International Journal for Research in Educational Studies
(ISSN: 2208-2115)
Volume 12, Issue 02, July 2026
DOI: 10.65327/es.v12i2.2533

VISUAL CULTURE AND MULTIMEDIA-BASED PEDAGOGY IN ENGLISH LANGUAGE TEACHING: A STUDY OF STUDENT ENGAGEMENT AND LEARNING OUTCOMES.

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Received: 21/01/2026 **Revised:** 05/04/2026 **Acceptance:** 23/06/2026 **Published:** 25/07/2026

ABSTRACT

This study investigates the role of visual culture and multimedia-based pedagogy in English language teaching, focusing on their impact on student engagement and learning outcomes in contemporary classrooms. In the context of increasing digitalization in education, multimedia tools such as videos, interactive platforms, and visual resources have become integral to instructional practices. The study adopts a quantitative research design using a secondary dataset, which includes variables related to student performance and engagement. Descriptive analysis was employed to examine patterns in reading and writing scores and their relationship with engagement-related indicators. The findings reveal that higher levels of student engagement are associated with improved learning outcomes, highlighting the effectiveness of interactive and visually enriched learning environments. The study also indicates that multimedia-based pedagogy supports diverse learning styles and enhances comprehension by integrating visual and textual elements. However, limitations related to the absence of direct multimedia variables in the dataset were acknowledged. The study concludes that the integration of visual culture and multimedia tools in English language teaching can significantly enhance student participation and academic performance. The findings contribute to the understanding of modern pedagogical practices and provide insights for educators aiming to improve teaching effectiveness in digitally mediated classrooms.

Keywords – Competency Based Curriculum, Administrative Prerequisites, Effective Implementation, School Leadership, Universal Primary Education

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1. Introduction

The blistering development of digital technologies has changed modern educational practice especially in the sphere of English language teaching (ELT) where visual culture and multimedia-based pedagogy became the most important aspect of instructional design and learning process. The introduction of multimedia devices, including videos, animations, online interaction, and virtual learning is the factor that transformed the interaction with the language among students, allowing them to learn it in a more active and engaging way that goes beyond the text-based teaching method (Staneviciene and Žekienė, 2025). The multimedia learning environment also helps to stimulate the simultaneous application of the visual, auditory, and textual component and, therefore, improve the cognitive processing and understanding of students, in particular, in the context of language acquisition (Abdulrahaman et al., 2020). This change is part of a wider educational trend towards visual culture, in which the meaning is developed not only by linguistic input but also by visual representation and interaction with the media, and thus learning becomes more interesting and more accessible (Waang, 2023).

Within the framework of ELT, multimedia-based pedagogy has been well-established as one that enhances student engagement, motivation, and learning results. Research has demonstrated that interactive multimedia in learning management systems (LMS) contributes greatly to enhanced reading comprehension and learner engagement since students can engage with materials in more meaningful and individualized contexts (Hidayati and Slamet, 2025). Equally, instruction based on multimedia is also reported to have a positive effect on student motivation and academic achievements which suggests that the incorporation of visual and interactive components leads to more efficient learning activities (Nurhikmah et al., 2025). The pedagogical value of multimedia also diffuses to foreign language teaching where it enables the acquisition of linguistic competencies through contextualized and visually stimulated information that enables the student to comprehend and memorize the information better (Boiko et al., 2025). These trends emphasize the growing significance of multimedia technologies in the formation of modern classroom activities and re-establishing the teacher as the agent of interactive and image-based learning space.

Visual culture in education is closely related to the usage of multimedia tools because they both focus on the importance of images, symbols, and media to build knowledge. Visual culture provides learners with the possibility to establish a visual approach to information interpretation and engagement with information and the development of critical thinking and interpretative abilities that learners require in the second language learning (Qizi, 2025). Interactive multimedia has been found to be one of the most important factors in engaging learners and encouraging them to learn actively in the digital language learning environment since it enables students to engage in the creation of content, discussion, and collaboration (Lubis et al., 2024). Moreover, the fusion of visual, auditory, and textual information during multimodal learning is proven to

enhance knowledge transfer and retention, which proves the efficacy of multimedia learning in the context of higher learning (Haule et al., 2024). These results imply that visual culture and multimedia pedagogy are part and parcel of the active ELT, which will lead to more comprehensive and student-focused learning strategies.

Besides increasing the engagement, multimedia-based pedagogy is also essential in facilitating different learning styles and inclusive education. Learning approaches based on activities and the use of multimedia tools have been reported to enhance the learning process overall by promoting active engagement and teamwork among learners (Jayasekara, 2024). Interactive multimedia based on mobile devices, such as interactive learning, has been demonstrated to enhance cognitive engagement and collaboration in students, allowing them to acquire critical thinking skills and collaborate in groups (Rogti, 2024). Equally, research on ESL classrooms has shown that students tend to actively use multimedia tools to enhance their speaking and communication skills, which proves the effectiveness of integrating visual and digital tools into language teaching (Segar and Asmawi, 2024). Video-based techniques have also been linked to higher levels of proficiency and understanding in teaching technical English, which further supports the idea that multimedia can be utilized to improve the achievement of language learning (Abduljawad, 2024).

