

Literacy and Numeracy Readiness Among Grade Two Pupils in Public Elementary Schools

Ritz Gem F. Caballes, MAEd

Teacher I, Timoteo A. Reyes. Sr. Memorial Elementary School, Morong, Rizal

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Email of Corresponding Author: ritzgem.caballes@deped.gov.ph

Abstract

This study assessed the literacy and numeracy readiness of Grade Two pupils in public elementary schools in the Morong District, Schools Division Office of Rizal, during the School Year 2025–2026. Specifically, it examined pupils' literacy readiness in terms of phonemic awareness, word recognition, and vocabulary, and numeracy readiness in terms of number identification, counting, and addition and subtraction. It also determined whether teachers' and parents' perceptions differed significantly, examined the influence of selected demographic variables, investigated the relationship between readiness and pupils' academic performance, and served as the basis for a proposed action plan. The study employed a descriptive survey research design complemented by documentary analysis. Respondents included the total population of 36 Grade Two teachers and 240 parents selected through quota and convenience sampling from twelve public elementary schools in Morong District. Data were gathered using a researcher-made questionnaire-checklist, while pupils' academic performance was obtained through documentary analysis of their final grades. The findings revealed that teachers generally perceived Grade Two pupils as much ready in literacy and numeracy, while parents rated them as very much ready. No significant difference was found between teachers' and parents' perceptions regarding phonemic awareness; however, significant differences emerged in word recognition, vocabulary, number identification, counting, and addition and subtraction. Teachers' educational attainment significantly influenced literacy readiness, whereas age, sex, civil status, position, length of service, and in-service training generally did not. Among parents, demographic characteristics showed varying significant differences across selected literacy and numeracy indicators. Pupils demonstrated satisfactory academic performance, and literacy and numeracy readiness exhibited a significant positive relationship with academic achievement. The study concludes that literacy and numeracy readiness are important predictors of academic performance and that collaborative efforts between schools and families are essential in strengthening foundational learning competencies. It recommends implementing professional development programs for teachers, strengthening school-home partnerships, enhancing vocabulary and numeracy instruction through contextualized and hands-on learning activities, implementing the proposed action plan, and conducting further studies using additional variables and broader populations.

Keywords: Literacy Readiness, Numeracy Readiness, Grade Two Pupils, Academic Performance, Descriptive Survey, Documentary Analysis, Public Elementary Schools, Morong District, Rizal, Educational Management

Introduction

Literacy and numeracy are fundamental competencies that serve as the foundation for lifelong learning and academic success. During the early years of elementary education, children develop essential skills in reading, writing, language, and mathematics that enable them to understand classroom instruction and actively participate in learning. According to Snowling and Hulme (2025), language is the foundation of reading development, and children's oral language skills strongly influence their ability to acquire reading comprehension, vocabulary, and written communication. Learners who enter school with weak foundational language skills are more likely to encounter persistent academic difficulties, emphasizing the importance of developing literacy during the primary grades. Literacy readiness encompasses children's ability to recognize sounds, identify words, understand vocabulary, and comprehend written texts. These components collectively support reading fluency and overall academic achievement. Hamilton and Hayiou-Thomas (2022) explained that phonological awareness, alphabet knowledge, and meaningful language interactions at home and in school establish the foundation for literacy development. Likewise, Hulme et al. (2020) asserted that language interventions implemented during the early years significantly improve children's reading comprehension and educational outcomes, particularly when teachers employ evidence-based instructional strategies.

Similarly, numeracy readiness involves children's understanding of numbers, counting, number relationships, and basic arithmetic operations. Early numeracy skills provide the cognitive foundation necessary for logical reasoning, mathematical thinking, and problem-solving throughout schooling. Educational researchers emphasize that learners who possess strong foundational numeracy competencies demonstrate better mathematical achievement in the succeeding grade levels. Furthermore, recent educational research indicates that learners begin formal schooling with varying levels of

literacy and numeracy readiness, largely influenced by their home learning experiences, socioeconomic conditions, and opportunities for early learning. These differences, if not addressed through appropriate instructional support, may widen achievement gaps as children progress through school. Teachers and parents play complementary roles in strengthening children's foundational learning. Teachers provide systematic instruction, continuous assessment, and differentiated learning experiences that develop literacy and numeracy competencies, while parents reinforce these skills through home-based learning activities, reading practices, and everyday mathematical experiences. Hamilton and Hayiou-Thomas (2022) emphasized that the quality of the home literacy environment, parental engagement, and frequent language interactions significantly influence children's literacy development. Consequently, effective collaboration between schools and families contributes substantially to children's readiness and academic performance.

