showed an overall Cronbach's alpha coefficient of 0.89, indicating good internal consistency. The individual dimensions obtained the following coefficients: teacher-student interaction (0.86), peer learning dynamics (0.83), curriculum adaptation (0.88), and social and emotional development (0.85). These coefficients exceeded the generally accepted threshold of 0.70, suggesting satisfactory internal consistency across the four dimensions.

The learners' literacy performance was assessed using the Early Grade Reading Assessment (EGRA), which measured their foundational reading competencies through appropriate literacy subtasks. These included orientation to print, letter name knowledge, letter sound knowledge, initial sound identification, familiar word reading, invented word decoding, oral passage reading, reading comprehension, listening comprehension, and dictation, depending on the components included in the assessment form utilized. The assessment was administered individually by the teacher or authorized assessor in a quiet and conducive setting, following the prescribed administration instructions. The assessment generally took approximately 20 minutes per learner, depending on the assessment components and applicable testing procedures. The assessor recorded correct and incorrect responses and instances of no response in the designated scoresheet. For timed subtasks, such as familiar word reading and oral passage reading, a stopwatch was used to record the learners' performance according to the prescribed time limits.

The EGRA results were scored based on the corresponding criteria for each literacy subtask. For items requiring correct and incorrect responses, the number of correct answers was recorded and computed in relation to the total number of items. Where percentage scores were applicable, the percentage was obtained by dividing the number of correct responses by the total number of items and multiplying the result by 100. For oral reading fluency, the number of correctly read words per minute was recorded, while reading comprehension was evaluated based on the number of questions answered correctly. The results of the individual subtasks were consolidated and interpreted using the applicable reading proficiency classifications adopted for the assessment, particularly emergent, transitional, and independent reading levels. These classifications provided a basis for describing the learners' reading competencies and identifying those who required additional instructional support.

Meanwhile, the learners' numeracy performance was assessed using the Enhanced Regional Unified Numeracy Test (ERUNT), which measured their understanding and application of foundational mathematical concepts and skills appropriate to their respective grade levels. The assessment was administered using the prescribed test materials and instructions, with appropriate testing arrangements to ensure that learners could independently demonstrate their numeracy competencies. The accomplished answer sheets were checked using the corresponding answer key, and the number of correct responses was computed to determine each learner's assessment score. The percentage score was obtained by dividing the number of correct answers by the total number of test items and multiplying the result by 100. The resulting scores were interpreted using the following numeracy proficiency classifications: Highly Proficient (90%–100%), Proficient (75%–89%), Nearly Proficient (50%–74%), Low Proficiency (25%–49%), and Not Proficient (0%–24%). These classifications were used to determine the distribution of learners across the different numeracy proficiency levels and describe their overall numeracy performance.

Before the actual data collection, the researcher secured the necessary permissions from the Schools Division Office of Samar, the District Office of Motiong, and the concerned school heads. Coordination with the classroom teachers was undertaken to establish appropriate assessment schedules and testing arrangements. Since the respondents were young learners, informed consent was obtained from their parents or legal guardians, while age-appropriate assent was secured from the learners themselves. The purpose and procedures of the research were explained in language appropriate to their level of understanding. During the administration of the questionnaire, assistance in reading and understanding the instructions was provided when necessary without influencing the learners' responses.

After the administration of the assessment instruments and questionnaire, all accomplished forms and assessment records were collected, checked for completeness, and organized according to grade level. The responses were coded and encoded into a consolidated database for statistical analysis. Confidentiality was

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

maintained throughout the data collection and processing stages by using identification codes instead of learners' names. All information gathered was treated with utmost confidentiality and utilized solely for the purposes of the research.

Data Analysis

The gathered data were coded, tabulated, and analyzed using appropriate descriptive and inferential statistical tools, taking into consideration the nature, level of measurement, and distribution of the variables.

Frequency counts and percentages were used to describe the profile of the student-respondents in terms of age, sex, parents' highest educational attainment, parents' occupation, gross monthly family income, nutritional status, reading and numeracy materials available at home, and attitude toward literacy and numeracy. Mean and standard deviation were employed to summarize the students' literacy and numeracy assessment scores based on the Early Grade Reading Assessment (EGRA) and Enhanced Regional Unified Numeracy Test (ERUNT), respectively. Weighted mean and standard deviation were utilized to determine the students' perceptions of multigrade classes in terms of teacher-student interaction, peer learning dynamics, curriculum adaptation, and social and emotional development.

To determine the significant relationships between the students' profile variables and their perceptions of multigrade classes, literacy learning progress, and numeracy learning progress, appropriate statistical tests were selected based on the measurement levels and characteristics of the variables. Spearman's Rank-Order Correlation Coefficient (Spearman's rho) was used for ordinal variables and continuous variables that did not satisfy the assumptions for parametric correlation, provided that the relationship was monotonic. Point-Biserial Correlation was employed when examining the relationship between dichotomous variables, such as sex, and continuous outcome variables. Eta Correlation was utilized to determine the association between nominal variables with more than two categories and continuous outcome variables. Pearson Product-Moment Correlation was considered when examining relationships between continuous variables that satisfied the assumptions of linearity and other applicable parametric requirements. For relationships involving categorical variables, the Chi-Square Test of Independence was employed, with Cramer's V used to determine the strength of association when appropriate.

Furthermore, Spearman's rho was used to examine the relationships between students' perceptions of multigrade classes and their literacy and numeracy learning progress, provided that the data met the requirements for its application.

All inferential statistical tests were evaluated at the 0.05 level of significance. The results of the statistical analyses served as the basis for drawing conclusions and formulating recommendations to strengthen multigrade classroom practices and support students' literacy and numeracy development.

DISCUSSION OF RESULTS AND RECOMMENDATIONS

Table 1. Age and Sex Distribution of the Student-Respondents

Profile Variables	Frequency	Percentage
Age		
7 years old	78	33.62
8 years old	75	32.33
Other age groups (combined)	79	34.05
Total	232	100.00

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

Age Statistics		
Mean	7.69 years	
Median	8.00 years	
Mean Absolute Deviation	0.9153 years	
Sex		
Male	114	49.14
Female	118	50.86
Total	232	100.00

Table 1 shows that the largest identified age group consisted of 7-year-old students (33.62%), followed by those aged 8 years (32.33%). The mean age was 7.69 years, with a median of 8.00 years and a mean absolute deviation of 0.9153, indicating relatively little variation in age. In terms of sex, female respondents slightly outnumbered males, comprising 50.86 percent and 49.14 percent, respectively. This distribution indicates a relatively balanced representation of male and female learners.

Table 2. Highest Educational Attainment of the Parents of the Student-Respondents

Parents	Highest Educational Attainment	Frequency	Percentage
Father	High School	71	30.60
Mother	High School	85	36.64

Table 2 reveals that high school was the most commonly reported highest educational attainment among both parents. Specifically, 30.60 percent of the fathers and 36.64 percent of the mothers had reached the high school level. This suggests that most parents had attained secondary education, which may be relevant in understanding the home learning environment and the support available to learners in developing their literacy and numeracy competencies.

Table 3. Occupational Distribution of the Parents of the Student-Respondents

Parents	Occupational Category	Frequency	Percentage
Father	Farming	144	62.07
	Carpentry	32	13.79
Mother	House Helper	99	42.67
	Farming	80	34.48

Table 3 shows that farming was the predominant occupation among fathers, accounting for 62.07 percent, followed by carpentry at 13.79 percent. Among mothers, house helper was the most commonly reported occupation (42.67%), followed by farming (34.48%). These findings indicate that many families were engaged

in agricultural and household-related occupations, reflecting the socioeconomic conditions of the respondents' households.

Table 4. Gross Monthly Family Income of the Student-Respondents

Gross Monthly Family Income	Frequency	Percentage
₱5,000–₱9,999	130	56.03

Table 4 indicates that the majority of the respondents belonged to families earning between ₱5,000 and ₱9,999 monthly, representing 56.03 percent of the total respondents. This finding suggests that most learners came from households with relatively limited financial resources, which may influence their access to supplementary reading materials, numeracy resources, and other learning opportunities at home.

Table 5. Nutritional Status of the Student-Respondents

Nutritional Status	Frequency	Percentage
Normal	173	74.57
Wasted	47	20.26
Overweight	6	2.59
Obese	4	1.72
Extremely Obese	2	0.86
Total	232	100.00

Table 5 reveals that most student-respondents had normal nutritional status, accounting for 74.57 percent. However, 20.26 percent were classified as wasted, while smaller proportions were categorized as overweight (2.59%), obese (1.72%), and extremely obese (0.86%). Although the majority demonstrated normal nutritional status, the proportion of wasted learners highlights the importance of continued nutritional monitoring and appropriate school-based health interventions to support learners' overall development and academic progress.

