

Multimedia Utilization in Developing the Reading Comprehension of Grade Three Pupils

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Abstract

This study aimed to determine the extent of multimedia utilization in developing the reading comprehension skills of grade three pupils in public elementary schools under District Learning Center II-B, City Schools Division of Antipolo, during the School Year 2025–2026. The research focused on six schools: Dalig Elementary School, Isaias S. Tapales Elementary School, Jesus S. Cabarrus Elementary School, Pantay Elementary School, San Antonio Village Elementary School, and Teofila Z. Rovero Memorial Elementary School. The respondents included the total population of 60 grade three teachers, described in terms of age, sex, civil status, educational attainment, length of service, position title, and in-service trainings attended. A total of 300 grade three pupils, fifty from each school, were selected using quota sampling to determine their reading comprehension levels based on the Comprehensive Rapid Literacy Assessment (CRLA). The study utilized a descriptive survey research design, employing a researcher-made questionnaire checklist to assess the extent of multimedia utilization in teaching reading comprehension as perceived by teachers, focusing on word recognition skills, understanding vocabulary, understanding content, and drawing conclusions. Documentary analysis was also applied to evaluate pupils' reading comprehension levels. Findings revealed that most teachers were 31 years old and above, female, married, pursuing graduate education, holding Teacher I–III positions, with over ten years of service and participation in in-service trainings at the division and national levels. Multimedia was often used for word recognition, vocabulary, and content comprehension but only sometimes for drawing conclusions. Teachers' age significantly influenced their perception of multimedia use, whereas other demographic variables did not. Most pupils were classified as low emergent readers, and a significant relationship was found between multimedia utilization and reading comprehension levels. Teachers often encountered challenges in multimedia application. The study concludes that multimedia utilization positively affects pupils' reading comprehension, and teacher age influences perceptions of its use. It recommends comprehensive teacher training, exposure of pupils to interactive materials, implementation of an action plan, and further experimental studies.

Keywords: Multimedia Utilization, Reading Comprehension, Grade Three Pupils, Public Elementary Schools, CRLA

1. Introduction

Education is a lifelong process that shapes individuals' knowledge, skills, and competencies, equipping them to be productive citizens and contributing to societal development (Philippine Constitution, 1987, Art. XIV, Sec. 1). In the context of the Philippines, the Department of Education (DepEd) continues to prioritize initiatives that enhance literacy and 21st-century skills, as reflected in the MATATAG Curriculum, which aims to prepare learners for future local and global challenges by fostering inclusivity, critical thinking, and technological competence (DepEd Order No. 010, s. 2024).

Reading proficiency is a foundational skill essential for academic success. However, studies indicate that many elementary pupils struggle with reading comprehension, particularly in conceptualizing and retaining information presented in lessons (Vidal, 2022; Diasalo, 2023). To address this, educators have increasingly incorporated multimedia tools into instruction. Multimedia—comprising images, audio, video, animations, and interactive presentations—enhances learning by providing visual and auditory scaffolds that support understanding, engagement, and motivation (Subaidi, 2021; Ozdemir, 2024). Research demonstrates that multimedia can improve vocabulary acquisition, text comprehension, and critical thinking skills across various grade levels and learning contexts (Dewi, 2021; Paredes, 2022; Almacén, 2024).

Foreign studies also highlight the effectiveness of multimedia in improving reading comprehension. Subaidi (2021) reported that multimedia learning improved comprehension among indigenous pupils in Malaysia, while Dewi (2021) found that PowerPoint-based instruction enhanced narrative and descriptive text understanding among elementary education students in Indonesia. Similarly, Ozdemir (2024) noted that multimedia animation-based instruction improved

fourth graders' reading comprehension and mitigated the challenges of text difficulty. Jambi (2024) further demonstrated that learning videos increased engagement and reading ability among grade six students.