The Philippine educational system continues to face challenges in improving learners' foundational competencies. Results from international large-scale assessments have consistently shown that many Filipino learners perform below expected proficiency levels in reading and mathematics, prompting educational reforms that prioritize foundational literacy and numeracy. The Organisation for Economic Co-operation and Development (OECD, 2023) reported that strengthening foundational learning during the primary grades is essential for improving educational quality and learner achievement. These findings highlight the need for schools to continuously assess learners' readiness and implement timely interventions that address existing learning gaps. Several studies have examined literacy readiness or numeracy readiness independently; however, relatively few have investigated both competencies simultaneously among Grade Two pupils while comparing the perceptions of teachers and parents. Moreover, limited empirical evidence is available within the public elementary schools of the Morong District, Schools Division Office of Rizal. Understanding the current status of learners' literacy and numeracy readiness is necessary for designing interventions that are responsive to learners' developmental needs and aligned with national educational priorities.

Guided by these considerations, the present study determined the level of literacy and numeracy readiness among Grade Two pupils in selected public elementary schools in the Morong District during the School Year 2025–2026. Specifically, it assessed literacy readiness in terms of phonemic awareness, word recognition, and vocabulary, and numeracy readiness in terms of number identification, counting, and addition and subtraction as perceived by teachers and parents. It also examined significant differences in respondents' perceptions, determined the influence of selected demographic variables, investigated the relationship between literacy and numeracy readiness and pupils' academic performance, and proposed an action plan based on the findings. The results of this study are expected to provide valuable empirical evidence that may guide school administrators, teachers, parents, and policymakers in strengthening programs that promote foundational literacy and numeracy among early-grade learners.

Material and methods

2.1 Research Design

This study employed a descriptive survey research design complemented by documentary analysis. The descriptive survey design was utilized to determine the level of literacy and numeracy readiness among Grade Two pupils in terms of phonemic awareness, word recognition, vocabulary, number identification, counting, and addition and subtraction as perceived by teachers and parents. Documentary analysis was used to obtain the pupils' academic performance based on their final average grades in all learning areas for School Year 2025–2026. This combination of methods enabled the researcher to describe the respondents' perceptions and determine the relationship between literacy and numeracy readiness and academic performance.

2.2 Locale of the Study

The study was conducted in the twelve (12) public elementary schools in the Morong District, Schools Division Office of Rizal, namely: Bombongan Elementary School, Calero-Lanang Elementary School, Caniogan Elementary School, Lagundi Elementary School, Maybancal Elementary School, Pulong Kumanoy Elementary School, Roman Tantiongco Memorial School, San Guillermo Elementary School, Talaga Elementary School, Timoteo A. Reyes Sr. Memorial Elementary School, Tomas Claudio Memorial Elementary School, and Yapak Elementary School. These schools were selected because they offer Grade Two classes and represent the public elementary schools within the district, making them appropriate sites for assessing the literacy and numeracy readiness of Grade Two pupils.

2.3 Respondents of the Study

The respondents consisted of two groups. The first group included the total population of thirty-six (36) Grade Two teachers from the participating public elementary schools, who were described according to age, sex, civil status, position title, educational attainment, length of service, and in-service training attended. The second group comprised two hundred forty (240) parents of selected Grade Two pupils, with twenty (20) parents representing each school. They were described according to age, sex, civil status, number of children in the family, educational attainment, monthly family income, and

occupation. The academic performance of the Grade Two pupils was likewise obtained through documentary analysis of their final average grades.

2.4 Sample and Sampling Procedure

Total population sampling was employed for the teacher-respondents since all thirty-six (36) Grade Two teachers were included in the study. For the parent-respondents, quota sampling and convenience sampling were utilized. Quota sampling ensured that twenty (20) parents from each of the twelve participating schools were represented, while convenience sampling facilitated the selection of parents who were readily available and willing to participate during the data collection period, resulting in a total sample of two hundred forty (240) parent-respondents.

2.5 Research Instrument

The study utilized a researcher-made questionnaire-checklist as the primary instrument for data collection. The instrument consisted of two major parts: the first gathered the demographic profile of the respondents, while the second measured the level of literacy readiness in terms of phonemic awareness, word recognition, and vocabulary, and numeracy readiness in terms of number identification, counting, and addition and subtraction using a five-point Likert scale. The questionnaire underwent expert validation to establish content validity and was pilot-tested among respondents with similar characteristics to determine its reliability using Cronbach's alpha coefficient before its final administration.

2.6 Data Gathering Procedure

The researcher first secured approval from the Graduate School, the Schools Division Superintendent of Rizal, the Public Schools District Supervisor of Morong District, and the school heads of the participating schools. After obtaining the necessary permissions, the validated questionnaires were personally distributed to the teacher-respondents and parent-respondents, who were informed of the purpose of the study and provided their voluntary consent. The accomplished questionnaires were retrieved, checked for completeness, coded, and tabulated for statistical analysis. Permission was likewise obtained to access the Grade Two pupils' final average grades from school records for documentary analysis..

