THE USE OF MULTIMEDIA PRESENTATIONS IN ENHANCING CLASSROOM INSTRUCTION IN SELECTED PUBLIC SECONDARY SCHOOLS IN SULU: TEACHERS' PERSPECTIVES

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*ABSTRACT***.** This study used a descriptive-correlational research methodology with 100 teacher respondents to examine the effects of multimedia presentations on classroom instruction in a subset of Sulu's public secondary schools. Frequency, percentage scores, weighted means, standard deviations, Pearson's correlation, t-tests, and ANOVA were among the data analysis techniques used. In addition to taking into account demographic variables including age, gender, educational achievement, and teaching experience, key topics of study included instructional delivery, student involvement, and evaluation. The majority of respondents were over 31, mostly female, had five years or fewer of service, and had bachelor's degrees with master's units, according to the findings. With ratings ranging from "Moderate to Great Extent," teachers generally had a positive opinion of multimedia usage. Interestingly, those between the ages of 26 and 30 had a higher positive opinion of student participation and evaluation. Richard Mayer's Cognitive Theory of Multimedia Learning (CTML), which holds that structured multimodal presentations reduce cognitive load, make content more understandable, and enable real-time cognitive monitoring to improve generative learning, was supported by a very high positive correlation. The study emphasizes the significance of multimedia integration and digital literacy for efficient instructional delivery using interactive and multimodal techniques.

KEYWORDS*: multimedia presentations, classroom instruction, Cognitive Theory of Multimedia Learning (CTML), Cognitive Progress, Interactive Simulations*

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INTRODUCTION

Technology integration was essential for meeting the needs of digital-age learners in the quickly changing sector of education. Multimedia tools have the potential to improve teaching and learning in the Philippines, according to the Department of Education (DepEd). Their support of educators to experiment with novel approaches, such as the use of multimedia, demonstrated this dedication. In order to better prepare students for the demands of the contemporary digital world, this method sought to build more effective and interesting learning environments. Both teaching and learning are greatly improved by multimedia tools. This concept is consistent with the findings

of Adalia, Rodríguezo, Eustaquio, et al. (2025), which highlight differences in knowledge, competence, or social standing, ultimately presenting a sense of superiority. Resources like videos, animations, interactive simulations, and educational software offered dynamic and engaging ways for students to grasp and retain information.

By reducing difficult topics and encouraging active learning, multimedia technologies in education accommodate a variety of learning styles, including kinesthetic, auditory, and visual. According to research by Chavez et al. (2025), which emphasizes the value of contextualized instruction, multimedia integration, and scaffolding strategies that promote more accessible reading, these tools improve student engagement and teamwork. Multimedia resources provide teachers with creative ways to convey knowledge, comprehension tests, and useful feedback systems that make classes more engaging. Additionally, using these resources enhances the classroom and helps students acquire vital 21st-century abilities including creativity, critical thinking, and digital literacy (Almacen and Labitad 2024).

The Department of Education demonstrated its commitment to improving these competencies through the K–12 Curriculum and digital rise initiatives by taking the effort to incorporate Information and Communications Technology (ICT) into its framework. (Labitad and Almacen, 2024).

According to a study by Idnay H.V. (2020), a number of statistics from many sources demonstrated how successful multimedia is in the classroom and how its implementations might actually improve student learning. Multimedia technology can be extremely beneficial for learning, but unless everyone understands that the primary goal was to learn with technology rather than about technology, its use could seriously disrupt the learning process (National Science Foundation, 1996). It was useful to know whether multimedia has actually changed the teaching-learning processes for these and many other reasons. The infrastructure of a multimedia-enabled classroom is complicated and requires many drastic modifications in all areas, including curriculum development, pedagogical approach, faculty training, and organizational problems, according to studies reported by Slack 1999 in India H.V. 20202.

Even though the majority of us are exposed to technology these days, there are instances when we would rather teach using the speak and chalk technique since we don't have enough time to create our lesson plans. This concept is consistent with Chavez's (2022) findings about the timely and pertinent creation of educational resources as well as improved teacher training programs on activities and teaching techniques. Some of our pupils don't want to listen and participate as a result. During class, they are preoccupied with utilizing their devices. As a result, they receive extremely low evaluation scores. It was clear that employing technology in the teaching-learning process is more fun than learning in a traditional manner. However, the experience of using various ICTs in classrooms and other educational settings throughout the world over the past few decades indicates that the full fulfillment of ICT's potential educational benefits (Josol et al., 2023).