Local research supports these findings. Diasalo (2023) observed significant improvement in grade three pupils' comprehension when audio-video materials were integrated into lessons. Paredes (2022) and Almacen (2024) also confirmed that multimedia-based reading strategies effectively enhanced students' understanding and academic performance. While these studies highlight the benefits of multimedia, gaps remain: most research focuses on experimental designs, older students, or specific multimedia tools, leaving limited data on the extent of multimedia utilization by teachers and its direct impact on grade three pupils' reading comprehension in Philippine public elementary schools.

Given these gaps, the present study seeks to examine how multimedia is utilized in teaching reading comprehension to grade three pupils, focusing on its perceived effectiveness in word recognition, vocabulary understanding, content comprehension, and drawing conclusions. By combining teachers' perceptions with pupils' performance outcomes, this study contributes to the growing body of evidence on technology-enhanced learning in early elementary education and informs practical strategies for improving reading proficiency..

2. Materials and methods

2.1 Research Design

The study applied the descriptive survey research design utilizing a questionnaire as the tool in gathering pertinent data

2.2 Research Setting

The study was conducted in public elementary schools in District Learning Center II-B, City Schools, Division Office of Antipolo. These include Dalig Elementary School, Isaias S. Tapales Elementary School, Jesus S. Cabarrus Elementary School, Pantay Elementary School, San Antonio Village Elementary School and Teofila Z. Rovero Memorial Elementary School

2.3 Respondents

The study involved a total population of 60 grade three teachers from six public elementary schools under District Learning Center II-B, City Schools Division of Antipolo. These teachers were described based on their age, sex, civil status, educational attainment, length of service, position title, and in-service trainings attended. To assess pupils' reading comprehension, 50 grade three pupils from each school were included, resulting in a total of 300 pupils, selected through quota sampling. The pupils' comprehension levels were determined using the Comprehensive Rapid Literacy Assessment (CRLA). The distribution of respondents across the schools was as follows: Dalig Elementary School (8 teachers, 50 pupils), Isaias S. Tapales Elementary School (24 teachers, 50 pupils), Jesus S. Cabarrus Elementary School (8 teachers, 50 pupils), Pantay Elementary School (6 teachers, 50 pupils), San Antonio Village Elementary School (8 teachers, 50 pupils), and Teofila Z. Rovero Memorial Elementary School (6 teachers, 50 pupils). This composition ensured a representative sample of teachers' perspectives on multimedia utilization and a comprehensive evaluation of pupils' reading comprehension across the selected schools.

2.4 Research Instruments

The study utilized a researcher-made questionnaire-checklist to gather data from teacher respondents. The instrument consisted of three parts. Part I collected personal information of the respondents, including age, sex, civil status, educational attainment, position title, length of service, and in-service trainings attended. Part II assessed the extent of multimedia utilization in developing grade three pupils' reading comprehension across four aspects: word recognition skills, understanding vocabulary, understanding content, and drawing conclusions. Each aspect contained 10 items, totaling 40 items. Responses were rated using a five-point Likert scale: 5 (Always, 4.50–5.00), 4 (Often, 3.50–4.49), 3 (Sometimes, 2.50–3.49), 2 (Seldom, 1.50–2.49), and 1 (Never, 1.00–1.49). Part III focused on the extent of challenges encountered by teachers in utilizing multimedia for reading comprehension, also rated using the same five-point scale.

To ensure validity, the instrument underwent content validation by experts in research, school heads, master teachers, thesis advisers, professorial lecturers, and the Dean of the Graduate Studies Program. Feedback on clarity, relevance, and comprehensiveness of the items was incorporated in the final version of the questionnaire, ensuring it was suitable for accurate and meaningful data collection and analysis.

2.5 Data Collection

A Gantt Chart of Activities will be followed in the conduct of the study. This includes the formulation of the research problem up to the revision of the manuscript and submission of the final copy. After the validation of the instrument, consent to conduct the study will be attained from the Office of the Schools Division Superintendent. The

questionnaire-checklist will be administered to the respondents. The researcher will also follow the guidelines in the Data Privacy Act of 2012.

After the retrieval, the data were encoded and processed through the Statistical Package for Social Sciences (SPSS). After the analysis and interpretation of data, summary of findings, conclusions and recommendations were formulated. After the final oral defense, the manuscript was revised and incorporating all the comments and suggestions of the oral examination committee. The manuscript was also subjected to Anti-plagiarism test at the statistical center. Hardbound copies of the manuscript were submitted after the final editing and revision to the office of graduate studies program and other offices concerned.