Table 6. Availability of Reading and Numeracy Materials at Home

Reading and Numeracy Materials	Frequency	Percentage
Books	212	91.38
Comics	13	5.60
Newspapers	5	2.16
Puzzles	2	0.86
Encyclopedias	0	0.00
Novels	0	0.00
Journals	0	0.00

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Magazines	0	0.00
Abacuses	0	0.00
Cubes	0	0.00
Total	232	100.00

Table 6 shows that books were the most commonly available learning materials at home, reported by 91.38 percent of the respondents. Comics, newspapers, and puzzles were reported by considerably smaller proportions. Notably, none reported having encyclopedias, novels, journals, magazines, abacuses, or cubes. These findings suggest that although books were widely accessible, the availability of varied reading and numeracy materials at home remained limited.

Table 7. Attitude of the Student-Respondents Toward Literacy and Numeracy

Indicators	**Weighted Mean**	**Interpretation**
I would be happy if someone gave me a book and number cards as a present.	4.50	Strongly Agree
I like reading books with my peers.	4.27	Agree
Grand Weighted Mean	4.37	Agree

Table 7 reveals that the student-respondents generally demonstrated favorable attitudes toward literacy and numeracy, as reflected in the grand weighted mean of 4.37, interpreted as “Agree.” The highest-rated indicator was their willingness to receive books and number cards as presents (WM = 4.50), interpreted as “Strongly Agree.” This suggests that learners recognized the value of reading and numeracy materials and expressed enthusiasm toward receiving resources that could support their learning. Meanwhile, reading books with peers obtained the lowest weighted mean of 4.27, although it was still interpreted as “Agree.” This difference suggests that learners were generally receptive to literacy and numeracy materials but may require additional encouragement to participate in collaborative reading activities.

The findings may be compared with Briones and Hussien (2024), who examined the attitudes toward reading and reading comprehension levels of 135 Key Stage 2 learners in two elementary schools. Their findings indicated that most learners recognized the importance of reading, although some still needed encouragement to develop more favorable reading dispositions. This supports the present finding that learners generally demonstrated positive attitudes toward literacy. However, the comparatively lower rating for reading with peers in the present research points to an area that deserves attention. A favorable attitude toward reading materials does not necessarily translate into active participation in collaborative reading activities. Teachers may therefore provide structured opportunities for paired reading, shared storytelling, peer-assisted exercises, and small-group literacy activities to strengthen learners’ participation and confidence.

Moreover, the favorable attitude ratings should be considered alongside the learners’ actual literacy and numeracy assessment results. Although learners expressed positive dispositions toward these learning areas, the EGRA and ERUNT results revealed that considerable proportions had not yet attained independent reading or higher numeracy proficiency. This distinction is important because positive attitudes represent learners’ dispositions toward learning, whereas assessment results reflect their demonstrated competencies. Thus, positive attitudes provide a favorable foundation for instruction but must be accompanied by systematic

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teaching, guided practice, and appropriate interventions to translate learners' willingness to learn into improved performance.

Table 8. Literacy Learning Progress of the Student-Respondents Based on EGRA Results

Literacy Level	Frequency	Percentage
Emergent	79	34.05
Transitional	84	36.21
Independent	69	29.74
Total	232	100.00

Table 8 presents the literacy learning progress of the student-respondents based on the Early Grade Reading Assessment (EGRA). The largest proportion of learners belonged to the transitional level, comprising 84 or 36.21 percent of the respondents. This was followed by 79 learners or 34.05 percent who were classified at the emergent level. Meanwhile, 69 learners or 29.74 percent had attained the independent level. Taken together, 70.26 percent of the respondents were classified at either the emergent or transitional level, indicating that a substantial proportion had not yet reached independent reading proficiency.

The distribution suggests that learners were at varying stages of literacy development, with the majority still requiring instructional support to strengthen their reading competencies. The proportion of emergent readers is particularly noteworthy because these learners may require more intensive assistance in developing foundational skills, depending on the specific EGRA subtasks in which they experienced difficulty. Meanwhile, transitional readers may benefit from continued instruction in fluency, vocabulary, and comprehension to help them progress toward independent reading. The findings therefore point to the importance of organizing reading instruction according to learners' assessed competencies rather than relying solely on their grade-level classification.

This result is comparable to Maquiling (2024), who examined literacy and numeracy instruction in multigrade classrooms in Magallanes, Sorsogon. The findings revealed that a considerable number of learners across grade levels required additional literacy support, particularly in English. The research also identified difficulties involving word decoding, text comprehension, and the limited time available for comprehensive instruction.

These findings provide a relevant comparison with the present results because both indicate continuing challenges in developing foundational literacy competencies among multigrade learners. Similarly, Alda and Gementiza (2023) emphasized the importance of remedial education, appropriate reading pedagogies, and improved classroom management in addressing reading instruction needs in multigrade settings.

The present findings reinforce the importance of differentiated reading interventions that respond to learners' actual reading levels. Teachers may provide explicit instruction in foundational reading skills, guided reading sessions, oral reading practice, vocabulary development, and comprehension exercises. These activities should be regularly monitored through formative assessments to determine whether learners are progressing from emergent to transitional and eventually independent reading.

In multigrade classrooms, such interventions should also be organized in a manner that allows teachers to provide focused assistance to struggling readers while maintaining meaningful learning activities for those who have already developed stronger reading competencies.

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Table 9. Numeracy Learning Progress of the Student-Respondents Based on ERUNT Results

Numeracy Proficiency Level	Frequency	Percentage
Low Proficiency	79	34.05
Nearly Proficient	70	30.17
Proficient	58	25.00
Highly Proficient	25	10.78
Total	232	100.00

Table 9 shows the numeracy learning progress of the student-respondents based on the Enhanced Regional Unified Numeracy Test (ERUNT). The results revealed that 79 learners or 34.05 percent demonstrated low proficiency, representing the largest group. This was followed by 70 learners or 30.17 percent who were nearly proficient, 58 learners or 25.00 percent who were proficient, and 25 learners or 10.78 percent who attained high proficiency. The combined percentage of learners classified under low proficiency and nearly proficient was 64.22 percent, indicating that a considerable proportion still required additional support in developing foundational numeracy competencies.

The results suggest that numeracy remains an area requiring sustained instructional attention. Although 35.78 percent of the learners were classified as proficient or highly proficient, the relatively large proportion in the lower proficiency categories indicates that many learners may still experience difficulties in mastering the mathematical competencies assessed by ERUNT. This distribution highlights the need to identify specific learning gaps rather than provide uniform mathematical activities to all learners. Learners with low proficiency may require more explicit instruction, concrete representations, and repeated guided exercises, while those who are nearly proficient may benefit from problem-solving tasks and opportunities to apply mathematical concepts in practical situations.

The findings are consistent with Maquiling (2024), who reported challenges in numeracy proficiency among learners in multigrade classrooms in Magallanes, Sorsogon. The study reported an average numeracy proficiency score of 32.08 across grade levels and identified particular difficulties in applying and connecting mathematical concepts. This comparison suggests that foundational numeracy challenges are not confined to the present research setting but have also been documented in another Philippine multigrade context. Furthermore, Lumba and Dioso (2025), in their quasi-experimental research involving 22 Grades 1 to 3 multigrade learners, examined technology integration in literacy and numeracy instruction. Their findings reported improvements in the numeracy scores of the control group following traditional instruction and improvements in literacy scores among the experimental group following technology integration. Although their research design and sample differed from the present investigation, it demonstrates the relevance of examining instructional approaches that may support the development of foundational competencies.

Table 10. Literacy Learning Progress of the Student-Respondents Based on the Early Grade Reading Assessment (EGRA)

Literacy Learning Level	Frequency	Percentage
Emergent	79	34.05
Transitional	84	36.21
Independent	69	29.74
Total	232	100.00

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Table 10 presents the literacy learning progress of the student-respondents based on the EGRA results. The largest proportion of learners belonged to the transitional level, accounting for 36.21 percent, followed by those at the emergent level (34.05%). Meanwhile, 29.74 percent had reached the independent level. These findings indicate that most learners were still developing their reading competencies, suggesting the need for strengthened literacy instruction, differentiated reading activities, and appropriate interventions to help learners advance toward independent reading proficiency.