The current study is also based on the United Nations Sustainable Development Goal (SDG 4), which seeks to improve classroom instruction and strengthen multimedia presentations in order to promote inclusive, equitable, and high-quality education. Despite the significance of multimedia presentations in the twenty-first century, there is a research gap regarding the particular understudied role of contextual barriers, such as infrastructure, training, and policy. Although obstacles are frequently cited, there hasn't been much empirical research done on how infrastructure—such as power and Internet reliability, hardware and software access, and training availability—affects utilization in locations with limited resources. Comprehending the viewpoints

of educators can facilitate the identification of strengths, resolution of obstacles, and direction of school reform projects.

The purpose of this study was to evaluate how multimedia presentations are used in a few Sulu public secondary schools to improve instruction. The important connection between multimedia presentations and classroom instruction was examined in this study. The study examined how widely multimedia presentations are used in instruction, student involvement, evaluation, and feedback. This study found the main areas for improvement and made suggestions for improving classroom instruction by looking at the teachers' opinions.

LITERATURE

With its ability to improve clarity, engagement, and learning efficiency, multimedia has become a crucial part of 21st-century education. Multimedia learning, according to Mayer (2018), enhanced understanding by allowing pupils to assimilate material more thoroughly by providing it through both verbal and visual channels. His Cognitive Theory of Multimedia Learning emphasizes how including text, visuals, audio, and animations can improve students' retention of the material.

Hadi, W. (2022) highlighted that effective multimedia graphics foster meaningful learning by fortifying the link between ideas and practical applications. This concept is consistent with the findings of Chavez, Valencia, Diamante, et al. (2025). Because students can master the material separately, multimedia may help boost learning motivation. With interactive multimedia, successful learning, and efficiency in the form of greater time savings than traditional learning, students can also develop their skills on their own [20–23].

According to Liu (2020), because multimodal learning settings appeal to numerous sensory pathways, they boost students' motivation and responsiveness. Additionally, multimedia helped teachers organize their lessons. Additionally, he points out that teachers might use digital presentation tools to keep students' attention, highlight important concepts, and arrange lessons methodically. This concept is consistent with the findings of Chavez, Samilo, Cabiles, et al. al., (2026) believe that human teachers' empathy and cultural sensitivity cannot be replaced by artificial intelligence.

According to Snelson and Hsu (2019), secondary teachers in the US employ multimedia tools to improve the clarity and engagement of their classes, particularly in areas that call for visual aids. Additionally, Moreno and Mayer (2007) discovered that multimedia enhances learning outcomes by assisting learners with different learning preferences and improving information processing. When taken as a whole, these international research support multimedia's beneficial effects on learning efficacy, student engagement, and instructional clarity.

These results were corroborated by a thorough assessment conducted in the United States by Schindler et al. (2020). The authors came to the conclusion that when multimedia presentations are intentionally incorporated into teaching methods, they improve classroom instruction. In order to improve instructional efficacy and prevent cognitive overload, teachers emphasized the significance of matching multimedia content with learning objectives.

In South Korea, Costley and Lange (2021) carried out an experimental study to investigate how multimedia presentations affected student involvement and comprehension. According to the findings, pupils who were taught utilizing multimedia-supported lessons showed greater comprehension than those who were taught using conventional techniques. The results of Chavez, Salvaleon, Suazo, et al. are consistent with this theory. al., (2026) These characteristics allowed leaders to overcome institutional limitations, maintain inclusive programs throughout time, and

react flexibly to change, opposition, and learner variety. Multimedia presentations, according to teachers, were especially useful for clarifying difficult and abstract ideas.

In a systematic evaluation conducted in Germany, Bond et al. (2021) discovered that multimedia technologies had a good impact on student engagement and teaching strategies at all educational levels. Instructors stressed that multimedia presentations improved classroom dynamics and educational delivery by fostering engaging, student-centered learning environments.

Multimedia presentations are becoming more and more integrated into classroom education, according to a number of research carried out in the Philippines starting in 2018. PowerPoint presentations and instructional films were the most often utilized multimedia tools, according to Dela Cruz's (2018) analysis of ICT integration among public secondary school teachers in Central Luzon. Multimedia was seen by teachers as a useful tool for explaining lesson material and holding students' interest during class discussions.