2.6 Data Analysis

The data collected in this study were analyzed using appropriate statistical tools to ensure accurate interpretation. The demographic profile of the respondents was described using frequency, percentage, and rank distribution. To determine the extent of multimedia utilization in developing the reading comprehension of grade three pupils across the different aspects (word recognition, vocabulary understanding, content comprehension, and drawing conclusions), the weighted mean was employed. To examine whether respondents' perceptions of multimedia utilization differed based on their demographic profile, one-way analysis of variance (ANOVA) was applied. The level of reading comprehension skills of grade three pupils was determined from the results of the Comprehensive Rapid Literacy Assessment (CRLA). To investigate the relationship between the perceived extent of multimedia utilization and pupils' reading comprehension levels, correlation analysis was conducted. Additionally, the weighted mean was used to assess the extent of challenges encountered by teachers in utilizing multimedia for reading comprehension development. These statistical treatments provided a comprehensive understanding of both teachers' perceptions and pupils' performance outcomes, ensuring that the results were valid and interpretable.

2.7 Ethical Considerations

The study ensured the protection of the rights and welfare of all respondents. Participation was voluntary, and respondents were informed about the purpose of the study. Confidentiality and anonymity of all information provided were strictly maintained, and data were used solely for research purposes. The researcher ensured that the respondents were treated with respect and that no harm, whether physical, emotional, or psychological, would result from their participation in the study..

3. Results and Discussion

3.1. The Profile of the Teacher-Respondents in Terms of the Selected Variables

Table 1 presents the profile of the teacher-respondents in terms of the selected variables

As shown in the table, in terms of age, 33% are 41-50 years old, 30 % are 31-40 years old. And the rest are 51 years old and above with 21.7% and 15% respectively. In terms of sex, most of them are females with 83.3%. Majority of them are married with 80%. With regard to their educational attainment, 43.3% are Masters' degree holder, 28.4% have MA units, 23.3 % are Bachelors' degree holder and 5% have doctoral units. As to their position title, 46.6% are Teacher I, 26.7% are Teacher II, 20% are Teacher III and 6.7% are Master Teacher. In terms of length of service, 33.3% have been in the service for 10-14 years, 30 % have been in the service for 15-19 years, 20 % for 5-9 years and the rest have been in the service for 20 years and above. With regard to in-service trainings attended, 26.7% have attended in the division level, 23.3 % have attended in the regional level, 16.7% in the school level and 13.3% have attended in the national level.

Table 1: *Profile of the Teacher-Respondents in Terms of the Selected Variables*

Profile	Frequency	Percentage	Rank
Age			
51 years old and above	13	21.7	3
41 – 50 years old	20	33.3	1
31 – 40 years old	18	30.0	2
21 – 30 years old	9	15.0	4
Total	60	100.0	
Sex			
Male	10	16.7	2
Female	50	83.3	1
Total	60	100.0	
Civil Status			
Single	12	20.0	2
Married	48	80.0	1

Total	60	100.0	
Educational Attainment			
MA with Doctorate units	3	5.0	4
Masters' Degree	26	43.3	1
With MA units	17	28.4	2
Bachelor's Degree	14	23.3	3
Total	60	100.0	
Position Title			
Master Teacher I	4	6.7	4
Teacher III	12	20.0	3
Teacher II	16	26.7	2
Teacher I	28	46.6	1
Total	60	100.0	
Length of Service			
20 years and above	10	16.7	4
15 - 19 years	18	30.0	2
10 - 14 Years	20	33.3	1
5 - 9 years	12	20.0	3
Total	60	100.0	
In-Service Trainings Attended			
National Level	8	13.3	5
Regional Level	14	23.3	2
Division Level	16	26.7	1
District Level	12	20.0	3
School Level	10	16.7	4
Total	60	100.0	

