

Multimedia Skills of Early Grade Teachers and Learning Interest for Kindergarten Pupils

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Abstract. This study aimed to determine the significant relationship between the early grade teachers' multimedia skills and the kindergarten pupils' learning interest. The study utilized a descriptive-correlational design. Seventy-four (74) teachers in the Sulop District, Division of Davao del Sur, were identified through Tabachnick and Fidell's formula. A researcher-made questionnaire was utilized to gather data. The study used Mean, Pearson r , and multiple linear regression as statistical tools. Results revealed that it was oftentimes evident at the level of the multimedia skills of early grade teachers. Concerning the level of learning interest among kindergarten pupils, it was often evident that there was a significant relationship between the Multimedia Skills of Early Grade Teachers and the Learning Interest of kindergarten pupils in Sulop District, Division of Davao del Sur. The results appeared to have a computed p -value of .000, lower than the .05 significance level. Thus, the null hypothesis was rejected since the value denotes a significant relationship. Thus, it is recommended that teachers should maximize their multimedia skills by continuously exploring innovative ways to integrate digital tools into their lessons.

KEY WORDS

1. Multimedia skills
2. learning interest
3. early grade teachers
4. kindergarten pupils
5. descriptive correlation
6. Davao Del Sur, Philippines

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1. Introduction

Learning interest was a source of enthusiasm, pushing children to engage meaningfully in schoolwork. When students exhibit sincere enthusiasm in their studies, they are more inclined to connect profoundly with the content, pose inquiries, and search for more information. The learning interest of kindergarten pupils is a crucial aspect of early childhood learning, significantly impacting their educational engagement, mental growth, and social-emotional development. Kindergartners possess an innate cu-

riosity and a desire to learn more about their surroundings; however, numerous obstacles might hinder their keen interest in learning, leading to disinterest and indifference towards learning activities.

A study by Balante et al. (2023) in the Davao Region revealed a decline in participants' interest in learning about a specific subject. Another identified element was the degree of involvement the teacher fosters, and the educational environment can influence pupils' inter-

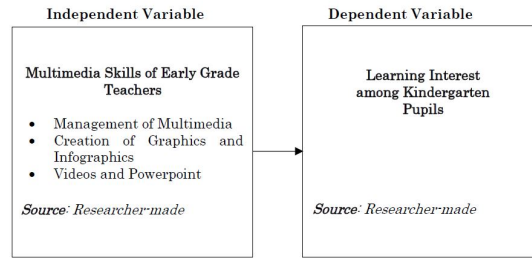


Fig. 1. Conceptual Framework

est in school. Boredom occurs when the content is tedious and repetitious or the teacher fails to render the lectures entertaining and captivating.

As highlighted in the previously mentioned studies, students' lack of interest in learning was a notable educational issue. A considerable research gap remains in grasping the relationship between student learning interest and early-grade teachers' teaching strategies, especially with multimedia skills. Considering the growing dependence on digital resources in contemporary education, investigating the impact of teachers' multimedia skills on student learning interest may yield significant insights for enhancing academic results and involvement in essential learning. This study aims to provide empirical evidence in the locale of Davao del Sur, addressing the relationship between practices of educators and student involvement, and proposing pertinent recommendations for enhancing instructional techniques and cultivating a more engaging atmosphere for learning in early education.

The study sought to address the following objectives: a.) to determine the level of multimedia skills of early grade teachers in terms of multimedia management, creation of graphics and infographics, and videos and PowerPoint. b.) to determine the level of learning interest among kindergarten pupils, and c.) to determine if there is a significant relationship between multimedia skills of early grade teachers and learning interest among kindergarten pupils.

The following hypothesis was tested at the .05 level of significance: a.) There is no significant relationship between the multimedia skills of early grade teachers and learning interest among kindergarten pupils.

This study's outcomes and conclusions were valuable to various stakeholders. The findings for the Department of Education underscored the need for policies supporting multimedia integration in classrooms, particularly encouraging teachers to use video materials during instruction. School heads recognized the importance of teacher training in multimedia use, seeing it as key to fostering student engagement and improving academic outcomes. Teachers were inspired to adopt multimedia strategies to boost creativity and student interest, especially in kindergarten. Young learners benefited from more engaging and interactive lessons, which enhanced their motivation, retention, and connection to learning. Lastly, future researchers were encouraged to build on these findings by exploring the effectiveness of specific multimedia tools and their long-term impact on student development.

Figure 1 illustrates the conceptual framework encompassing the study's variables. The independent variable was the multimedia skills of early grade teachers measured in terms of multimedia management, creation of graphics and infographics, and videos and PowerPoint. Meanwhile, the dependent variable was learning interest among kindergarten pupils.

2. Methodology

The following section outlines the procedures used by the researcher to perform this research study. It includes the population and sampling, instrumentation, data source, and data analysis.