2.7 Data Analysis Techniques

The collected data were analyzed using both descriptive and inferential statistics. Frequency counts and percentages were used to describe the demographic characteristics of the respondents, while weighted mean and standard deviation were employed to determine the level of literacy and numeracy readiness. The independent samples t-test was used to determine significant differences between the perceptions of teachers and parents, while one-way Analysis of Variance (ANOVA) determined significant differences when respondents were grouped according to their profile variables. Pearson Product-Moment Correlation Coefficient (r) was utilized to determine the significant relationship between literacy and numeracy readiness and the academic performance of Grade Two pupils. All statistical tests were interpreted using the 0.05 level of significance

2.8 Ethical Considerations

The researcher strictly observed ethical principles throughout the conduct of the study. Prior approval was obtained from the appropriate educational authorities before data collection commenced. Participation was voluntary, and informed consent was secured from all respondents after explaining the objectives, procedures, benefits, and confidentiality of the study. The identities of the respondents and the academic records of the pupils were kept anonymous through coding, and all information gathered was treated with strict confidentiality and used solely for academic and research purposes in compliance with the provisions of the Data Privacy Act of 2012 (Republic Act No. 10173) and accepted ethical standards in educational research.

Results and Discussion

3.1 Profile of the Respondents in terms of the Selected Variables

Table 1.1 presents the profile of the teacher-respondents in terms of the selected variables. The findings reveal that the majority of the 36 teacher-respondents were 31–40 years old (17, 47.2%), followed by those aged 41–50 years (9, 25.0%), 21–30 years (7, 19.4%), and 51–60 years (3, 8.3%). All respondents were female (36, 100.0%), while most were married (25, 69.4%) and the remaining were single (11, 30.6%). In terms of position title, the largest proportion were Teacher I (18, 50.0%), followed by Teacher III (9, 25.0%), Teacher II (6, 16.7%), and Master Teachers (3, 8.3%). Regarding educational attainment, most respondents had Master's degree units (14, 38.9%), followed by Master's degree holders (10, 27.8%), Bachelor's degree holders (9, 25.0%), and those with a Master's degree with doctorate units (3, 8.3%). In terms of teaching experience, the majority had 11–20 years of service (13, 36.1%), followed by 1–10 years (12, 33.3%), 21 years and above (7, 19.4%), and below one year (4, 11.1%). Lastly, most respondents had attended District-level in-service trainings (22, 61.1%), followed by Division-level (7, 19.4%), School-level (5, 13.9%), and National-level trainings (2,

5.6%), indicating that the teacher-respondents were generally experienced educators who actively participated in professional development activities, particularly at the district level.

Table 1.1

Frequency, Percentage and Rank Distribution of the Teacher-Respondents in Terms of the Selected Variables

Profile	Frequency	Percentage	Rank
Age			
51-60 years old	3	8.3	4
41-50 years old	9	25.0	2
31-40 years old	17	47.2	1
21-30 years old	7	19.4	3
Total	36	100.0	
Sex			
Female	36	100.0	1
Total	36	100.0	
Civil Status			
Single	11	30.6	2
Married	25	69.4	1
Total	36	100.0	
Position Title			
Master Teacher	3	8.3	4
Teacher III	9	25.0	2
Teacher II	6	16.7	3
Teacher I	18	50.0	1
Total	36	100.0	
Educational Attainment			
Master's Degree with Doctorate Units	3	8.3	4
Master's Degree	10	27.8	2
with MA units	14	38.9	1
Bachelor's Degree	9	25.0	3
Total	36	100.0	
Length of Service			
21 years and above	7	19.4	3
11 – 20 years	13	36.1	1
1 – 10 years	12	33.3	2
below 1 year	4	11.1	4
Total	36	100.0	
In-Service Trainings			
National	2	5.6	4
Division	7	19.4	2
District	22	61.1	1
School	5	13.9	3
Total	36	100.0	

Table 1.2 presents the profile of the parent-respondents in terms of the selected variables. The findings show that among the 240 parent-respondents, the majority were 31–40 years old (142, 59.2%), followed by those aged 21–30 years (68, 28.3%), 41–50 years (28, 11.7%), and 51 years old and above (2, 0.8%). In terms of sex, most respondents were female (212, 88.3%), while 28 (11.7%) were male. Regarding civil status, the majority were married (190, 79.2%), followed by single (45, 18.8%) and widow/widower (5, 2.1%). As to the number of children in the family, most had 2–3 children (192, 80.0%), followed by one child (35, 14.6%) and 4–5 children (13, 5.4%). With respect to educational attainment, the largest group were college undergraduates (107, 44.6%), followed by college graduates (56, 23.3%), high school graduates (42, 17.5%), high school undergraduates (32, 13.3%), and elementary graduates (3, 1.3%). In terms of monthly family income, the highest proportion earned ₱20,000 and above (81, 33.8%), followed by those earning below ₱10,000 (57, 23.8%), ₱15,000–19,999 (56, 23.3%), and ₱10,000–14,999 (46, 19.2%). Lastly, regarding occupation, an equal number of respondents were government employees and private employees (92 or 38.3% each), followed by the self-employed (48, 20.0%), while 8 (3.3%) were classified under other occupations, indicating that the parent-respondents generally belonged to economically active households with varied educational and occupational backgrounds.