Flores (2023) investigated the use of multimedia in post-pandemic classroom instruction in Cebu's public high schools. According to the study, after participating in remote and blended learning, teachers used multimedia presentations more frequently. Instructors stated that by enabling the use of interactive tests and visual explanations, multimedia enhanced assessment and feedback.

Ogena and Magno (2021) emphasized that multimedia literacy is an essential skill for Filipino educators in the twenty-first century while discussing teacher professional development. Teachers who have received training in multimedia design and usage are more comfortable teaching and giving feedback, according to their conversation. In order to optimize the educational advantages of multimedia presentations, the literature stressed the significance of ongoing training.

METHODS

1. Research Design

In order to investigate how multimedia presentations can enhance classroom instruction at particular public secondary schools in Sulu, this study used a descriptive-correlational methodology. A systematic survey was used to collect data from a representative sample of secondary public school teachers, including their demographics and opinions on multimedia use. The research's descriptive component sought to methodically characterize the phenomena, concentrating on providing answers to the research problem's what, when, where, and how questions rather than its causes. Descriptive statistics were used in data analysis to describe demographic traits, and correlational analysis was used to investigate the relationships between these traits, the improvement of classroom instruction, and the use of multimedia.To find significant variations in multimedia usage across different demographic characteristics, statistical tests were used. The thorough approach highlighted teachers' opinions of multimedia presentations' efficacy in the classroom and offered insights into how they affect teaching and learning.

2. Research Locale

This study concentrated on a few public secondary schools in Sulu, a province in the Philippines' Region IX that is known for its varied student body from several islands. Hadji Butu School of Arts and Trades, Jolo National High School, Sulu National High School, Jolo School of Fisheries, and Sulu State College Laboratory High School were among the research sites. These establishments were typical of public secondary school settings that frequently use multimedia presentations, including PowerPoint and video resources. In order to gather pertinent and accurate data on the use of multimedia in classroom settings within the province's public secondary education system, the researcher selected these schools based on accessibility, the availability of ICT resources, and their willingness to participate.

3. Participants of the Study

The survey concentrated on Sulu public secondary school instructors who instructed students in Grades 7–10 in the academic year 2025–2026. Multimedia presentations such as PowerPoint slides and films were used by these teachers who were directly involved in teaching in the classroom. Because of their relevant experiences with multimedia teaching technologies, they were chosen as responders. In order to shed light on the real practices, advantages, and difficulties encountered in this setting, the study sought to obtain insights into their use, experiences, and perceived efficacy of multimedia in improving instruction.

4. Sampling Procedure

Purposive sampling, a non-probability technique, was used in this study to pick respondents according to particular research-related criteria. Teachers who now work in public secondary schools in Sulu were the targeted responders; in particular, they were in charge of classes 7–10 and had used multimedia displays in their lessons. To guarantee that the sample comprised people who could directly share their experiences with multimedia tools, a total of one hundred teachers were specifically chosen. Since not all teachers may use these materials, it is important to get input from those who have, which justifies our sampling strategy. Purposive sampling, according to John W. Creswell (2018), is a strategic technique in which researchers deliberately choose subjects or locations that best highlight the study's main phenomenon.

5. Research Instrument

A structured survey was used as the research tool in this study to gather quantitative information about instructors' use of multimedia presentations and their opinions of how it affects instruction in the classroom. It is divided into two sections: the first collects demographic data, including age, gender, length of service, and educational attainment; the second section asks teachers about their opinions of multimedia presentations in terms of student engagement, instructional delivery, assessment, and feedback. The questionnaire incorporates ideas from other studies (Mohammad & Abdulrazzaq, 2020; Sibayan, 2019; Aldalalah & Ababneh, 2015; Kumar & Tammelin, 2018; Aguinaldo & Villanueva, 2021) and is based on standardized instruments on multimedia usage. The instrument, which focuses on instructors' perspectives on multimedia consumption, has been specially adapted to the context and goals of the study, although being founded on these frameworks. Before being administered to the entire sample, it was designed to be clear, succinct, and understandable, guaranteeing its efficacy and dependability.