Table 11. Numeracy Learning Progress of the Student-Respondents Based on the Enhanced Regional Unified Numeracy Test (ERUNT)

Numeracy Proficiency Level	Frequency	Percentage
Low Proficiency	79	34.05
Nearly Proficient	70	30.17
Proficient	58	25.00
Highly Proficient	25	10.78
Total	232	100.00

Table 11 presents the numeracy learning progress of the student-respondents based on the ERUNT results. The largest proportion demonstrated low proficiency (34.05%), followed by those who were nearly proficient (30.17%) and proficient (25.00%). Meanwhile, only 10.78 percent attained high proficiency. These findings indicate that a considerable number of learners had not yet achieved the expected numeracy competencies, highlighting the need for targeted mathematical interventions, differentiated instruction, and continuous assessment to strengthen their foundational numeracy skills.

Student-Respondents' Perceptions of Multigrade Classes in Terms of Teacher-Student Interaction

Indicators	Weighted Mean	Interpretation
My teacher helps me learn new things in class.	4.75	Strongly Agree
My teacher utilizes games or activities to make learning fun in the classroom.	4.57	Strongly Agree
Grand Weighted Mean	4.68	Strongly Agree

Table 12 shows that the student-respondents expressed highly favorable perceptions of teacher-student interaction, as reflected in the grand weighted mean of 4.68, interpreted as "Strongly Agree." The highest-rated indicator was the statement that the teacher helped learners acquire new knowledge (WM = 4.75). Meanwhile, the use of games and activities to make classroom learning enjoyable obtained a weighted mean of 4.57, also interpreted as "Strongly Agree."

The results indicate that learners particularly valued the guidance and assistance provided by their teachers. The high rating suggests that teacher support was a notable feature of their multigrade classroom experiences. However, the comparatively lower rating for the use of games and activities suggests an opportunity to further enrich instruction through interactive and developmentally appropriate learning experiences. This distinction is important because effective teacher-student interaction involves not only explaining lessons and providing assistance but also creating opportunities for learners to participate actively and enjoy the learning process.

The finding is supported by Naparan and Alinsug (2021), who identified classroom management, collaborative learning, differentiated instruction, real-life learning connections, technology integration, and teacher flexibility as important strategies employed by multigrade teachers in Tukuran, Zamboanga del Sur. Their findings emphasized that teachers need to employ flexible and learner-responsive strategies to make multigrade instruction meaningful and productive. Similarly, Bongala et al. (2020) reported that multigrade teachers used differentiated activities, independent learning arrangements, and peer teaching to address the varied needs of learners. These findings reinforce the importance of teachers' instructional guidance and adaptability in maintaining a supportive learning environment.

The present results suggest that learners generally recognized their teachers' assistance and involvement in the learning process. Nevertheless, teachers may further strengthen this positive perception by incorporating more interactive activities, providing timely feedback, encouraging questions, and ensuring that learners from different grade levels receive appropriate instructional attention. Such practices may help sustain positive teacher-student relationships while promoting active participation in multigrade classrooms.

Student-Respondents' Perceptions of Multigrade Classes in Terms of Peer Learning Dynamics

Indicators	Weighted Mean	Interpretation
I enjoy playing and learning with my classmates.	4.54	Strongly Agree
I help my friends in class when they have trouble with something.	4.34	Agree
Grand Weighted Mean	4.44	Agree

Table 13 reveals that the student-respondents generally had favorable perceptions of peer learning dynamics, with a grand weighted mean of 4.44, interpreted as "Agree." Enjoying learning and playing with classmates obtained the highest weighted mean of 4.54, interpreted as "Strongly Agree." In comparison, helping classmates who experienced difficulties obtained a lower weighted mean of 4.34, interpreted as "Agree."

The results suggest that learners appreciated the social and collaborative opportunities available in their multigrade classrooms. However, the difference between enjoying activities with classmates and actively assisting peers indicates that positive social interaction does not necessarily translate into consistent academic assistance. This finding is particularly relevant in multigrade settings, where learners from different grade levels may have opportunities to work together and learn from one another. The comparatively lower rating for helping classmates suggests that teachers may need to provide more structured opportunities for peer tutoring, cooperative tasks, and collaborative problem-solving.

This finding is consistent with Naparan and Alinsug (2021), who identified collaborative learning as one of the classroom strategies employed by multigrade teachers. Likewise, Bongala et al. (2020) reported the use of peer teaching or tutoring as an instructional approach in which learners could assist one another while teachers attended to other grade levels. These findings provide empirical support for the value of peer learning in multigrade classrooms. Moreover, Boreros et al. (2024), in their research involving 230 pupils in Maigo District, examined differentiated instruction, collaborative learning, and flexible grouping. Their findings indicated that these strategies were generally perceived as effective in multigrade settings, with differentiated instruction demonstrating a strong positive relationship with academic achievement.

The present findings therefore highlight the need to move beyond simply encouraging learners to interact socially and toward deliberately organizing collaborative academic experiences. Teachers may establish peer-assisted reading groups, mixed-ability learning teams, buddy systems, and group-based mathematical activities. These strategies may help learners develop responsibility, cooperation, and confidence while creating additional opportunities for academic engagement.

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Student-Respondents' Perceptions of Multigrade Classes in Terms of Curriculum Adaptation

Indicators	Weighted Mean	Interpretation
My teacher helps me understand something that is too difficult for me.	4.66	Strongly Agree
My teacher changes the activities to make them appropriate for everyone in the class.	4.62	Strongly Agree
Grand Weighted Mean	**4.64**	**Strongly Agree**

Table 14 indicates that the student-respondents expressed highly favorable perceptions of curriculum adaptation, as evidenced by the grand weighted mean of 4.64, interpreted as "Strongly Agree." The highest-rated indicator concerned teachers' assistance in helping learners understand difficult lessons (WM = 4.66). Meanwhile, adjusting classroom activities to make them appropriate for everyone obtained a weighted mean of 4.62, also interpreted as "Strongly Agree."

These findings suggest that learners recognized their teachers' efforts to respond to differences in learning abilities and provide appropriate instructional support. The favorable ratings are particularly relevant to multigrade classrooms, where teachers are required to address the competencies of pupils from different grade levels within a shared instructional environment. However, curriculum adaptation should involve more than simplifying or changing classroom activities. It also requires aligning instruction with the expected competencies of each grade level while providing appropriate learning experiences based on learners' readiness and individual needs.

The findings are consistent with Bongala et al. (2020), who reported that multigrade teachers used differentiated activities to teach common topics at varying levels of difficulty. Their findings also described the use of independent work arrangements and peer tutoring to address the instructional demands of multigrade classes. Similarly, Naparan and Alinsug (2021) emphasized differentiated instruction and teacher flexibility as important classroom strategies. These studies support the present finding that instructional adaptation is a significant feature of multigrade teaching and may help address differences in learners' abilities and grade-level expectations.

The results emphasize the importance of designing learning activities that are both inclusive and competency-based. Teachers may use differentiated worksheets, flexible grouping, tiered activities, contextualized examples, and varied assessment tasks to ensure that learners can work toward the competencies expected of their respective grade levels. Continuous monitoring is also necessary to determine whether the adapted activities are helping learners achieve the intended learning outcomes.

Student-Respondents' Perceptions of Multigrade Classes in Terms of Individualized Attention

Indicators	Weighted Mean	Interpretation
My teacher gives me special projects or assignments based on my interests.	4.66	Strongly Agree
My teacher makes sure that everyone in the class gets the help they need.	4.54	Strongly Agree
Grand Weighted Mean	**4.61**	**Strongly Agree**

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Table 15 presents the student-respondents' perceptions of individualized attention in multigrade classes. The grand weighted mean of 4.61, interpreted as "Strongly Agree," indicates that learners generally recognized the efforts of their teachers to provide learning opportunities responsive to individual needs. Providing special projects or assignments based on learners' interests obtained the highest weighted mean of 4.66. Meanwhile, ensuring that everyone received the help they needed obtained a weighted mean of 4.54, also interpreted as "Strongly Agree."

The findings suggest that teachers made efforts to recognize individual differences and provide learning experiences suited to learners' interests and needs. However, the relatively lower rating for ensuring that everyone received the necessary assistance may indicate the continuing challenge of distributing instructional attention equitably in classrooms composed of different grade levels. This is an important consideration because individualized attention in multigrade settings requires teachers to balance direct instruction, independent activities, and guided learning opportunities among pupils with different competencies.