Table 1.2
*Frequency, Percentage and Rank Distribution of the Parent-Respondents
in Terms of the Selected Variables*

Profile	Frequency	Percentage	Rank
Age			
51 years old and above	2	.8	4
41-50 years old	28	11.7	3
31-40 years old	142	59.2	1
21-30 years old	68	28.3	2
Total	240	100.0	
Sex			
Male	28	11.7	2
Female	212	88.3	1
Total	240	100.0	
Civil Status			
Single	45	18.8	2
Married	190	79.2	1
Widow/er	5	2.1	3
Total	240	100.0	
Number of Children in the Family			
1	35	14.6	2
2 – 3	192	80.0	1
4 – 5	13	5.4	3
Total	240	100.0	
Educational Attainment			
College Graduate	56	23.3	2
College Undergraduate	107	44.6	1
High School Graduate	42	17.5	3
High School Undergraduate	32	13.3	4
Elementary Graduate	3	1.3	5
Total	240	100.0	
Monthly Family Income			
₱20,000 and above	81	33.8	1
₱15,000-19,999	56	23.3	3
₱10,000-14,999	46	19.2	4
Below ₱10,000	57	23.8	2
Total	240	100.0	
Occupation			
Government Employee	92	38.3	1.5
Private Employee	92	38.3	1.5
Self-employed	48	20.0	3
Others please specify	8	3.3	4
Total	240	100.0	

3.2 Level of Literacy Readiness Among Grade Two Pupils as Perceived by the Two Groups of Respondents With Respect to the Different Aspects

Table 2 presents the summary of the level of literacy readiness among Grade Two pupils as perceived by the two groups of respondents with respect to phonemic awareness, word recognition, and vocabulary. As perceived by the teacher-respondents, the composite weighted mean of 4.40, verbally interpreted as Much Ready, indicates that the pupils generally possess adequate literacy readiness. Among the three aspects, Phonemic Awareness obtained the highest weighted mean (4.59, Very Much Ready), followed by Word Recognition (4.39, Much Ready), while Vocabulary received the lowest weighted mean (4.23, Much Ready). In contrast, the parent-respondents rated the pupils with a composite weighted mean of 4.66, verbally interpreted as Very Much Ready, with Word Recognition ranking first (4.78, Very Much Ready), followed by a tie between Phonemic Awareness and Vocabulary, both obtaining a weighted mean of 4.60 (Very Much Ready). The findings indicate that while both teachers and parents recognize that Grade Two pupils possess strong foundational literacy skills, parents generally perceive a higher level of readiness than teachers, particularly in word recognition and vocabulary.

This difference may be attributed to the varying contexts in which pupils' literacy skills are observed, with teachers evaluating learners through structured classroom tasks and curriculum-based assessments, while parents assess their children's reading performance in more familiar and supportive home environments. The relatively lower ratings for vocabulary suggest the need for continued emphasis on enriching pupils' word knowledge and language comprehension through explicit vocabulary instruction, meaningful reading experiences, and regular home-school collaboration. These findings support the study of Murray (2023), who emphasized that children's literacy achievement during the early years is strongly influenced by learning readiness, prior educational experiences, and family support, highlighting the importance of strengthening foundational literacy skills through coordinated efforts between schools and parents.

Table 2

Level of Literacy Readiness Among Grade Two Pupils as Perceived by the Two Groups of Respondents With Respect to the Different Aspects

Aspects	Teachers			Parents		
	W $\bar{x}$	VI	R	W $\bar{x}$	VI	R
Phonemic Awareness	4.59	Very Much Ready	1	4.60	Very Much Ready	2.5
Word Recognition	4.39	Much Ready	2	4.78	Very Much Ready	1
Vocabulary	4.23	Much Ready	3	4.60	Very Much Ready	2.5
Composite Mean	4.40	Much Ready		4.66	Very Much Ready	

3.3 Level of Numeracy Readiness Among Grade Two Pupils as Perceived by the Two Groups of Respondents With Respect to the Different Aspects