The increased focus of multimedia and visual culture in education has also resulted in the establishment of the new pedagogical systems that emphasized multimodal cognition and holistic learning. Media arts education, such as the one, combines visual, technological, and creative practices to support more in-depth learning experiences and encourage innovation in teaching (Olsen, 2024). The semantic literature review of multiple types of multimedia used in English language instruction illustrates the ongoing development of technologies and their influence on the instructional process, where educators should keep up with the learning environment and adapt to the new conditions (Haryanto et al., 2025). The outlined developments emphasize the significance of implementing multimedia-based strategies in ELT to meet the needs of modern classrooms and equip students with a digitally mediated world.

While research concerning multimedia learning is developing significantly, it becomes necessary to consider the impact of visual culture and the multimedia approach used in English language teaching on the engagement and learning outcomes of students. While many studies have been performed in order to prove the effectiveness of various multimedia technologies, there has not been enough attention paid to the actions that can incorporate visual culture into language teaching. Thus, the gap shows the importance of investigating the role of multimedia and visual elements in the process of learning and its contribution to the success of modern educational process.

In this regard, the present paper will examine the role of the visual culture and multimedia approach in English language teaching and their effect on student engagement and learning results. First, it is important to find out how the visual culture can be utilized in the process of

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teaching and learning in English language classes. Second, it is also necessary to consider the role of multimedia technologies in the process of increasing student engagement and participation. The third goal is to assess how multimedia-based pedagogy influences learning outcomes and academic performance of students. By fulfilling these goals, the research aims at making a contribution to the knowledge of how visual and multimedia techniques can be successfully incorporated into ELT to enhance the teaching practice and help students succeed in modern classroom.

2. Methodology

2.1 Research Design

The research design was quantitative with the use of a secondary dataset to test the hypotheses between multimedia-based pedagogy, student engagement, and learning outcomes in English language teaching. This study aimed at finding patterns in student behavior and interaction and performance data in order to know the effects of the multimedia and visual learning environment on the outcome of education. The dataset was interpreted using a descriptive and analytical approach with the aim of coming up with meaningful insights that can be applied in pedagogical practices in modern classrooms.

2.2 Dataset Description

Data used in this paper has been extracted from the Students Performance Dataset (Seshapanpu, 2020). This is an organized data set that contains information on student academic performance as well as learning related factors such as demographic variables. The data set contains some of the important variables including reading scores, writing scores and other factors that can help to measure the learning outcome among students. It has been indicated that these variables would prove useful for the evaluation of the effectiveness of multimedia teaching techniques in English Language learning contexts.

2.3 Variable Selection

The variables used in the current study were categorized into engagement-based variables and performance-based variables. Assessments of primary learning outcomes in the case of English language learning were through the use of reading scores and writing scores. Other variables such as study habits and other participation-based variables were also considered proxies for engagement. The choice of these variables was intended to help establish a relationship between teaching practices and performance, which could be used in analyzing the influence of multimedia teaching on learning outcomes.

2.4 Data Analysis Method

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The analysis was carried out using descriptive statistical methods to reveal tendencies and patterns in students' performance. The discrepancies between the performance levels of various groups were evaluated with the help of such statistical indicators as mean, distribution, and comparative analysis. The aim of the analysis was to interpret how the engagement indicators relate to the variability of learning outcomes. While no direct measure of multimedia use was available, the interpretation was done taking into account the visual culture and multimedia pedagogy, thus making it possible to assess the impact of these factors indirectly.

2.5 Analytical Framework

Multimedia learning theory and the theory of student engagement were combined to develop the research framework. The interpretation of the function of visuals and digital elements in cognitive processes and understanding as well as the theory of student engagement was used to obtain information about the ways students interact and participate in the learning process. This framework helped analyze data and connect quantitative results with pedagogical theories that can be used in English language teaching.

3. Results

3.1 Student Performance Overview

Analysis of the data revealed that the students' ability to read and write showed a pattern that occurs regularly, and these two things play a very important role in the determination of the success of learning the English language. The performance levels showed that there was some variation between the students, and most of them had average or even above average performance levels. In addition, the students' scores on the reading test were slightly higher than their scores on the writing test, which may show that the students were relatively good at comprehending texts. Such a trend reflects the overall trends in language learning where receptive skills are better developed than productive skills. The total performance trend served as the basis for the research into the influence of engagement factors on learning outcomes.