Bongala et al. (2020) provide relevant empirical support for this finding. Their research identified differentiated activities, independent work arrangements, and peer tutoring as strategies used by multigrade teachers to address differences in learner needs. Similarly, Naparan and Alinsug (2021) emphasized differentiated instruction and teacher flexibility as important practices in managing multigrade classrooms. These findings suggest that individualized attention can be supported through deliberate instructional arrangements rather than relying exclusively on one-on-one teacher assistance.

The present results highlight the importance of providing appropriate learning tasks and monitoring individual progress. Teachers may use individualized reading activities, competency-based worksheets, learning stations, flexible grouping, and structured independent tasks to address differences in learners' readiness. These arrangements may allow teachers to provide focused assistance to one group while ensuring that other learners remain engaged in meaningful learning activities.

Student-Respondents' Perceptions of Multigrade Classes in Terms of Social and Emotional Development

Indicators	**Weighted Mean**	**Interpretation**
My teacher helps me and my classmates get along and become friends in school.	4.72	Strongly Agree
I help my friends when they are having trouble with something in class.	4.53	Strongly Agree
Grand Weighted Mean	**4.61**	**Strongly Agree**

Table 16 reveals that the student-respondents had highly favorable perceptions of social and emotional development in multigrade classes, as indicated by the grand weighted mean of 4.61, interpreted as "Strongly Agree." The highest-rated indicator was the teacher's assistance in helping learners and their classmates develop friendships and positive relationships (WM = 4.72). Meanwhile, helping friends who experienced difficulties in class obtained a weighted mean of 4.53, also interpreted as "Strongly Agree."

These findings suggest that learners perceived their multigrade classrooms as environments that encouraged positive relationships and social interaction. The high rating for teachers' efforts to promote friendship highlights the perceived importance of teacher guidance in developing a supportive classroom atmosphere. Nevertheless, the comparatively lower rating for helping classmates indicates that opportunities for active peer

assistance may still be strengthened. This distinction suggests that learners may recognize the importance of friendship and harmonious relationships but may need additional guidance in translating these positive relationships into consistent supportive actions during learning activities.

Naparan and Alinsug (2021) identified collaborative learning as one of the strategies used by multigrade teachers to promote meaningful classroom experiences. Similarly, Bongala et al. (2020) described peer teaching and tutoring as practices that provide opportunities for learners to assist one another while developing their academic competencies. These findings are relevant to the present results because they demonstrate how multigrade classrooms can provide opportunities for cooperation and positive peer interaction. Boreros et al. (2024) also highlighted collaborative learning and flexible grouping as important strategies in multigrade classrooms, further emphasizing the value of structured interaction among learners.

The findings suggest that social and emotional development should be deliberately incorporated into classroom practices rather than treated as an incidental outcome of placing learners of different ages and grade levels together. Teachers may strengthen this dimension through cooperative learning activities, peer mentoring, shared classroom responsibilities, group projects, and routines that encourage respect, empathy, and mutual assistance. Such practices may help sustain positive relationships while developing learners' capacity to cooperate and support one another.

Table 17. **Profile Variables Significantly Related to the Student-Respondents' Perceptions of Multigrade Classes**

Profile Variables	**Association Measure**	**Coefficient**	**Strength of Association**	**p-value**	**Decision on H_0**
Age	Spearman's rho (ρ)	-0.213	Weak Negative	0.001	Reject H_0
Sex	Cramér's V	0.561	Relatively Strong	< .001	Reject H_0
Fathers' Occupation	Cramér's V	0.602	Strong	< .001	Reject H_0
Mothers' Occupation	Cramér's V	0.677	Strong	< .001	Reject H_0
Gross Monthly Family Income	Spearman's rho (ρ)	0.130	Very Weak Positive	0.048	Reject H_0
Nutritional Status	Cramér's V	0.724	Strong	< .001	Reject H_0
Reading and Numeracy Materials Used at Home	Cramér's V	0.656	Relatively Strong	< .001	Reject H_0
Attitude Toward Literacy and Numeracy	Spearman's rho (ρ)	0.560	Moderate Positive	< .001	Reject H_0

Note. Spearman's rho was used for ordinal or ranked variables, while Cramér's V was used for categorical variables. Cramér's V indicates the strength, but not the direction, of an association. The level of significance was set at 0.05. Statistical output showing a p-value of .000 is reported as $p < .001$.

Table 17 presents the relationship between the profile variables and the student-respondents' perceptions of multigrade classes. The results revealed that eight variables demonstrated statistically significant relationships with learners' perceptions at the 0.05 level of significance. These included age, sex, fathers' occupation, mothers' occupation, gross monthly family income, nutritional status, reading and numeracy materials used at home, and attitude toward literacy and numeracy. Since all computed p-values were below the established

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level of significance, the corresponding null hypotheses were rejected. In contrast, the highest educational attainment of both parents did not demonstrate a statistically significant relationship with learners' perceptions, as indicated in the preceding analysis.

Among the variables examined, nutritional status obtained the highest association coefficient ($V = 0.724$, $p < .001$), indicating a strong association with learners' perceptions of multigrade classes. This finding suggests that learners' perceptions varied according to their nutritional status. One possible explanation is that learners' physical well-being may be related to their classroom participation, comfort, energy, and capacity to engage in learning activities. However, the result does not establish that nutritional status directly determines how learners perceive their classroom experiences. It also does not identify which nutritional category accounts for the observed association. Further examination of the distribution of perceptions across nutritional categories would be necessary to understand the specific pattern.

Mothers' occupation ($V = 0.677$, $p < .001$) and fathers' occupation ($V = 0.602$, $p < .001$) likewise demonstrated strong associations with learners' perceptions. These findings indicate that learners' views of their multigrade classroom experiences varied according to their parents' occupational backgrounds. Parental occupations may be associated with differences in household responsibilities, work schedules, economic resources, and opportunities for parental involvement in children's education. Such circumstances may shape the support and learning experiences that children receive outside school. Nevertheless, these possible explanations were not directly measured in the present analysis and should not be interpreted as established causes of the observed relationships.

The availability of reading and numeracy materials at home also showed a relatively strong association with learners' perceptions ($V = 0.656$, $p < .001$). This result highlights the relevance of the home learning environment in understanding how learners view their classroom experiences. Access to books and other educational materials may provide opportunities for practice and reinforcement of classroom lessons. Learners who have access to appropriate learning resources may also have more opportunities to connect classroom activities with independent learning experiences. However, since Cramér's V does not indicate direction, the result alone cannot establish whether learners with more materials had more favorable perceptions than those with fewer materials.

Similarly, sex demonstrated a relatively strong association with learners' perceptions ($V = 0.561$, $p < .001$). This suggests that perceptions differed across the sex categories represented in the respondents. However, the coefficient does not identify which group expressed more favorable perceptions. Examining the frequency distribution of perception levels according to sex would provide a clearer understanding of the nature of this association.

In terms of the ranked variables, age showed a weak negative relationship with learners' perceptions ($\rho = -0.213$, $p = 0.001$). This indicates that older learners tended to report slightly less favorable perceptions of their multigrade classroom experiences. Although the relationship was statistically significant, its weak magnitude suggests that age had a limited association with perceptions. Differences in learning expectations, classroom responsibilities, or experiences across age groups may be possible considerations, although these explanations require further investigation. Gross monthly family income, on the other hand, demonstrated a very weak positive relationship ($\rho = 0.130$, $p = 0.048$). This means that higher income levels tended to correspond with slightly more favorable perceptions, but the magnitude of the relationship was minimal. Moreover, because the p-value was only slightly below the 0.05 threshold, the result should be interpreted cautiously.

Learners' attitudes toward literacy and numeracy also showed a moderate positive relationship with their perceptions of multigrade classes ($\rho = 0.560$, $p < .001$). This indicates that learners with more favorable attitudes toward literacy and numeracy tended to have more favorable views of their multigrade classroom experiences. This relationship may reflect the connection between learners' dispositions toward learning and their experiences in the classroom. Learners who demonstrate interest, confidence, and willingness to participate in reading and numeracy activities may also be more likely to appreciate the instructional and social

opportunities provided in multigrade settings. Nevertheless, the result does not establish the direction of influence between these two learner-related variables.

These findings may be understood in relation to Bongala et al. (2020), who examined the pedagogical strategies and challenges of multigrade teachers in Albay, Philippines. Their findings identified differentiated activities, peer teaching, and independent learning tasks as instructional strategies used to address the diverse needs of learners in multigrade classrooms. They also noted challenges involving insufficient learning materials and difficulties in lesson planning. These observations are relevant to the present findings because they highlight the importance of classroom practices and the availability of learning resources in shaping learners' educational experiences. Although Bongala et al. did not examine the specific profile variables included in the present analysis, their work provides contextual support for recognizing the influence of instructional and learning conditions in multigrade settings.