6. Data Gathering Procedure

Getting institutional approval from Sulu State College's Graduate Studies office was the first step in the data collection process for this study. The study's goals, methods, and ethical issues were all outlined in a comprehensive proposal that was submitted for approval. After receiving approval, the researcher worked with the principals or other approved school officials to arrange for the survey questionnaires to be distributed. To ensure clarity and relevance, the professors emphasized the study's goal and the significance of their sincere participation. All participants provided written informed consent before the survey was administered.In order to provide participants enough time to finish the survey, it was administered via a selected mode, such as online platforms, paper-based distribution, or in-person administration. After being gathered, survey results were examined and examined using the proper statistical procedures to address the research issues. Data confidentiality was upheld throughout the procedure, guaranteeing participant anonymity and information safety.

7. Ethical Considerations

In order to maintain integrity, validity, and credibility throughout the stages of data collection, analysis, and interpretation, this study emphasizes crucial ethical aspects. Important ethical precepts highlighted include: The study prioritized participants' safety in order to prevent any harm—physical, psychological, or social. The autonomy and rights of the participants were upheld, guaranteeing their voluntary participation and their freedom to leave at any time without consequence. To protect privacy, personal information was removed from participant responses, which were kept private. When presenting and analyzing the results, the researcher remained impartial and avoided personal prejudices. Before signing consent papers, participants were thoroughly informed about the goal of the study and their roles. The Sulu State College Ethics Committee provided ethical evaluation and clearance, attesting to compliance with both national and institutional ethics requirements.

RESULTS

1. What is the extent of usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu in terms of: Instructional Delivery; Student Engagement; and Assessment and Feedback?

Table 1.1 In terms of Instructional Delivery

No	Statements	Mean	S.D.	Description
1	I use PowerPoint or video materials to introduce new lessons.	3.24	1.24819	Moderate Extent
2	Multimedia presentations help me organize and present lessons systematically.	3.62	1.02277	Great Extent
3	I integrate text, images, and audio-visuals to clarify lesson content.	3.70	.98985	Great Extent
4	I prepare multimedia slides to summarize key points during lectures	3.30	1.10554	Moderate Extent
5	I utilize multimedia to demonstrate complex concepts and processes	3.42	1.10261	Moderate Extent
6	I modify multimedia materials to suit the learning needs of my students	3.60	1.04447	Great Extent
7	Multimedia presentations help me manage my class time efficiently	3.62	1.04234	Great Extent
8	I use multimedia as a visual guide while explaining lessons	3.40	1.13707	Moderate Extent
9	I incorporate multimedia to align with curriculum objectives	3.38	1.11718	Moderate Extent
10	I regularly update my multimedia resources to improve instructional quality	3.46	1.10481	Moderate Extent
	Weighted Mean	**3.474**	**.97873**	**Moderate Extent**

Legend: (5) 4.50 – 5.00=Very Great Extent; (4) 3.50 – 4.49=Great Extent; (3) 2.50 – 3.49=Moderate Extent; (2)1.50 – 2.49=Small Extent; (1)1.00 – 1.49=Not At All

Table 1.1 highlights a composite mean score of 3.474 with a standard deviation of.97873, classed as "Moderate Extent" in instructional delivery, demonstrating the usage of multimedia presentations to improve classroom learning in a few public secondary schools in Sulu. Among the particular findings, item number two received a mean score of 3.62 (standard deviation of 1.02277, rated as “Great Extent”), indicating that “Multimedia presentations help me organize and present lessons systematically.” Similarly, item number seven received a mean score of 3.62 (standard deviation of 1.04234, rated as “Great Extent”), indicating that “Multimedia presentations help me manage class time efficiently.”

Table 1.2 In terms of Student Engagement

No	Statements	Mean	S.D.	Description
1	Multimedia presentations capture and maintain students' attention throughout the class	3.76	.97566	Great Extent
2	Students become more active and participative when multimedia is used	3.86	.98494	Great Extent
3	The use of multimedia materials increases students' motivation to learn	3.80	.96400	Great Extent
4	Students express enthusiasm during lessons supported by multimedia	3.72	.96484	Great Extent
5	Multimedia presentations make the learning environment more interactive	3.86	.94302	Great Extent
6	Students respond positively to visuals and videos used in class	3.76	.93333	Great Extent
7	Multimedia encourages collaborative learning among students	3.68	.93073	Great Extent
8	The use of multimedia helps reduce off-task behavior	3.68	.97318	Great Extent
9	Multimedia promotes curiosity and deeper inquiry among learners	3.80	.94281	Great Extent
10	Students remember lessons better when multimedia is used.	3.70	.98985	Great Extent
	Weighted Mean	**3.762**	**.89801**	**Great Extent**