3.2. Extent of Multimedia Utilization in Developing Reading Comprehension of Grade Three Pupils as Perceived by the Teacher-Respondents with Respect to the Different Aspects/effects of Classroom Environment of Primary Grade Pupils as Perceived by the Respondents with Respect to Motivation to Learn, Class Participation, and Task Accomplishment

As gleaned from the table, the composite weighted mean obtained is 3.87 interpreted Often. Among the aspects, first in rank is Word Recognition Skills with an overall weighted mean of 4.36 interpreted Often. Understanding Vocabulary and Understanding Content are also interpreted Often with overall weighted means of 4.22 and 3.98 respectively. Last in rank is Drawing of Conclusions with an overall weighted mean of 2.92 interpreted Sometimes.

It could be deduced from the results that as perceived by teachers, multimedia is often utilized in developing the reading comprehension of pupils with regard to word recognition skills, understanding vocabulary and understanding content. In terms drawing conclusions multi media is sometimes utilized.

Findings imply that multimedia integration significantly enhances reading comprehension skills by increasing motivation, improving understanding through visual and auditory aids, and supporting vocabulary acquisition. It provides a richer learning experience, especially for struggling readers, by presenting content in authentic contexts and scaffolding the learning process through a combination of text, audio, and visuals like animations and videos. This leads to greater overall proficiency, including better identification of vocabulary, sequencing events, understanding the main idea, and making inferences.

Table 2: Extent of Multimedia Utilization in Developing Reading Comprehension of Grade Three Pupils as Perceived by the Teacher-Respondents with Respect to the Different Aspects/effects of Classroom Environment of Primary Grade Pupils as Perceived by the Respondents with Respect to Motivation to Learn, Class Participation, and Task Accomplishment

Aspects	Overall $\bar{W\bar{X}}$	Verbal Interpretation	Rank
Word Recognition Skills	4.36	Often	1
Understanding Vocabulary	4.22	Often	2
Understanding Content	3.98	Often	3
Drawing of Conclusions	2.92	Sometimes	4
Composite $\bar{W\bar{X}}$	3.87	Often	

3.3. Significant Difference on the Extent of Multimedia Utilization in Developing Reading Comprehension of Grade Three Pupils as Perceived by the Teacher-Respondents with Respect to the Different Aspects in Terms of Their Profile

The table shows that with respect to the different aspects, in terms of age, the F-test results reveal probability values less than .05. This rejects the null hypothesis stating that there is no significant difference on the extent of multimedia utilization in developing reading comprehension of grade three pupils as perceived by the respondents with respect to the different aspects in terms of age. On the other hand, in terms of the other variables, the null hypothesis is accepted since all the probability values are greater than .05.

Findings reveal that personal variables of teachers except for age are not significant on the perception of teachers on the extent of multimedia utilization in developing reading comprehension of grade three pupils with respect to the different aspects. This means that teachers' age is significant on their evaluation.

Findings imply that sex, civil status, educational attainment, position title, length of service and in-service trainings attended have nothing to do with their perception on the level of effectiveness of multimedia utilization in developing reading comprehension of grade three pupils with respect to the different aspects. On the other hand, teachers' maturity is contributory on their perceptions.

This is similar with the findings of the study of Anterola (2025) which revealed that the personal attributes of the teachers are not significant on their perceptions on the extent of effects of media instruction on the academic performance of grade four pupils with respect to acquisition of skills, comprehension and task accomplishment.

Table 3: Significant Difference on the Extent of Multimedia Utilization in Developing Reading Comprehension of Grade Three Pupils as Perceived by the Respondents with Respect to the Different Aspects in Terms of Their Profile