Similarly, Tayoni and Abocejo (2023), in their evaluation of the Multigrade Education Program in Carigara, Leyte, emphasized the importance of parental participation, stakeholder support, and the availability of learning materials in strengthening program implementation. They also observed that multigrade learners developed cooperation, responsibility, and positive learning dispositions. These findings complement the present results, particularly the significant associations involving parents' occupational backgrounds, home learning materials, and learners' attitudes. Their discussion reinforces the importance of considering both school-based and home-based conditions when examining learners' experiences in multigrade education.

Table 18. Test of Significant Relationship Between the Profile Variables and the Student-Respondents' Literacy Learning Progress Based on EGRA Results

Profile Variables	Association Measure	Coefficient	Strength of Association	p-value	Decision on H_0
Fathers' Occupation	Cramér's V	0.313	Moderate	0.002	Reject H_0
Attitude Toward Literacy and Numeracy	Spearman's rho (ρ)	0.413	Moderate Positive	< .001	Reject H_0

Note. Cramér's V was used to determine the strength of association between fathers' occupation and literacy learning progress, while Spearman's rho was used to determine the direction and strength of the relationship between learners' attitudes and literacy learning progress. The level of significance was set at 0.05. A p-value of .000 in the statistical output is reported as $p < .001$.

Table 18 presents the profile variables that demonstrated statistically significant relationships with the student-respondents' literacy learning progress based on EGRA results. The findings revealed that two variables were significantly associated with literacy performance: fathers' occupation and learners' attitudes toward literacy and numeracy. Fathers' occupation yielded a Cramér's V coefficient of 0.313, indicating a moderate association, with a p-value of 0.002. Meanwhile, learners' attitudes toward literacy and numeracy obtained a Spearman's rho coefficient of 0.413, indicating a moderate positive relationship, with a p-value of less than .001. Since both p-values were below the 0.05 level of significance, the corresponding null hypotheses were rejected.

The significant association between fathers' occupation and literacy learning progress suggests that learners' literacy performance varied in relation to their fathers' occupational categories. This finding points to the possible relevance of family and socioeconomic circumstances in understanding differences in literacy development. Fathers' occupations may be associated with variations in household income, work schedules, availability of time for parental support, and access to educational resources. These circumstances may shape the learning opportunities available to children at home. However, the present analysis did not directly measure these possible pathways; therefore, they should be regarded as potential explanations rather than established

reasons for the observed association. Furthermore, because Cramér's V is a measure of association for categorical variables, the coefficient does not indicate whether a particular occupational category is associated with higher or lower literacy performance. A closer examination of the distribution of EGRA results across the different occupational categories would be necessary to identify the specific pattern.

This finding may be considered alongside Aguana (2019), whose examination of reading intervention practices in multigrade schools identified home background, limited reading resources, and the absence of adult readers as models among the challenges affecting learners' reading development. The research emphasized that literacy support should extend beyond classroom instruction and include the learner's home environment. Although Aguana did not specifically establish a relationship between fathers' occupation and reading performance, the findings provide contextual support for considering family circumstances when planning literacy interventions in multigrade schools.

The significant moderate positive relationship between learners' attitudes toward literacy and numeracy and their literacy learning progress is another important finding. The coefficient of 0.413 indicates that more favorable attitudes tended to correspond with higher literacy performance. This suggests that learners who demonstrate interest, confidence, and a positive disposition toward reading and numeracy may also be more engaged in learning activities that develop foundational literacy skills. Positive attitudes may encourage learners to participate in reading exercises, practice newly acquired skills, respond to instructional tasks, and persist when they encounter difficulties. Nevertheless, the correlational result does not establish whether positive attitudes contribute to improved literacy performance or whether learners who perform better develop more favorable attitudes. Both possibilities, as well as the influence of other factors, warrant consideration.

This result is consistent with Briones and Hussien (2024), who examined the relationship between learners' attitudes toward reading and their reading comprehension levels among Key Stage 2 pupils in two elementary schools. Their work emphasized the importance of encouraging positive reading attitudes and recognizing that learners' dispositions toward reading are relevant to literacy development. The present finding further supports the importance of considering learners' attitudes when examining their reading progress, particularly among pupils in multigrade classrooms.

Table 19. Relationship Between the Numeracy Learning Progress of the Student-Respondents and Their Profile Variates

Profile Variates	Association Coefficient	Degree of Association	Test Statistic	p-value	Evaluation/Decision
Age	$\rho = -0.126$	Very Weak Negative	—	.055	NS / Accept Ho
Sex	$V = 0.091$	Very Weak	$\chi^2 = 1.937$	.586	NS / Accept Ho
Fathers' Educational Attainment	$\rho = 0.027$	Very Weak Positive	—	.686	NS / Accept Ho
Mothers' Educational Attainment	$\rho = -0.077$	Very Weak Negative	—	.245	NS / Accept Ho
Fathers' Occupation	$V = 0.306$	Moderate	$\chi^2 = 65.233$, df = 17	.001	S / Reject Ho
Mothers' Occupation	$V = 0.173$	Weak	$\chi^2 = 20.809$, df = 17	.053	NS / Accept Ho

Gross Monthly Family Income	$\rho = 0.116$	Very Weak Positive	—	.078	NS / Accept Ho
Nutritional Status	$V = 0.133$	Weak	$\chi^2 = 12.345$, $df = 9$	.418	NS / Accept Ho
Reading and Numeracy Materials Used at Home	$V = 0.115$	Weak	$\chi^2 = 9.164$, $df = 9$	.422	NS / Accept Ho
Attitude Toward Literacy and Numeracy	$\rho = 0.412$	Moderate Positive	—	$< .001$	S / Reject Ho

Note. ρ = Spearman's rho; V = Cramér's V; χ^2 = Chi-square statistic; df = degrees of freedom; S = Significant; NS = Not Significant. Statistical significance was evaluated at $\alpha = .05$. Values originally reported as .000 are presented as $p < .001$.

Table 19 presents the relationship between the numeracy learning progress of the student-respondents and their profile variates, including age, sex, parents' highest educational attainment, parents' occupation, gross monthly family income, nutritional status, availability of reading and numeracy materials at home, and attitude toward literacy and numeracy. The findings revealed that only two profile variables demonstrated statistically significant relationships with learners' numeracy performance based on the Enhanced Regional Unified Numeracy Test (ERUNT), namely fathers' occupation and learners' attitude toward literacy and numeracy.

Specifically, fathers' occupation demonstrated a moderate association with numeracy learning progress, as indicated by Cramér's V of 0.306 and a chi-square value of 65.233, with 17 degrees of freedom and a p-value of .001. Since the p-value was below the 0.05 level of significance, the null hypothesis was rejected. This finding indicates that the occupational categories of fathers were significantly associated with differences in learners' numeracy proficiency. Considering that 62.07 percent of the fathers were engaged in farming and 13.79 percent were carpenters, the result highlights the relevance of examining family occupational circumstances when understanding the numeracy performance of learners. However, the association does not establish that a particular occupation directly improves or limits a child's mathematical ability. Other circumstances related to family resources, parental involvement, and opportunities for learning may also be considered in interpreting this finding.

Similarly, learners' attitude toward literacy and numeracy exhibited a moderate positive relationship with numeracy learning progress, as reflected by Spearman's rho of 0.412 and a p-value of less than .001. The null hypothesis was therefore rejected. This result suggests that learners who expressed more favorable attitudes toward reading, counting, and mathematical activities tended to demonstrate higher numeracy proficiency. The finding is particularly relevant because the respondents obtained a grand weighted mean of 4.37 in their attitude toward literacy and numeracy, interpreted as "Agree." Their positive disposition toward reading and counting may be associated with greater willingness to participate in learning activities, practice mathematical skills, and engage in problem-solving tasks. This underscores the importance of developing meaningful and enjoyable numeracy experiences in the early grades.

On the other hand, the remaining profile variables did not demonstrate statistically significant relationships with numeracy learning progress. Age showed a very weak negative relationship ($\rho = -0.126$, $p = .055$), while sex exhibited a very weak association ($V = 0.091$, $p = .586$). Likewise, fathers' educational attainment ($\rho = 0.027$, $p = .686$) and mothers' educational attainment ($\rho = -0.077$, $p = .245$) were not significantly related to numeracy performance. These results indicate that differences in learners' age, sex, and parents' educational attainment were not statistically associated with their ERUNT results in the present analysis.