Legend: (5) 4.50 – 5.00=Very Great Extent; (4) 3.50 – 4.49=Great Extent; (3) 2.50 – 3.49=Moderate Extent; (2)1.50 – 2.49=Small Extent; (1)1.00 – 1.49=Not At All

Table 1.2 illustrates that multimedia presentations significantly enhance student participation in select Sulu public secondary schools. The composite mean score from teacher-respondents was 3.762, indicating a "Great Extent" of effectiveness. Notably, items two and five achieved the highest mean scores of 3.86, demonstrating that multimedia fosters active participation and interactivity in the learning environment. Furthermore, item three's mean score of 3.80 points to an increase in student motivation and curiosity for learning, underscoring multimedia's critical role in enriching classroom instruction.

Table 1.3 In terms of Assessment and Feedback

No	Statements	Mean	S.D.	Description
1	I use multimedia (slides, videos, etc.) to explain assessment tasks or rubrics	3.54	.98903	Great Extent
2	Multimedia helps me present feedback in a clear and engaging way	3.56	1.00825	Great Extent
3	I show multimedia examples of expected outputs or model answers	3.54	1.04852	Great Extent
4	I use multimedia tools to display students' progress or results	3.48	1.02966	Moderate Extent
5	Multimedia helps me provide instant feedback to learners	3.62	.98247	Great Extent
6	I prepare multimedia-based quizzes or tests to evaluate learning	3.52	.92638	Great Extent
7	Multimedia enhances students' understanding of assessment criteria	3.54	.92573	Great Extent
8	I use multimedia to demonstrate correct responses after an assessment	3.66	1.03690	Great Extent
9	Multimedia materials help me summarize class performance	3.58	1.02671	Great Extent
10	I integrate multimedia feedback to encourage student improvement	3.58	1.00685	Great Extent
	Weighted Mean	**3.562**	**.90919**	**Great Extent**

Legend: (5) 4.50 – 5.00=Very Great Extent; (4) 3.50 – 4.49=Great Extent; (3) 2.50 – 3.49=Moderate Extent; (2)1.50 – 2.49=Small Extent; (1)1.00 – 1.49=Not At All

Table 1 evaluates multimedia presentations in Sulu public high schools, showing that teachers rated these tools for enhancing classroom education as effective, with an overall mean score of 3.562 (SD = 0.90919). The highest-rated item (mean = 3.66, SD = 1.03690) confirmed multimedia's role in providing accurate feedback post-assessment. Statements regarding instant feedback (3.62, SD = 0.98247) and multimedia for summarizing performance (3.58, SD = 1.02671) were also rated highly, both classified as "Great Extent." Overall, multimedia is recognized to significantly enhance educational feedback and learning outcomes.

2. Is there a significant difference in the usage of multimedia presentations in enhancing

classroom instruction in selected public secondary schools in Sulu, as perceived by teachers, when data are categorized according to their demographic profile in terms of: Age; Gender; Educational Attainment; and Length of Service?

Table 2.1 According to Age

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Instructional delivery	Between Groups	3.247	2	1.624	1.720	.185	Not Significant
	Within Groups	91.585	97	.944			
	Total	94.832	99				
Student engagement	Between Groups	6.838	2	3.419	4.543	.013	Significant
	Within Groups	72.998	97	.753			
	Total	79.836	99				
Assessment and feedback	Between Groups	6.642	2	3.821	2.259	.010	Significant
	Within Groups	68.193	97	.806			
	Total	71.836	99				

Significance at alpha 0.05

Table 2.1 demonstrates how different age groups in a few Sulu public secondary schools use multimedia presentations to improve classroom education. With the exception of "instructional delivery," the F-ratios and P-values demonstrate a significant difference, suggesting that age is a strong predictor of student involvement, assessment, and feedback perceptions. As a result, the hypothesis claiming that age has no discernible impact on multimedia usage is disproved.