2.1. Research Design—This study utilized a quantitative methodology with a descriptive-correlational research design to explore the relationship between the multimedia skills of early grade teachers and the learning interest of kindergarten learners. The descriptive aspect assessed teachers' competencies in managing multimedia, creating graphics and infographics, and developing videos and PowerPoint presentations while measuring pupils' interest in learning activities. This approach provided an objective snapshot of current instructional practices without manipulating variables, offering a realistic view of classroom dynamics (McCombes, 2023). The correlational component then examined the relationship between multimedia skills and student interest, analyzing naturally occurring data to uncover significant associations (Cherry, 2023). While the study does not establish causality, it effectively identifies patterns that may inform improvements in teaching strategies.

2.2. Ethical Considerations—The researcher strictly followed the ethical guidelines of RMC's Research Ethics Committee, addressing key principles such as informed consent, participant vulnerability, risk and safety, and privacy. The study explored the relationship between early-grade teachers' multimedia skills and kindergarten learners' interest, highlighting how multimedia enhances engagement and motivation. It emphasized the benefits for stakeholders, including the Department of Education, school leaders, educators, and learners, promoting multimedia integration in teaching. Teachers participated voluntarily with complete understanding of their rights, and efforts were made to reduce any pressure or risks, ensuring confidentiality and anonymity. The researcher,

adequately qualified and supported by mentors, used reliable facilities and adhered to rigorous research protocols. Data privacy was maintained per legal standards, and conflicts of interest were avoided to preserve objectivity. All participants were treated fairly, with inclusion criteria clearly defined, and findings were shared transparently through academic forums to encourage wider application and future research.

2.3. Research Respondents—The study targeted early grade teachers in the Sulop District, Division of Davao del Sur, as the primary respondents, with a total sample size of 74 determined using Tabachnick and Fidell's (2007) formula ($n = 50 + 8m$), where m represents the number of independent variables—in this case, three: management of multimedia, creation of graphics and infographics, and videos and PowerPoint presentations. To ensure the validity and reliability of the findings, universal sampling was used whenever feasible, encompassing all eligible teachers who regularly integrated multimedia into their teaching practices, thereby minimizing sampling bias and enhancing the representativeness of the data (Creswell Creswell, 2023). The inclusion criteria required participants to be current early grade teachers in the Sulop District who actively used multimedia in their teaching. At the same time, those who did not meet these qualifications were excluded. By focusing on this specific population, the study aimed to provide meaningful insights into how teachers' multimedia proficiency influences the learning interest of kindergarten learners.

2.4. Research Instrument—This study employed survey questionnaires as the primary research tool to evaluate early-grade teach-

ers' multimedia skills and their perceptions of kindergarten pupils' learning interests. The instrument comprised two sections: the first assessed teachers' proficiency in using multimedia tools (management of multimedia, creation of graphics and infographics, videos, and PowerPoint) through a 5-point Likert scale. The second section focused on teachers' observations of student learning interest. To ensure the reliability and validity of the instruments, a pilot test was conducted among early-grade teachers, and feedback was used to refine the questionnaire. Additionally, experts in early childhood education reviewed the tool to enhance its content validity and alignment with the study's objectives. Through this rigorously developed instrument, the study aimed to generate meaningful insights into the relationship between teachers' multimedia competencies and the learning interest levels of kindergarten pupils, contributing to a deeper understanding of technology's role in early childhood education.

2.5. Data Gathering Procedure—Several crucial procedures were adhered to in this investigation to guarantee ethical and accurate data collection. In order to distribute the survey effectively, the researcher first secured formal ap-

proval from academic authorities, gave school heads letters of recommendation, and worked closely with school personnel. The study's goal, participant rights, and confidentiality were all covered in detail. To guarantee clarity, dependability, and consistency with research objectives, the research instruments underwent extensive content validation by specialists and pilot testing. Surveys were given out in person to build trust and give respondents enough time. Questionnaires were securely retrieved and confirmed after being checked for completeness. Following data analysis, the study's validity and trustworthiness were increased by triangulation, utilizing thematic content analysis for qualitative discoveries and SPSS for quantitative insights.

2.6. Data Analysis—The research employed data analysis tools to ensure accurate interpretation, including the mean, which assessed the level of early grade teachers' multimedia skills and the level of kindergarten pupils' learning interest. Pearson's r was also used to identify the significant relationship between the teachers' multimedia skills and the pupils' learning interest.

3. Results and Discussion

This chapter outlined the results and discussion of the research. The discussions opened with a detailed analysis of the level of multimedia skills of early grade teachers in terms of multimedia management, creation of graphics and infographics, and videos and PowerPoint. Moreover, the discussions also revealed the level of learning interest among kindergarten pupils. The concluding presentation highlighted the significant relationship between the early grade teachers' multimedia skills and the kindergarten pupils' learning interest.

3.1. Level of the Multimedia Skills of the Early Grade Teachers—Table 1 shows the summary of the level of multimedia skills of the early grade teachers, which is measured by three indicators: Multimedia Management, Creation of Graphics and Infographics, and Videos and PowerPoint. The mean ratings of these

indicators are as follows: Multimedia Management (3.83), which was described as high and was oftentimes evident. Creations of Graphics and Infographics (3.79) were equivalent to high, which means that it was oftentimes evident. Lastly, Videos and PowerPoint (3.82) were equivalent to high, which also means that

it was oftentimes evident. The three indicators/ domains on the level of multimedia skills of the early grade teachers generate an overall mean rating of 3.81, described as oftentimes evident. This means that the level of multimedia skills

of the early grade teachers in terms of multimedia management, creation of graphics and infographics, videos, and PowerPoint has gained high results among learners of Magsaysay South District, Division of Davao Del Sur.