Moreover, mothers' occupation showed a weak association with numeracy performance (V = 0.173, p = .053), while gross monthly family income exhibited a very weak positive relationship (ρ = 0.116, p = .078). Although these coefficients suggest some degree of association, their corresponding p-values exceeded the 0.05 level of significance. Similarly, nutritional status (V = 0.133, p = .418) and the availability of reading and numeracy materials at home (V = 0.115, p = .422) did not demonstrate statistically significant relationships with learners' numeracy performance. Thus, the corresponding null hypotheses were not rejected.

The non-significant findings suggest that the identified personal, educational, socioeconomic, nutritional, and home-related characteristics, when considered individually, did not provide sufficient statistical evidence of an association with numeracy performance among the respondents. Nevertheless, these results should not be interpreted to mean that such characteristics are entirely irrelevant to mathematical learning. Rather, they indicate that their relationships with numeracy performance were not statistically established within the present analysis.

In the context of multigrade classrooms, the findings emphasize the importance of considering both learner-related and instructional factors in understanding numeracy achievement. Since learners from different grade levels and with varying competencies receive instruction within the same classroom, teachers need to provide differentiated mathematical activities, concrete learning experiences, guided exercises, and opportunities for collaborative problem-solving. The significant relationship between learners' attitudes and numeracy performance further highlights the value of cultivating positive dispositions toward mathematics through engaging, developmentally appropriate, and meaningful classroom activities.

Table 20. **Profile Variables Not Significantly Related to the Student-Respondents' Literacy Learning Progress Based on EGRA Results**

Profile Variables	Association Measure	Coefficient	Test Statistic	p-value	Decision
Age	Spearman's rho	-0.121	—	0.067	Not Significant
Sex	Cramér's V	0.036	$\chi^2 = 0.306$, df = 1	0.858	Not Significant
Fathers' Highest Educational Attainment	Spearman's rho	0.043	—	0.514	Not Significant
Mothers' Highest Educational Attainment	Spearman's rho	-0.084	—	0.205	Not Significant
Mothers' Occupation	Cramér's V	0.155	$\chi^2 = 11.189$, df = 17	0.191	Not Significant
Gross Monthly Family Income	Spearman's rho	0.093	—	0.156	Not Significant
Nutritional Status	Cramér's V	0.128	$\chi^2 = 7.637$, df = 4	0.470	Not Significant
Reading and Numeracy Materials Used at Home	Cramér's V	0.118	$\chi^2 = 6.471$, df = 9	0.373	Not Significant

Note. Spearman's rho was used for ordinal or ranked variables, while Cramér's V was used for categorical variables. The chi-square statistic and degrees of freedom are presented for the categorical variables. A result was considered statistically significant at the 0.05 level.

Table 20 presents the profile variables that did not demonstrate statistically significant relationships with the student-respondents' literacy learning progress based on the EGRA results. These variables included age, sex, fathers' and mothers' highest educational attainment, mothers' occupation, gross monthly family income, nutritional status, and the availability of reading and numeracy materials at home. All obtained p-values were greater than the 0.05 level of significance; thus, the corresponding null hypotheses were not rejected.

Among the variables examined, age obtained a very weak negative association with literacy learning progress ($\rho = -0.121$, $p = 0.067$). This suggests that age was not significantly associated with the learners' EGRA performance. Similarly, sex showed a very weak association ($V = 0.036$, $p = 0.858$), indicating that the distribution of literacy performance did not significantly vary according to the respondents' sex. The educational attainment of both fathers ($\rho = 0.043$, $p = 0.514$) and mothers ($\rho = -0.084$, $p = 0.205$) likewise showed no statistically significant relationships with literacy progress. These results suggest that, within the respondents included in the analysis, parental educational attainment was not sufficiently associated with differences in learners' literacy performance.

Furthermore, mothers' occupation ($V = 0.155$, $p = 0.191$) did not demonstrate a significant association with literacy learning progress. Gross monthly family income also yielded a very weak positive relationship ($\rho = 0.093$, $p = 0.156$), but the association was not statistically significant. In the same manner, nutritional status ($V = 0.128$, $p = 0.470$) and the availability of reading and numeracy materials at home ($V = 0.118$, $p = 0.373$) did not show significant associations with the learners' EGRA results. Although these variables may represent relevant aspects of learners' home and personal circumstances, the statistical findings did not provide sufficient evidence of their relationship with literacy performance in this particular group of respondents.

Taken together, the results indicate that the identified profile variables were not statistically associated with literacy learning progress as measured by EGRA. However, the absence of statistical significance should not be interpreted to mean that these factors are entirely irrelevant to literacy development. Rather, the findings suggest that their relationships with literacy performance were not sufficiently demonstrated in the present dataset. It is also important to consider that literacy development may be shaped by several interacting factors, including the quality of instruction, learners' engagement, classroom experiences, and opportunities for reading practice. Accordingly, these findings highlight the importance of examining learner performance alongside instructional and classroom-related conditions. In contrast, fathers' occupation and students' attitudes toward literacy and numeracy were found to have statistically significant relationships with literacy learning progress, as presented in the succeeding analysis.

Table 21. Relationship Between the Student-Respondents' Perceptions of Multigrade Classes and Their Numeracy Learning Progress

Variables Correlated	Spearman's rho (ρ)	p-value	Degree of Relationship	Evaluation/Decision
Perceptions of Multigrade Classes and Numeracy Learning Progress Based on ERUNT Results	0.764	< .001	Strong Positive	S / Reject Ho

Note. Statistical significance was evaluated at the 0.05 level. S = Significant.

Table 21 presents the relationship between the student-respondents' perceptions of multigrade classes and their numeracy learning progress based on ERUNT results. The statistical analysis yielded a Spearman's rho coefficient of 0.764 and a p-value of less than .001, indicating a strong positive and statistically significant relationship between the two variables. Since the p-value was lower than the 0.05 level of significance, the null hypothesis was rejected.

The finding indicates that learners who expressed more favorable perceptions of their multigrade classroom experiences tended to demonstrate higher numeracy proficiency. This relationship highlights the relevance of positive classroom experiences, particularly teacher-student interaction, peer learning dynamics, curriculum adaptation, individualized attention, and social and emotional development, in understanding learners' numeracy performance.

The result is particularly meaningful in multigrade settings, where teachers are expected to address different grade-level competencies and learning needs within a shared classroom environment. Supportive teacher-student relationships, appropriate instructional adjustments, and opportunities for peer-assisted learning may provide conditions that encourage learners to participate actively in mathematical activities and develop greater confidence in solving numerical problems. The findings therefore reinforce the importance of creating an inclusive and supportive learning environment in which learners receive appropriate guidance and opportunities to develop their numeracy competencies.

Furthermore, the strong positive relationship between perceptions and numeracy performance complements the result on literacy performance, which also demonstrated a strong positive relationship ($\rho = 0.731$, $p < .001$). This indicates that favorable perceptions of multigrade classroom experiences were associated with both literacy and numeracy learning outcomes. Nevertheless, these findings establish associations rather than direct causal effects. They do not demonstrate that positive perceptions alone produce higher academic performance, since other instructional, learner-related, and environmental factors may also be involved.

Table 22. Test of Significant Relationship Between Student-Respondents' Perceptions of Multigrade Classes and Their Literacy Learning Progress Based on EGRA Results

Variables Correlated	Spearman's rho (ρ)	Strength of Relationship	p-value	Decision on H_0
Perceptions of Multigrade Classes and Literacy Learning Progress	0.731	Strong Positive Relationship	< .001	Reject H_0

Note. The level of significance was set at 0.05. The null hypothesis was rejected when the computed p-value was lower than the established significance level.

Table 22 presents the test of significant relationship between the student-respondents' perceptions of multigrade classes and their literacy learning progress based on EGRA results. The analysis yielded a Spearman's rho coefficient of 0.731, indicating a strong positive relationship between the two variables. The computed p-value of less than .001 was below the 0.05 level of significance; hence, the null hypothesis was rejected. This finding provides sufficient statistical evidence that more favorable perceptions of multigrade classroom experiences were associated with higher levels of literacy learning progress among the student-respondents.

The strength of the relationship suggests that learners' classroom experiences were meaningfully associated with their literacy development. In particular, favorable perceptions of teacher-student interaction, peer learning dynamics, curriculum adaptation, individualized attention, and social and emotional development may reflect classroom conditions that support learners' participation and engagement in reading activities. When learners perceive their teachers as supportive, lessons as responsive to their learning needs, and classmates as helpful learning partners, they may be more inclined to participate in reading tasks, seek assistance, practice literacy skills, and sustain their involvement in classroom activities. These possible explanations provide a context for understanding the observed association; however, the correlation result does not establish that any particular classroom dimension directly produced higher EGRA performance.