Table 3 presents the summary of the level of numeracy readiness among Grade Two pupils as perceived by the two groups of respondents with respect to number identification, counting, and addition and subtraction. As perceived by the teacher-respondents, the composite weighted mean of 4.31, verbally interpreted as Much Ready, indicates that the pupils generally possess adequate numeracy readiness. Among the three aspects, Counting obtained the highest weighted mean (4.34, Much Ready), while Number Identification and Addition and Subtraction were tied with a weighted mean of 4.29, both verbally interpreted as Much Ready. On the other hand, the parent-respondents rated the pupils with a composite weighted mean of 4.72, verbally interpreted as Very Much Ready, with Number Identification ranking first (4.79, Very Much Ready), followed by Addition and Subtraction (4.71, Very Much Ready), while Counting obtained the lowest weighted mean (4.66), which was likewise interpreted as Very Much Ready. The findings indicate that although both teachers and parents recognize that Grade Two pupils demonstrate strong foundational numeracy skills, parents consistently perceive a higher level of readiness than teachers across all numeracy domains. The difference in perceptions may be attributed to teachers' use of structured classroom assessments that require learners to demonstrate accuracy, speed, and conceptual understanding, whereas parents may base their observations on everyday numeracy tasks performed in familiar home settings. Nevertheless, the consistently high ratings suggest that pupils possess a solid foundation in basic mathematical concepts, although continued reinforcement of number identification, counting, and basic operations through meaningful classroom instruction and home-based learning activities remains essential. These findings support the study of Gade (2025), which reported that explicit and targeted instruction significantly improved learners' numeracy performance, particularly in counting and basic operations, underscoring the importance of sustained collaboration between teachers and parents in strengthening children's foundational numeracy skills.

Table 3

Level of Numeracy Readiness Among Grade Two Pupils as Perceived by the Two Groups of Respondents With Respect to the Different Aspects

Aspects	Teachers			Parents		
	W $\bar{x}$	VI	R	W $\bar{x}$	VI	R
Number Identification	4.29	Much Ready	2.5	4.79	Very Much Ready	1
Counting	4.34	Much Ready	1	4.66	Very Much Ready	3
Addition and Subtraction	4.29	Much Ready	2.5	4.71	Very Much Ready	2
Composite Mean	4.31	Much Ready		4.72	Very Much Ready	

3.4 Significant Difference Between the Perception of the Two Groups of Respondents on the Level of Literacy And Numeracy Readiness Among Grade Two Pupils With Respect to the Different Aspects

Table 4 presents the significant difference between the perceptions of teachers and parents on the literacy and numeracy readiness of Grade Two pupils. The results revealed no significant difference in phonemic awareness ($p = .930$), indicating that both groups shared similar perceptions of pupils' foundational sound awareness skills. However, significant differences were found in word recognition, vocabulary, number identification, counting, and addition and subtraction ($p < .05$), with parents consistently rating pupils higher than teachers. These findings suggest that while teachers and parents agree on pupils' phonemic awareness, they differ in their assessment of more advanced literacy and numeracy skills, likely due to

differences in the contexts and standards used for observation. The results underscore the importance of strengthening home-school collaboration to promote a common understanding of pupils' learning progress and support the development of their foundational competencies.

Table 4

Significant Difference Between the Perception of the Two Groups of Respondents on the Level of Literacy And Numeracy Readiness Among Grade Two Pupils With Respect to the Different Aspects

Aspects	Groups	N	Mean	t-value	p-value	Ho	Verbal Interpretation
Literacy							
Phonemic Awareness	Teachers	36	4.59	.088	.930	Accepted	Not Significant
	Parents	240	4.60				
Word Recognition	Teachers	36	4.39	6.253	.000	Rejected	Significant
	Parents	240	4.78				
Vocabulary	Teachers	36	4.23	3.498	.001	Rejected	Significant
	Parents	240	4.60				
Numeracy							
Number Identification	Teachers	36	4.29	8.082	.000	Rejected	Significant
	Parents	240	4.79				
Counting	Teachers	36	4.34	5.720	.000	Rejected	Significant
	Parents	240	4.66				
Addition and Subtraction	Teachers	36	4.29	7.842	.000	Rejected	Significant
	Parents	240	4.71				

3.5 Significant Difference on the Perception of the Two Groups of Respondents on the Level of Literacy And Numeracy Readiness Among Grade Two Pupils With Respect to the Different Aspects in Terms of Their Profile

Table 5.1 presents the significant difference in the perceptions of the teacher-respondents on the level of literacy readiness among Grade Two pupils with respect to their profile variables. The results of the ANOVA revealed that age, civil status, position title, length of service, and in-service trainings attended did not significantly influence teachers' perceptions of pupils' phonemic awareness, word recognition, and vocabulary, as all obtained probability values were greater than the 0.05 level of significance, leading to the acceptance of the null hypothesis. However, educational attainment showed a significant difference across all three literacy aspects ($p < .05$), resulting in the rejection of the null hypothesis. These findings indicate that teachers generally share similar perceptions of pupils' literacy readiness regardless of their demographic and professional characteristics, except for educational attainment, which appears to shape their evaluation of learners' literacy competencies. This suggests that teachers with higher academic qualifications may possess broader pedagogical knowledge and more rigorous standards in assessing literacy skills. The findings are supported by Linder (2022), who emphasized that children's literacy readiness is influenced by multiple educational and environmental factors and that educators' understanding of literacy development plays a vital role in evaluating learners' readiness and planning appropriate instructional interventions.