Profile	f-value	p-value	Decision	Verbal Interpretation
Age				
Word Recognition Skills	10.980	.000	Rejected	Significant
Understanding Vocabulary	4.001	.010	Rejected	Significant
Understanding Content	3.333	.023	Rejected	Significant
Drawing of Conclusions	5.386	.003	Rejected	Significant
Sex				
Word Recognition Skills	.170	.681	Accepted	Not Significant
Understanding Vocabulary	.146	.703	Accepted	Not Significant
Understanding Content	.534	.467	Accepted	Not Significant
Drawing of Conclusions	3.308	.072	Accepted	Not Significant
Civil Status				
Word Recognition Skills	2.585	.111	Accepted	Not Significant
Understanding Vocabulary	.177	.675	Accepted	Not Significant
Understanding Content	.107	.744	Accepted	Not Significant
Drawing of Conclusions	.057	.811	Accepted	Not Significant
Educational Attainment				
Word Recognition Skills	2.054	.111	Accepted	Not Significant
Understanding Vocabulary	2.551	.060	Accepted	Not Significant
Understanding Content	.233	.873	Accepted	Not Significant
Drawing of Conclusions	1.044	.377	Accepted	Not Significant
Position Title				
Word Recognition Skills	1.195	.316	Accepted	Not Significant
Understanding Vocabulary	1.385	.252	Accepted	Not Significant
Understanding Content	2.488	.065	Accepted	Not Significant
Drawing of Conclusions	1.673	.178	Accepted	Not Significant
Length of Service				
Word Recognition Skills	.687	.065	Accepted	Not Significant
Understanding Vocabulary	.871	.459	Accepted	Not Significant
Understanding Content	1.388	.251	Accepted	Not Significant
Drawing of Conclusions	2.521	.062	Accepted	Not Significant
In-service Trainings Attended				
Word Recognition Skills	3.543	.017	Rejected	Significant
Understanding Vocabulary	7.593	.021	Rejected	Significant
Understanding Content	6.445	.001	Rejected	Significant
Drawing of Conclusions	3.692	.014	Rejected	Significant

3.4. Level of Reading Comprehension Skills of Grade Three Pupils as Revealed in the Results of the Comprehensive Rapid Literacy Assessment

The table shows that based on the results of the Comprehensive Rapid Literacy Assessment, out of 300 grade three pupils, 185 or 61.7% were classified as low emerging readers while 49 or 16.3% were classified as high emerging reader. Meanwhile, 42 or 14.0% are classified as developing reader while 24 or 8.0 % were classified as transitioning readers.

It can be deduced from the results that most of the pupils are in the low emerging reading level which means that these pupils have shown interest in Reading but do not yet have the abilities to read independently. This indicates that the pupils can read with some assistance but not completely independently.

Findings imply that many of the pupils need more guidance by their teachers and parents to be able to read independently. Teachers can use these levels to tailor reading instruction, ensuring each child receives the appropriate level of support to foster growth and engagement in reading.

Table 4: *Level of Reading Comprehension Skills of Grade Three Pupils as Revealed in the Results of the Comprehensive Rapid Literacy Assessment*

Reading Level	f	%	Rank
Low Emerging Reader	185	61.7	1
High Emerging Reader	49	16.3	2
Developing Reader	42	14.0	3
Transitioning Reader	24	8.0	4
Total	300	100.0	

3.5. Significant Relationship Between the Perceived Extent of Multimedia Utilization and the Level of Reading Comprehension Skills of Grade Three Pupils

The table depicts that with respect to word recognition skills , understanding vocabulary, understanding content and drawing of conclusions the computed r-values obtained values less than .05 level of significance. This rejects the null hypothesis stating that there is no significant relationship between the perceived extent of multimedia utilization and the level of reading comprehension skills of grade three pupils. Results reveal that multimedia utilization is significantly related to pupils' reading comprehension skills. This means that reading comprehension skills is influenced by the utilization of media in the teaching learning process. Findings imply that the media utilization in the teaching learning process is associated with the reading comprehension skills of pupils. Multimedia utilization has a positive relationship with reading comprehension skills, as it helps pupils visualize information, scaffold the learning process, and increase motivation. While studies show a general benefit, the specific impact can vary depending on the type of multimedia used; for example, audio alone is considered the least effective element. Incorporating a combination of visuals, audio, and text can improve comprehension, though the effectiveness of each component may differ between students. This relates with the findings of the study of Almacen (2024) which revealed significant improvement in academic performance and a positive shift in attitudes towards multimedia tools. These findings suggest that multimedia tools can enhance learners' academic performance and foster greater student engagement. It underscores the importance of integrating multimedia tools into educational practices to improve teaching and learning outcomes.