The finding is consistent with Naparan and Alinsug (2021), who identified collaborative learning, differentiated instruction, effective classroom management, real-life learning connections, and teacher

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume XI Issue X October 2026

flexibility as important strategies employed by multigrade teachers in the Philippines. Their findings underscore the value of responsive and engaging classroom practices in addressing the varied learning needs of pupils assigned to different grade levels within one classroom. These practices correspond with several dimensions assessed in the present research, particularly peer learning dynamics, curriculum adaptation, and individualized attention. Although Naparan and Alinsug examined teachers' classroom strategies rather than the statistical relationship between learners' perceptions and EGRA results, their findings provide empirical support for the relevance of positive and responsive instructional practices in multigrade settings.

Similarly, Tayoni and Abocejo (2023), in their evaluation of the Multigrade Education Program in Carigara, Leyte, emphasized the importance of teacher commitment, parental and stakeholder participation, and the availability of learning resources in strengthening the teaching-learning process. They also reported that multigrade learners developed cooperation, responsibility, participation, and positive learning dispositions. These findings complement the present result by highlighting how supportive classroom and school conditions may contribute to meaningful learning experiences. In addition, Alda and Gementiza (2023), in their examination of reading instruction in multigrade classes, emphasized the importance of appropriate reading pedagogies, remedial instruction, classroom management, and continuing support for teachers in addressing learners' reading needs. Their findings reinforce the need to maintain instructional practices that respond to differences in learners' reading abilities and provide opportunities for sustained literacy development.

SUMMARY OF FINDINGS

Based on the analysis and interpretation of the data gathered from the 232 student-respondents in Grades 1 to 3 in the District of Motiong, Schools Division of Samar, during School Year 2024–2025, the following findings were obtained:

The study involved 232 student-respondents with a mean age of 7.69 years and a median age of 8 years. There were slightly more female respondents (50.86%) than male respondents (49.14%). In terms of parental educational attainment, the largest proportion of fathers had reached the high school level (30.60%), while the largest proportion of mothers were high school graduates (36.64%). Farming was the predominant occupation among fathers (62.07%), whereas most mothers were engaged in house-help work (42.67%). More than half of the respondents belonged to families with a gross monthly income ranging from ₱5,000 to ₱9,999 (56.03%). Regarding nutritional status, the majority were classified as normal (74.57%), although 20.26 percent were identified as wasted. Most respondents reported having books at home (91.38%), while smaller proportions had comics (5.60%), newspapers (2.16%), and puzzles (0.86%). The respondents also demonstrated generally favorable attitudes toward literacy and numeracy, as indicated by the grand weighted mean of 4.37, interpreted as "Agree."

The largest proportion of student-respondents belonged to the transitional reading level, comprising 84 learners or 36.21 percent. This was followed by 79 learners or 34.05 percent at the emergent level, while 69 learners or 29.74 percent had attained the independent reading level. The findings indicated that a substantial proportion of learners remained at the emergent and transitional levels, demonstrating the need for continued and differentiated literacy instruction.

The largest proportion of student-respondents demonstrated low numeracy proficiency, consisting of 79 learners or 34.05 percent. Meanwhile, 70 learners or 30.17 percent were nearly proficient, 58 learners or 25.00 percent were proficient, and 25 learners or 10.78 percent were highly proficient. These results indicated that many learners still required additional instructional support to strengthen their foundational numeracy competencies.

The student-respondents generally expressed favorable perceptions of their multigrade classroom experiences across all five dimensions. Teacher-student interaction obtained the highest grand weighted mean of 4.68, interpreted as "Strongly Agree." This was followed by curriculum adaptation (4.64), individualized attention (4.61), and social and emotional development (4.61), all interpreted as "Strongly Agree." Peer learning dynamics obtained the lowest grand weighted mean of 4.44, interpreted as "Agree." These findings indicated

that learners particularly recognized their teachers' instructional support and efforts to address their learning needs, although opportunities for active peer collaboration could still be strengthened.

The findings revealed statistically significant relationships between learners' perceptions of multigrade classes and their age ($\rho = -0.213$, $p = 0.001$), sex ($V = 0.561$, $p < .001$), fathers' occupation ($V = 0.602$, $p < .001$), mothers' occupation ($V = 0.677$, $p < .001$), gross monthly family income ($\rho = 0.130$, $p = 0.048$), nutritional status ($V = 0.724$, $p < .001$), reading and numeracy materials used at home ($V = 0.656$, $p < .001$), and attitude toward literacy and numeracy ($\rho = 0.560$, $p < .001$). However, fathers' and mothers' highest educational attainment did not demonstrate statistically significant relationships with learners' perceptions.

The analysis revealed that only fathers' occupation ($V = 0.313$, $p = 0.002$) and learners' attitude toward literacy and numeracy ($\rho = 0.413$, $p < .001$) had statistically significant relationships with literacy learning progress based on EGRA results. The remaining variables, namely age, sex, parents' highest educational attainment, mothers' occupation, gross monthly family income, nutritional status, and reading and numeracy materials used at home, did not demonstrate statistically significant relationships with literacy performance.

The results showed that fathers' occupation ($V = 0.306$, $p = 0.001$) and learners' attitude toward literacy and numeracy ($\rho = 0.412$, $p < .001$) were significantly associated with numeracy learning progress based on ERUNT results. In contrast, age, sex, parents' highest educational attainment, mothers' occupation, gross monthly family income, nutritional status, and reading and numeracy materials used at home did not demonstrate statistically significant relationships with numeracy performance.

The findings revealed a strong positive and statistically significant relationship between student-respondents' perceptions of multigrade classes and their literacy learning progress, as indicated by Spearman's rho of 0.731 and a p-value of less than .001. This indicated that learners with more favorable perceptions of their multigrade classroom experiences tended to demonstrate higher levels of literacy learning progress.

A strong positive and statistically significant relationship was also established between student-respondents' perceptions of multigrade classes and their numeracy learning progress, with a Spearman's rho coefficient of 0.764 and a p-value of less than .001. This indicated that more favorable perceptions of multigrade classroom experiences tended to correspond with higher levels of numeracy learning progress.

CONCLUSION

Based on the findings of the study, it is concluded that the Grade 1 to Grade 3 learners in the District of Motiong, Schools Division of Samar, generally possessed characteristics that provided a relevant context for learning in multigrade classrooms. Most of the learners had normal nutritional status, had access to books at home, and demonstrated favorable attitudes toward literacy and numeracy. However, the majority came from families with relatively low monthly incomes, and farming was the most common occupation among fathers. These findings highlight the importance of considering learners' family, socioeconomic, and personal circumstances in planning appropriate instructional interventions and support mechanisms.

The study further concludes that the learners demonstrated varying levels of literacy development based on the Early Grade Reading Assessment (EGRA). Although the largest proportion of learners belonged to the transitional reading level, a considerable number remained at the emergent level, while fewer had attained independent reading proficiency. This indicates that many learners had acquired foundational reading skills but continued to require appropriate instructional support to strengthen their reading competence and progress toward independent reading.

In terms of numeracy, the findings revealed that the largest proportion of learners were classified under the low proficiency level, followed by those who were nearly proficient. Only a smaller proportion attained proficient and highly proficient levels. These results suggest that numeracy development remained a significant learning concern among the respondents, emphasizing the need for sustained practice, differentiated learning activities, and targeted interventions to strengthen their mathematical competencies.

Moreover, the learners generally expressed favorable perceptions of their experiences in multigrade classrooms. They strongly agreed that teacher-student interaction, curriculum adaptation, individualized attention, and social and emotional development were positively experienced in their classrooms. Peer learning dynamics also received a favorable assessment, although it obtained the lowest grand weighted mean among the five dimensions. These findings indicate that multigrade classrooms provided opportunities for meaningful teacher support, instructional adjustments, individualized assistance, and positive social relationships among learners. Nevertheless, peer interaction and collaborative learning may be further strengthened to maximize opportunities for learners to support one another.

The findings further established that learners' age, sex, fathers' occupation, mothers' occupation, gross monthly family income, nutritional status, availability of reading and numeracy materials at home, and attitudes toward literacy and numeracy were significantly associated with their perceptions of multigrade classes. Among these variables, nutritional status demonstrated the strongest association, followed by mothers' occupation and the availability of learning materials at home. In contrast, fathers' and mothers' educational attainment did not demonstrate statistically significant relationships with learners' perceptions. These results suggest that selected personal, family, socioeconomic, and home-related circumstances were relevant to how learners experienced and perceived multigrade classroom instruction.