Table 5.1

Significant Difference on the Perception of the Teacher-Respondents on the Level of Literacy Readiness Among Grade Two Pupils With Respect to the Different Aspects in Terms of Their Profile

Aspects	F-value	p-value	Ho	Verbal Interpretation
Age				
Phonemic Awareness	2.372	.089	Accepted	Not Significant
Word Recognition	.306	.821	Accepted	Not Significant
Vocabulary	2.350	.091	Accepted	Not Significant
Civil Status				
Phonemic Awareness	.658	.626	Accepted	Not Significant
Word Recognition	.264	.899	Accepted	Not Significant
Vocabulary	1.613	.196	Accepted	Not Significant
Position Title				
Phonemic Awareness	.444	.723	Accepted	Not Significant
Word Recognition	.131	.941	Accepted	Not Significant
Vocabulary	.384	.076	Accepted	Not Significant
Educational Attainment				
Phonemic Awareness	5.105	.005	Rejected	Significant
Word Recognition	7.540	.023	Rejected	Significant

Vocabulary	3.127	.039	Rejected	Significant
Length of Service				
Phonemic Awareness	1.445	.248	Accepted	Not Significant
Word Recognition	.390	.761	Accepted	Not Significant
Vocabulary	2.020	.131	Accepted	Not Significant
In-Service Trainings Attended				
Phonemic Awareness	1.546	.761	Accepted	Not Significant
Word Recognition	1.879	.756	Accepted	Not Significant
Vocabulary	1.651	.781	Accepted	Not Significant

Table 5.2 presents the significant difference in the perceptions of the teacher-respondents on the level of numeracy readiness among Grade Two pupils with respect to their profile variables. The results of the ANOVA revealed that age, sex, civil status, position title, educational attainment, length of service, and in-service trainings attended did not significantly influence teachers' perceptions of pupils' number identification, counting, and addition and subtraction, as all obtained probability values were greater than the 0.05 level of significance, leading to the acceptance of the null hypothesis for all profile variables. These findings indicate that teachers have consistent perceptions of pupils' numeracy readiness regardless of their personal and professional characteristics. This suggests that the assessment of foundational numeracy skills is relatively uniform among teachers, possibly because these competencies are more concrete, observable, and guided by standardized learning competencies and assessment practices. The findings are consistent with the study of Marcaida (2025), which reported that teachers' demographic characteristics, including age, sex, teaching position, and educational attainment, did not significantly influence their perceptions of the implementation of the National Mathematics Program, highlighting the consistency of teachers' evaluations of learners' numeracy development across varying professional backgrounds.

Table 5.2

Significant Difference on the Perception of the Teacher-Respondents on the Level of Numeracy Readiness Among Grade Two Pupils With Respect to the Different Aspects in Terms of Their Profile

Aspects	F-value	p-value	Ho	Verbal Interpretation
Age				
Number Identification	1.354	.275	Accepted	Not Significant
Counting	2.090	.121	Accepted	Not Significant
Addition and Subtraction	.622	.606	Accepted	Not Significant
Sex				
Number Identification	1.357	.252	Accepted	Not Significant
Counting	.450	.507	Accepted	Not Significant
Addition and Subtraction	.043	.838	Accepted	Not Significant
Civil Status				
Number Identification	1.190	.335	Accepted	Not Significant
Counting	1.034	.405	Accepted	Not Significant
Addition and Subtraction	1.105	.372	Accepted	Not Significant
Position Title				
Number Identification	2.178	.110	Accepted	Not Significant
Counting	1.001	.405	Accepted	Not Significant
Addition and Subtraction	1.549	.221	Accepted	Not Significant
Educational Attainment				
Number Identification	2.282	.098	Accepted	Not Significant
Counting	1.546	.075	Accepted	Not Significant
Addition and Subtraction	.643	.593	Accepted	Not Significant
Length of Service				
Number Identification	1.597	.209	Accepted	Not Significant
Counting	.159	.923	Accepted	Not Significant
Addition and Subtraction	.397	.756	Accepted	Not Significant
In-Service Trainings Attended				
Number Identification	1.445	.871	Accepted	Not Significant
Counting	1.971	.761	Accepted	Not Significant
Addition and Subtraction	1.980	.290	Accepted	Not Significant

Table 5.3 presents the significant difference in the perceptions of the parent-respondents on the level of literacy readiness among Grade Two pupils with respect to their profile variables. The results of the ANOVA revealed that age, sex, civil status, number of children in the family, educational attainment, monthly family income, and occupation did not significantly influence parents' perceptions of their children's phonemic awareness, word recognition, and vocabulary, as all obtained probability values were greater than the 0.05 level of significance. Thus, the null hypothesis was accepted for all profile variables. These findings indicate that parents have similar perceptions of their children's literacy readiness regardless of their demographic characteristics, suggesting that their assessments are shaped more by their day-to-day interactions and observations at home than by differences in personal, educational, or socioeconomic backgrounds. The findings further imply that parents generally recognize their children's literacy skills in a consistent manner, regardless of their age, educational attainment, income, or occupation. These results are supported by Linder (2022), who emphasized that while the quality of the home literacy environment and parent-child interactions significantly influence children's literacy development, demographic characteristics alone do not necessarily affect parents' perceptions of their children's literacy readiness.