Table 1. Level of Multimedia Skills of Early Grade Teachers

No.	Indicators	Mean	Descriptive Equivalent
1	Multimedia Management	3.83	High
2	Creations of Graphics and Infographics	3.79	High
3	Videos and PowerPoint	3.82	High
Overall		3.81	High

Note. Legend: 1.00–1.79 = Very Low, 1.80–2.59 = Low, 2.60–3.39 = Moderate, 3.40–4.19 = High, 4.20–5.00 = Very High.

3.2. *Level of Learning Interest Among Kindergarten Pupils*—Table 2 shows the data concerning the level of learning interest among

kindergarten pupils. The results revealed an overall mean value of 3.95, which was defined as high. This indicated that kindergarten pupils' level of learning interest was oftentimes evident.

Table 2. Level of Learning Interest Among Kindergarten Pupils

No.	Indicators	Mean	Descriptive Equivalent
1	Learning Interest	3.95	High
Overall		3.95	High

Note. Legend: 1.00–1.79 = Very Low, 1.80–2.59 = Low, 2.60–3.39 = Moderate, 3.40–4.19 = High, 4.20–5.00 = Very High.

3.3. *Significant Relationship between Multimedia Skills of Early Grade Teachers and Learning Interest among Kindergarten Pupils*—Table 3 flaunted the data on the significant relationship between Multimedia Skills of Early Grade Teachers and Learning Interest among Kindergarten Pupils in Sulop District, Division of Davao del Sur. The Pearson Product-Moment Correlation (Pearson r) was applied to the two variables to assess their significant relationship. The results appeared to have a computed p-value

of .000, lower than the .05 significance level. Thus, the null hypothesis was rejected since the value denotes a significant relationship.

Furthermore, the computed r-value of 0.78 denotes the correlation between the two variables with which the hypothesis of a significant relationship was tested. The findings inferred a strong, significant relationship between the Multimedia Skills of Early Grade Teachers and Learning Interest among Kindergarten Pupils in Sulop District, Division of Davao del Sur.

Table 3. Significant Relationship between Multimedia Skills of Early Grade Teachers and Learning Interest among Kindergarten Pupils

Variables	r-value	Statistical Description	p-value	Decision
Multimedia Skills (x)	Learning Interest (y)	0.78	Strong Positive correlation	.000
Reject H0				

Note: *Significant at $p < 0.05$.

4. Conclusions and Recommendations

This study aimed to determine the level of multimedia skills of early grade teachers in terms of multimedia management, creation of graphics and infographics, and videos and PowerPoint. Moreover, the discussions also revealed the level of learning interest among kindergarten pupils. The concluding presentation highlighted the significant relationship between the early grade teachers' multimedia skills and the kindergarten pupils' learning interest in the Sulop District, Division of Davao del Sur.

4.1. Findings—The following are the significant findings:

On the level of the multimedia skills of early grade teachers, the findings revealed that early grade teachers in the Magsaysay South District, Division of Davao Del Sur, demonstrate a high level of multimedia skills across three key areas: Multimedia Management, Creation of Graphics and Infographics, and Videos and PowerPoint. The results indicate that these skills are oftentimes evident in their teaching practices. Teachers effectively manage multimedia resources, create visually appealing graphics and infographics, and utilize videos and PowerPoint presentations to enhance student engagement and learning.

The results on the level of learning interest among kindergarten pupils demonstrated that the students consistently showed a robust and enduring interest in learning, suggesting elevated levels of participation and excitement in learning experiences. It was suggested that fostering this interest could enhance engagement and improve learning results, underscoring the necessity of creating an engaging and inspiring learning atmosphere in early childhood learning.

4.2. Conclusions—The findings inferred a strong, significant relationship between the Multimedia Skills of Early Grade Teachers and Learning Interest among Kindergarten Pupils in Sulop District, Division of Davao del Sur. This underscores the necessity for continuous professional development programs to improve teachers' proficiency in utilizing multimedia tools to create more engaging and interactive learning environments. By equipping educators with advanced instructional strategies, schools can foster a more stimulating and effective learning atmosphere, ultimately contributing to young learners' holistic development and academic success.

4.3. Recommendations—Based on the findings, it is recommended that the Department of Education prioritize multimedia training in professional development programs, as teachers' proficiency in multimedia tools is closely linked to increased student learning interest. Structured training on creating graphics, presentations, and videos, as well as access to resources like projectors and tablets, should be provided. School administrators should support ongoing workshops and mentorship programs to promote digital innovation. Teachers are encouraged to explore new multimedia strategies, collab-

orate with peers, and tailor content to diverse learning styles. For kindergarten pupils, age-appropriate multimedia tools—such as digital storytelling and educational games—should be used to spark curiosity and support classroom learning. Future research should explore additional factors, extend to other grade levels, and assess the long-term impacts of multimedia use in early education.

5. References

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