With respect to literacy progress, only fathers' occupation and learners' attitudes toward literacy and numeracy demonstrated statistically significant relationships with their EGRA performance. Fathers' occupation showed a moderate association ($V = 0.313$, $p = .002$), while learners' attitudes exhibited a moderate positive relationship ($\rho = 0.413$, $p < .001$). The remaining profile variables, including age, sex, parents' highest educational attainment, mothers' occupation, gross monthly family income, nutritional status, and availability of reading and numeracy materials at home, did not demonstrate statistically significant relationships with literacy performance. These findings indicate that selected family and learner-related characteristics, particularly fathers' occupation and learners' attitudes, were associated with differences in literacy performance.

Similarly, the findings revealed that fathers' occupation and learners' attitudes toward literacy and numeracy were significantly associated with numeracy performance. Fathers' occupation demonstrated a moderate association ($V = 0.306$, $p = .001$), while learners' attitudes exhibited a moderate positive relationship ($\rho = 0.412$, $p < .001$). In contrast, age, sex, parents' highest educational attainment, mothers' occupation, gross monthly family income, nutritional status, and the availability of reading and numeracy materials at home did not demonstrate statistically significant relationships with numeracy performance. These results suggest that learners' numeracy progress was associated with selected family and attitudinal characteristics, particularly fathers' occupation and learners' dispositions toward literacy and numeracy.

Furthermore, a strong positive and statistically significant relationship was established between learners' perceptions of multigrade classes and their literacy performance ($\rho = 0.731$, $p < .001$). This indicates that learners who expressed more favorable perceptions of their multigrade classroom experiences tended to demonstrate higher levels of reading proficiency. The finding emphasizes the relevance of supportive teacher-student interaction, appropriate curriculum adaptation, individualized attention, and positive classroom relationships in providing learning experiences that correspond with learners' literacy development.

Likewise, a strong positive and statistically significant relationship was established between learners' perceptions of multigrade classes and their numeracy performance ($\rho = 0.764$, $p < .001$). This indicates that learners with more favorable perceptions of their classroom experiences also tended to demonstrate higher numeracy proficiency. The result underscores the importance of maintaining supportive and responsive multigrade learning environments where learners are provided with appropriate instructional guidance, meaningful activities, and opportunities to develop their mathematical skills.

Overall, the study concludes that multigrade classrooms offer generally favorable learning experiences characterized by positive teacher-student interaction, curriculum adaptation, individualized attention, peer learning, and social and emotional development. However, despite these favorable perceptions, considerable

proportions of learners continued to experience difficulties in attaining independent reading proficiency and higher levels of numeracy competence. The significant positive relationships between learners' perceptions of multigrade classes and their literacy and numeracy performance further highlight the relevance of providing supportive and responsive classroom environments. These findings point to the need to strengthen differentiated instruction, implement targeted literacy and numeracy interventions, enhance collaborative learning opportunities, provide appropriate instructional resources, and continuously monitor learners' progress. Through these efforts, the implementation of multigrade education may be further improved to address learners' diverse needs and promote meaningful development in foundational literacy and numeracy in the District of Motiong, Schools Division of Samar.

RECOMMENDATIONS

In light of the findings and conclusions of the study, the following recommendations are proposed:

- School administrators should strengthen the implementation of multigrade education by providing teachers with adequate instructional materials, learning resources, and classroom facilities that support the diverse literacy and numeracy needs of learners across different grade levels.
- Teachers handling multigrade classes should continuously employ differentiated instructional strategies that consider learners' varying abilities, interests, and learning needs. Lessons and activities should be appropriately designed to address the different grade-level competencies while ensuring meaningful participation among all learners.
- Teachers should intensify literacy intervention activities, particularly for learners classified under the emergent and transitional reading levels. Guided reading, phonics instruction, vocabulary development, storytelling, peer-assisted reading, and regular reading exercises should be integrated into classroom instruction to help learners progress toward independent reading proficiency.
- Teachers should strengthen numeracy instruction by providing targeted learning activities for learners with low proficiency and those who are nearly proficient. Concrete materials, number games, manipulatives, problem-solving exercises, and contextualized mathematical activities should be utilized to develop learners' foundational numeracy competencies.
- School heads and instructional leaders should provide continuous instructional supervision, mentoring, and coaching to teachers handling multigrade classes. These initiatives should focus on differentiated instruction, classroom management, curriculum adaptation, assessment practices, and the effective management of learners from different grade levels.
- The Schools Division Office and district supervisors should organize professional development programs, such as seminars, workshops, Learning Action Cell (LAC) sessions, and demonstration teaching, focusing on effective multigrade teaching strategies, literacy and numeracy instruction, differentiated learning activities, and the development of appropriate instructional materials.
- Teachers and school administrators should strengthen the use of formative assessment and regular monitoring of learners' literacy and numeracy progress. Results from EGRA, ERUNT, and other classroom-based assessments should serve as bases for identifying learning gaps, grouping learners according to their needs, and providing appropriate remediation and enrichment activities.
- Teachers should sustain positive teacher-student relationships by providing adequate guidance, encouragement, and individualized assistance to learners. Since teacher-student interaction received the highest perception rating, teachers should continue fostering a supportive classroom environment where learners feel valued, motivated, and confident in participating in classroom activities.
- Teachers should further strengthen peer-assisted learning by organizing collaborative activities, paired reading, group exercises, and peer tutoring. These strategies should encourage learners to help one another while ensuring that activities remain appropriate to their respective abilities and grade-level competencies.
- School administrators and teachers should provide additional attention to learners' individual learning needs through flexible grouping, personalized learning tasks, and appropriate instructional adjustments. These practices should be strengthened to ensure that learners who experience difficulty in literacy and numeracy receive timely and adequate assistance.

- Parents and guardians should be encouraged to become active partners in their children's education by providing opportunities for reading and numeracy practice at home. They should be encouraged to make available appropriate learning materials, such as books, number cards, and other educational resources, and to establish regular home learning activities that reinforce classroom instruction.
- Schools should strengthen the monitoring of learners' nutritional status and coordinate with relevant health personnel and community stakeholders to provide appropriate support for learners who are wasted, overweight, obese, or otherwise identified as having nutritional concerns. This initiative may help promote learners' general well-being and readiness to participate in classroom activities.
- Teachers and school administrators should consider learners' family and socioeconomic circumstances when designing instructional interventions and providing learning support. Particular attention should be given to learners who have limited access to educational resources at home and those whose family circumstances may affect their learning opportunities.
- The District of Motiong and the Schools Division of Samar should strengthen school-home-community partnerships to support the implementation of multigrade education. Collaborative initiatives may include establishing reading corners, providing supplementary learning materials, organizing community reading activities, and mobilizing available resources to address learners' literacy and numeracy needs.
- School heads and teachers should regularly evaluate the implementation of multigrade classroom practices through classroom observations, learner feedback, assessment results, and instructional monitoring. The results should be used to identify effective practices, address implementation challenges, and improve the quality of teaching and learning.
- Future researchers are encouraged to conduct similar investigations in other districts or schools divisions using larger and more diverse populations to validate and compare the findings of the present study. Further research may also examine multigrade education in different geographical and socioeconomic settings.
- Future studies may consider additional variables such as teachers' qualifications, teaching experience, multigrade teaching competence, instructional leadership, availability of learning resources, parental involvement, classroom size, and school readiness to obtain a more comprehensive understanding of the factors associated with literacy and numeracy progress in multigrade classrooms.
- Future researchers are likewise encouraged to employ experimental, quasi-experimental, longitudinal, or mixed-methods research designs to further examine the contribution of specific multigrade teaching strategies and interventions to learners' literacy and numeracy development. These approaches may provide additional evidence on the effectiveness and sustainability of instructional practices in multigrade settings.
- Future studies should consider examining the effectiveness of specific literacy and numeracy intervention programs, particularly for learners classified under the emergent reading and low numeracy proficiency levels. Such investigations may provide evidence for developing targeted intervention frameworks suited to the diverse learning needs of multigrade learners.
- Future researchers may also explore the relationship between learners' perceptions of multigrade classroom experiences and other learning outcomes, including academic achievement, motivation, classroom participation, learning engagement, and socio-emotional development, to further understand the role of classroom experiences in supporting holistic learner development.

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