Table 2.2 According to Gender

VARIABLES	Grouping Gender	Mean	S. D.	Mean Difference	t	Sig.	Description
Instructional delivery	Male	3.618	.86658	.17232	.644	.521	Not Significant
	Female	3.446	1.00102				
Student engagement	Male	3.837	.82452	.08988	.365	.716	Not Significant
	Female	3.747	.91526				
Assessment and feedback	Male	3.762	.87550	.23869	.962	.338	Not Significant
	Female	3.523	.91554				

Significance at alpha 0.05

Table 2.2 demonstrates how multimedia presentations are used to improve classroom learning in a few Sulu public high schools, with an emphasis on gender. The information shows that the t-values and total mean differences between male and female teacher respondents are not significantly different. This implies that the usefulness of multimedia presentations in the classroom is perceived similarly by both sexes. As a result, the hypothesis that "There is no significant difference in the extent of usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu when data are grouped according to gender" is accepted.

Table 2.3 According to Educational Attainment

SOURCES OF VARIATION		Sum of Squares	df	Mean Square	F	Sig.	Description
Instructional delivery	Between Groups	1.070	4	.267	.271	.896	Not

	Within Groups	93.762	95	.987			Significant
	Total	94.832	99				
Student engagement	Between Groups	1.261	4	.315	.381	.822	Not
	Within Groups	78.575	95	.827			Significant
	Total	79.836	99				
Assessment and feedback	Between Groups	2.138	4	.534	.637	.637	Not
	Within Groups	79.698	95	.839			Significant
	Total	81.836	99				

Significance at alpha 0.05

Table 2.3 highlights disparities in educational attainment and shows the extent to which multimedia presentations are used to improve classroom instruction in a subset of Sulu's public secondary schools. Perceptions of multimedia consumption across different educational levels do not appear to differ significantly, according to the F-ratios and P-values. Interestingly, teachers with advanced degrees and those with bachelor's degrees both consistently believe that multimedia is useful. As a result, the following hypothesis is accepted: "When data are grouped according to educational attainment, there is no significant difference in the extent of usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu."

Table 2.4 According to Length of Service

SOURCES OF VARIATION		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Description**
Instructional delivery	Between Groups	2.554	3	.851	.886	.451	Not
	Within Groups	92.278	96	.961			Significant
	Total	94.832	99				
Student engagement	Between Groups	1.429	3	.476	.583	.627	Not
	Within Groups	78.407	96	.817			Significant
	Total	79.836	99				
Assessment and feedback	Between Groups	1.169	3	.390	.464	.708	Not
	Within Groups	80.667	96	.840			Significant
	Total	81.836	99				

Significance at alpha 0.05

Table 2.4 shows how multimedia presentations are used to improve classroom learning in a few Sulu public high schools, broken down by the tenure of the teachers. There are no discernible variations in tenure levels, according to the F-ratios and P-values. This implies that all educators, irrespective of their background, have a same opinion about how useful multimedia resources are in the classroom. As a result, the hypothesis that claims there is no discernible variation in the use of multimedia presentations according to service duration is accepted.

3. Is there a significant correlation among the subcategories subsumed under usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu?

Variables Instructional delivery	**Pearson *r***	**Sig.**	**N**	**Description**
Student engagement	.749**	.000	100	Very High Correlation
Assessment and feedback	.845**	.000	100	Very High Correlation

Student engagement				
Assessment and feedback	.855**	.000	100	Very High Correlation

Legend: ** *Correlation Coefficient is significant at alpha .01 level*
Correlation Coefficient Scales Adopted from Hopkins, Will (2002): 0.0-0.1=Nearly Zero; 0.1-0.30=Low; 0.3-0.5 0=Moderate; 0.5-0.7-0=High; 0.7-0.9= Very High; 0.9-1=Nearly Perfect

Table 3 indicates strong positive correlations between multimedia presentation subcategories and classroom education in Sulu public secondary schools. Key relationships include: high student engagement with assessment and feedback (r=.855), instructional delivery linked to assessment and feedback (r=.845), and instructional delivery related to student engagement (r=.749). These findings suggest that effective multimedia use enhances instructional delivery, engagement, and feedback. The most significant connection is between assessment and student engagement, highlighting that real-time feedback through multimedia significantly boosts participation. Additionally, structured multimodal teaching methods enhance motivation, while multimedia improves lesson organization and evaluation, providing evidence of a supportive learning environment.