Table 5: *Significant Relationship Between the Perceived Extent of Multimedia Utilization and the Level of Reading Comprehension Skills of Grade Three Pupils*

Aspects	r-value	p-value	Decision	Verbal Interpretation
Word Recognition Skills	.815	.002	Rejected	Significant
Understanding Vocabulary	.826	.025	Rejected	Significant
Understanding Content	.822	.019	Rejected	Significant
Drawing of Conclusions	.765	.033	Rejected	Significant

3.6. Extent of the Challenges Encountered by Teachers in Multimedia Utilization in Developing the Reading Comprehension of Grade Three Pupils

As reflected in the table, with respect to the challenges encountered by teachers in multimedia utilization in developing the reading comprehension of grade three pupils, the overall weighted mean obtained is 4.15 with all items

interpreted Often. First in rank is “Lack of multimedia equipment” with a weighted mean of 4.48. Last in rank is “Limited budgets which restrict the purchase and maintenance of multimedia equipment and software” with a weighted mean of 3.66. Results revealed that teachers often encountered varied challenges in media utilization in developing the reading comprehension of grade three pupils. This means that in teaching Reading utilizing multimedia, teachers often met hindrances in developing pupils’ reading comprehension skills. Findings imply that teachers face challenges like a lack of training and technological infrastructure, leading to difficulties in integrating multimedia effectively for reading comprehension. Other obstacles include student distractions, lack of teacher efficiency in content development, large class sizes, and resistance to change. This is in relation with the findings of Lumapenet (2022) which revealed that teachers face challenges such as lack of training and teacher efficiency with multimedia content, inadequate classroom resources like poor internet and equipment, distractions for students from digital devices, and difficulties in assessing student comprehension in a multimedia format. Additionally, large class sizes, a lack of administrative support, and the complexity of technology-based materials also hinder progress.

Table 6: *Extent of the Challenges Encountered by Teachers in Multimedia Utilization in Developing the Reading Comprehension of Grade Three Pupils*

Challenges Encountered	Weighted Mean	Verbal Interpretation	Rank
1. Insufficient internet access,	4.26	Often	6
2. Inadequate computer units,	4.06	Often	7
3. Lack of multimedia equipment.	4.48	Often	1
4. Limited budget which restrict the purchase and maintenance of multimedia equipment and software.	3.66	Often	10
5. Lack of the necessary skills and knowledge to effectively integrate multimedia into their teaching practices	4.46	Often	2
6. Teachers are hesitant to adopt new technologies due to concerns about increased workload or lack of familiarity	4.37	Often	4
7. Lack of ICT trainings.	3.87	Often	9
8. Creating or finding high-quality, engaging multimedia content which is time-consuming and challenging	3.90	Often	8
9. Large class sizes which make it difficult to effectively utilize multimedia resources	4.44	Often	3
10. Lack of personnel to provide technical support for multimedia equipment and software.	4.00	Often	8
Overall W$\bar{X}$	4.15	Often	

4. Conclusion & Recommendations

The study concluded that teachers’ age significantly influences their perception of the extent to which multimedia is utilized in developing grade three pupils’ reading comprehension, particularly in word recognition, vocabulary understanding, content comprehension, and drawing conclusions. Other demographic factors of teachers, including sex, civil status, educational attainment, position, length of service, and in-service trainings, were not found to significantly affect their perceptions. Furthermore, the findings indicate that multimedia utilization positively influences pupils’ reading comprehension skills, highlighting the effectiveness of technology-enhanced instruction in early elementary education. Based on these conclusions, it is recommended that school administrators provide comprehensive training programs to enhance teachers’ proficiency in multimedia integration. Pupils should be exposed to interactive and technology-based learning materials to further develop their reading comprehension skills. The study also supports the implementation of the proposed action plan for multimedia integration in teaching. Finally, future research may explore experimental studies on multimedia utilization in reading instruction to establish causal relationships and further optimize teaching strategies.

Compliance with ethical standards

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