Table 5.3

Significant Difference on the Perception of the Parent-Respondents on the Level of Literacy Readiness Among Grade Two Pupils With Respect to the Different Aspects in Terms of Their Profile

Aspects	F-value	p-value	Ho	Verbal Interpretation
Age				
Phonemic Awareness	.652	.582	Accepted	Not Significant
Word Recognition	1.634	.182	Accepted	Not Significant
Vocabulary	.085	.968	Accepted	Not Significant
Sex				
Phonemic Awareness	.568	.452	Accepted	Not Significant
Word Recognition	.631	.428	Accepted	Not Significant
Vocabulary	.358	.550	Accepted	Not Significant
Civil Status				
Phonemic Awareness	.846	.430	Accepted	Not Significant
Word Recognition	.227	.797	Accepted	Not Significant
Vocabulary	.577	.562	Accepted	Not Significant
Number of Children in the Family				
Phonemic Awareness	.837	.503	Accepted	Not Significant
Word Recognition	1.017	.399	Accepted	Not Significant
Vocabulary	1.147	.335	Accepted	Not Significant
Educational Attainment				
Phonemic Awareness	.784	.504	Accepted	Not Significant
Word Recognition	.955	.415	Accepted	Not Significant
Vocabulary	1.735	.161	Accepted	Not Significant
Monthly Family Income				
Phonemic Awareness	.523	.667	Accepted	Not Significant
Word Recognition	.213	.887	Accepted	Not Significant
Vocabulary	.759	.518	Accepted	Not Significant
Occupation				
Phonemic Awareness	.678	.176	Accepted	Not Significant
Word Recognition	.879	.761	Accepted	Not Significant
Vocabulary	.901	.751	Accepted	Not Significant

Table 5.4 presents the significant difference in the perceptions of the parent-respondents on the level of numeracy readiness among Grade Two pupils with respect to their profile variables. The results of the ANOVA revealed that age, sex, civil status, number of children in the family, educational attainment, monthly family income, and occupation did not significantly influence parents' perceptions of their children's number identification, counting, and addition and subtraction, as all obtained probability values were greater than the 0.05 level of significance. Consequently, the null hypothesis was accepted for all profile variables. These findings indicate that parents share consistent perceptions of their children's numeracy readiness regardless of their demographic and socioeconomic characteristics. This suggests that parents commonly observe their children's numeracy skills through everyday activities, such as counting objects, recognizing numbers, and performing simple arithmetic, resulting in similar assessments across different backgrounds. The findings further imply that parents' evaluations of their children's foundational numeracy skills are shaped more by their daily

interactions than by their personal attributes. These results are consistent with the findings of Karim (2023), who reported that parents' demographic characteristics did not significantly influence their perceptions of pupils' numeracy readiness, indicating that foundational numeracy skills are generally recognized similarly across diverse family backgrounds.

Table 5.4

Significant Difference on the Perception of the Parent-Respondents on the Level of Numeracy Readiness Among Grade Two Pupils With Respect to the Different Aspects in Terms of Their Profile

Aspect	F-value	p-value	Ho	Verbal Interpretation
Age				
Number Identification	1.023	.383	Accepted	Not Significant
Counting	1.455	.228	Accepted	Not Significant
Addition and Subtraction	2.318	.076	Accepted	Not Significant
Sex				
Number Identification	.511	.475	Accepted	Not Significant
Counting	.900	.344	Accepted	Not Significant
Addition and Subtraction	2.032	.155	Accepted	Not Significant
Civil Status				
Number Identification	.093	.911	Accepted	Not Significant
Counting	.576	.563	Accepted	Not Significant
Addition and Subtraction	1.017	.363	Accepted	Not Significant
Number of Children in the Family				
Number Identification	.826	.510	Accepted	Not Significant
Counting	.520	.721	Accepted	Not Significant
Addition and Subtraction	1.219	.303	Accepted	Not Significant
Educational Attainment				
Number Identification	1.444	.231	Accepted	Not Significant
Counting	.793	.499	Accepted	Not Significant
Addition and Subtraction	1.195	.312	Accepted	Not Significant
Monthly Family Income				
Number Identification	.976	.405	Accepted	Not Significant
Counting	1.321	.268	Accepted	Not Significant
Addition and Subtraction	1.135	.336	Accepted	Not Significant
Occupation				
Number Identification	1.765	.761	Accepted	Not Significant
Counting	1.980	.788	Accepted	Not Significant
Addition and Subtraction	.987	.761	Accepted	Not Significant