DISCUSSION

1.) On the extent of usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu

The results show that multimedia presentations are widely used to improve classroom instruction in a subset of public secondary schools in Sulu. They are consistently rated as high across key domains, with composite mean scores falling between "Moderate Extent" and "Great Extent." The most positively influenced category was student engagement, with teachers acknowledging the usefulness of multimedia in influencing students' behavior and attitudes. Even though instructional delivery received the lowest rating, it nevertheless shows how multimedia is incorporated into the teaching process—just not as the main mode in every course. This discrepancy may be caused by things like restricted access to ICT equipment, as mentioned by Mendoza (2019). To fully utilize multimedia in classroom settings, Nur and Hasssan (2024) highlight the necessity for improved ICT infrastructure and continued teacher training. Previous research, such as that conducted by Perez (2020) and Mendoza (2019), supports results that multimedia use increases student engagement, comprehension, and participation. Additionally, Flores (2023) confirms that interactive tests and visual aids in multimedia technologies improve evaluation and feedback systems.

2.) On difference in the extent of Usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu as perceived by teachers

Significant differences in teacher perceptions depending on age, but not on gender or educational level, were found in a study looking at how multimedia presentations affected classroom instruction at a few public secondary schools in Sulu. Multimedia integration was viewed more favorably by teachers between the ages of 26 and 30, especially when it came to student participation, assessment, and feedback. Despite these favorable opinions, the overall analysis shows that there are no appreciable variations in how multimedia is generally used to improve training across various demographic groups. demonstrates the consistent use of multimedia tools in teaching practices across different teacher-respondent categories, highlighting the fact that age has a greater impact on perceptions of multimedia usage than other demographic factors like gender and educational background.This finding is supported by Richard E. Mayer (2009), who emphasized that multimedia learning effectiveness depends on

how individuals process information, which may vary across age groups. Similarly, Roxana Moreno (2006) found that learner engagement and perception of multimedia tools can differ based on cognitive readiness rather than demographic characteristics such as gender.

3.) Correlation among the subcategories subsumed under the usage of multimedia presentations in enhancing classroom instruction in selected public secondary schools in Sulu

This study shows that the use of multimedia presentations in the classroom significantly enhances instruction in selected public secondary schools in Sulu. Student participation increases when teachers use multimedia to provide immediate feedback and illustrate performance, as indicated by the strongest correlation between student engagement and assessment/feedback. Furthermore, there is a clear relationship between instructional delivery and assessment/feedback; educators who utilize multimedia in presenting lessons are also likely to apply similar technologies in evaluating student learning.Additionally, the correlation between instructional delivery and student engagement demonstrates that a well-structured, multimedia-supported teaching approach actively stimulates learners. Overall, these findings provide strong evidence of a cohesive learning environment that promotes student engagement and improved learning outcomes. This is supported by Gunther Kress (2010), who highlighted the importance of multimodal learning environments in enhancing student engagement. Likewise, Richard E. Mayer (2009) emphasized that combining visual and verbal elements improves understanding and retention.

CONCLUSION

According to the study's findings, public secondary school teachers in Sulu are largely female, early-to-mid career professionals who are at least 31 years old and have bachelor's degrees with some master's units. At a critical juncture for postgraduate advancement, the majority have five years or less of teaching experience, indicating a stable workforce. Although they are middling in terms of total instructional delivery, multimedia presentations are heavily used to improve classroom learning, encouraging student involvement and simplifying evaluations. This indicates a significant change brought about by technology toward learning settings that are dynamic and feedback-oriented. Teachers between the ages of 26 and 30 showed improved opinions of multimedia's function in engagement, evaluation, and feedback, but there were no significant changes in multimedia usage based on gender, educational level, or duration of service.The study supports Mayer's Cognitive Theory of Multimedia Learning (CTML), which holds that integrated visual and auditory channels enhance meaningful learning, by showing a very strong positive correlation in multimedia usage across a variety of instructional areas. While the association between instructional delivery and assessment emphasizes how multimedia simplifies content for better assessments, the correlation between student engagement and instructional delivery confirms that organized multimedia lowers cognitive burden. Most significantly, the strong relationship between feedback and student involvement is a sign of active processing because multimedia offers instantaneous visual feedback that helps students monitor their cognitive development and supports the generative learning process.

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