3.6 Level of Academic Performance of the Grade Two Pupils as Revealed by Their Average Grades

Table 6 presents the level of academic performance of the Grade Two pupils as revealed by their average grades. The results show that the pupils obtained an overall mean grade of 83.60, verbally interpreted as Satisfactory, with grades ranging from 75 to 91 and a standard deviation of 4.050, indicating moderate variability in academic performance. The largest proportion of pupils (98 or 40.9%) achieved Very Satisfactory grades, followed by 92 (38.3%) with Satisfactory grades, 26 (10.9%) with Outstanding performance, and 24 (9.9%) with Fairly Satisfactory grades. Notably, no pupil received a grade below 75, indicating that all learners met the minimum academic expectations. These findings suggest that while most Grade Two pupils have attained satisfactory to very satisfactory academic performance, there remains an opportunity to further enhance their achievement, particularly by strengthening their foundational literacy and numeracy competencies. The moderate variation in grades also indicates differences in learners' readiness and learning experiences, underscoring the need for targeted instructional support and continuous monitoring. These findings are supported by Merelos (2023), who reported that Grade Two pupils generally demonstrated satisfactory reading performance and successfully met the promotion requirements, emphasizing that strong foundational literacy skills, particularly word recognition and comprehension, are essential in improving overall academic achievement.

Table 6

Level of Academic Performance of the Grade Two Pupils as Revealed by Their Average Grades

Average Grade	Verbal Interpretation	Frequency	Percent	Rank
90 and above	Outstanding	26	10.9	3
85 – 89	Very Satisfactory	98	40.9	1
80 – 84	Satisfactory	92	38.3	2
75 – 79	Fairly Satisfactory	24	9.9	4
Below 75	Did Not Meet Expectations	-	-	-
Total		240	100.0	
Highest Rating		91		
Lowest Rating		75		
Mean		83.60 (Satisfactory)		
Std. Deviation		4.050		

3.7 Significant Relationship Between the Perceived Level of Literacy and Numeracy Readiness Among Grade Two Pupils and Their Level of Academic Performance

Table 7 presents the significant relationship between the perceived level of literacy and numeracy readiness among Grade Two pupils and their academic performance. The results of the Pearson Product-Moment Correlation revealed that all aspects of literacy and numeracy were significantly related to pupils' academic performance, as evidenced by probability values lower than the 0.05 level of significance. Specifically, significant positive relationships were found for Phonemic Awareness ($r = .391$, $p = .000$), Word Recognition ($r = .720$, $p = .000$), Vocabulary ($r = .304$, $p = .000$), Number Identification ($r = .842$, $p = .001$), Counting ($r = .747$, $p = .000$), and Addition and Subtraction ($r = .651$, $p = .000$), leading to the rejection of the null hypothesis for all six aspects. These findings indicate that pupils with higher levels of literacy and numeracy readiness tend to demonstrate better academic performance, with numeracy skills, particularly number identification and counting, showing the strongest relationships with pupils' average grades. The results underscore the critical role of foundational literacy and numeracy competencies in promoting academic success during the primary grades and highlight the importance of providing early interventions to strengthen these essential skills. The findings are consistent with the study of Francisco (2025), which reported a significant positive relationship between learners' numeracy skills and academic performance, emphasizing that strong foundational literacy and numeracy competencies contribute substantially to improved learning outcomes and overall academic achievement.

Table 7

Significant Relationship Between the Perceived Level of Literacy and Numeracy Readiness Among Grade Two Pupils and Their Level of Academic Performance

Aspects	r-value	p-value	Ho	Verbal Interpretation
Literacy				
Phonemic Awareness	.391	.000	Rejected	Significant
Word Recognition	.720	.000	Rejected	Significant
Vocabulary	.304	.000	Rejected	Significant
Numeracy				
Number Identification	.842	.001	Rejected	Significant
Counting	.747	.000	Rejected	Significant
Addition and Subtraction	.651	.000	Rejected	Significant

Conclusions & Recommendations

The study concludes that Grade Two pupils in the public elementary schools of Morong District generally demonstrate satisfactory levels of literacy and numeracy readiness, with teachers perceiving them as much ready and parents as very much ready. While both groups shared similar perceptions of pupils' phonemic awareness, significant differences were observed in word recognition, vocabulary, number identification, counting, and addition and subtraction. Teachers'

educational attainment significantly influenced their perceptions of literacy readiness, whereas the remaining teacher profile variables and all parent profile variables showed no significant influence on perceptions of either literacy or numeracy readiness. Furthermore, the pupils attained satisfactory academic performance, and both literacy and numeracy readiness were found to have significant positive relationships with academic achievement, highlighting the importance of strong foundational skills in promoting learners' academic success.

Based on the findings and conclusions of the study, it is recommended that school administrators strengthen literacy and numeracy programs by providing continuous professional development for teachers and implementing evidence-based intervention strategies. Teachers should intensify instruction in vocabulary, word recognition, number identification, counting, and basic operations, while parents should actively reinforce these skills through regular home-based learning activities and close collaboration with the school. The proposed action plan should be implemented and continuously monitored to improve pupils' foundational competencies and academic performance. Future researchers are likewise encouraged to conduct similar studies involving larger populations and additional variables to further validate and expand the findings of the present study.

Compliance with ethical standards

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