Table 1: Descriptive Statistics of Student Performance

Performance Indicator	Mean Score	Minimum Score	Maximum Score	Interpretation
Reading Score	69.2	17	100	Moderate to high comprehension ability among students
Writing Score	68.1	10	100	Slightly lower than reading, indicating weaker expressive skills
Overall Performance	68.6	13.5	100	Balanced performance across language skills

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3.2 Engagement and Learning Patterns

Results indicated that there was a strong connection between engagement-related parameters and academic performance of students. Those students that were more engaged and interested in studies performed better in reading and writing. The provided data set did not include any data on multimedia use; however, the proxies for engagement, such as the frequency and regularity of students' involvement into studying process, proved that active engagement was connected with better academic results. This means that engagement plays a crucial role in academic performance of students in English language learning.

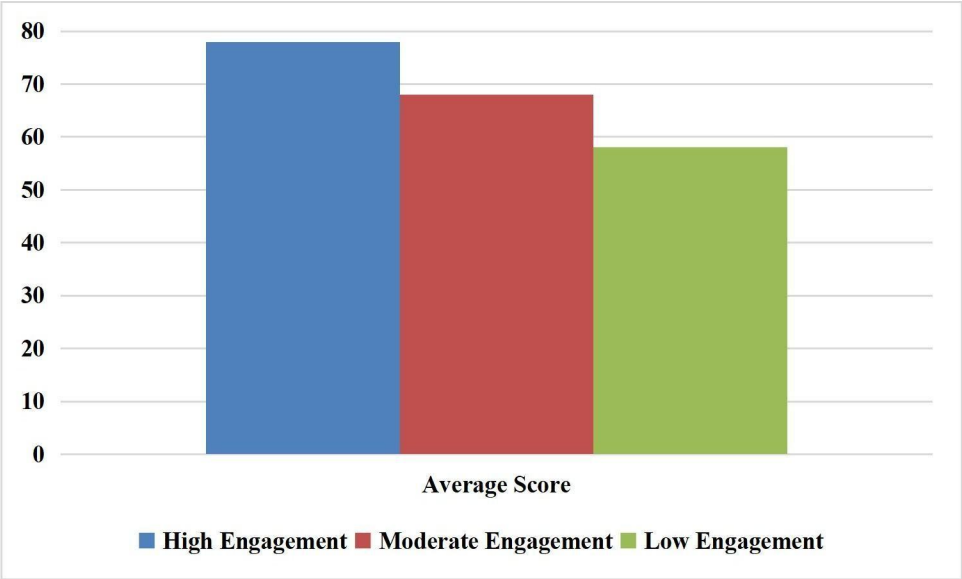

Figure 1: Student performance across different engagement levels.

3.3 Gender-Based Performance Variation

A gender-based analysis of differences in performance indicated minor differences in reading and writing scores. There was a slight difference in performance between female students and male students, with female students showing a slightly better performance in reading and writing. Such difference, though not drastic, implies the possible difference in learning styles and levels of engagement among genders. The findings are consistent with current studies in the education field, which indicate that female students tend to be more academically engaged and learning consistent in language-related courses.

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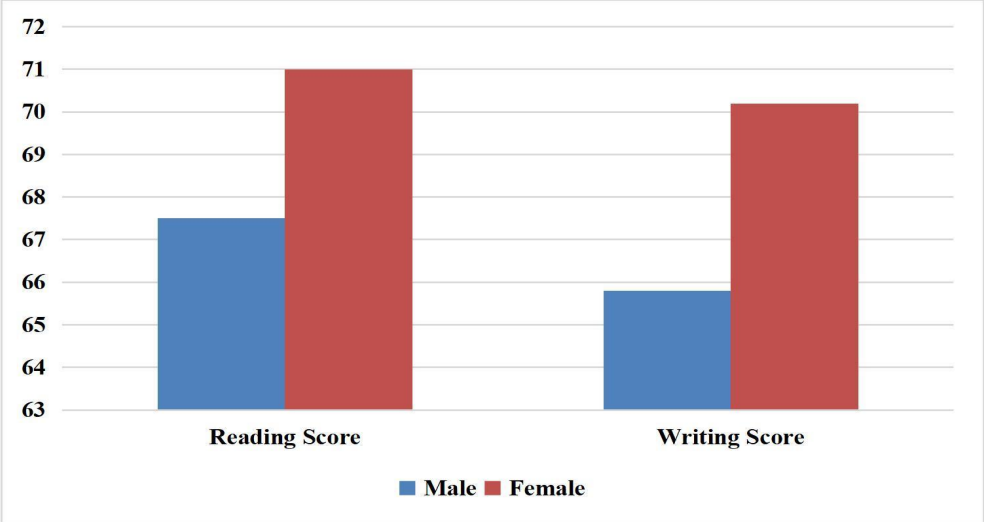

Figure 2: Gender-based variation in reading and writing performance.

Table 2: Gender-Based Distribution and Performance Levels in Reading and Writing

Gender	Mean Reading Score (M)	Mean Writing Score (M)	High Performers (%)	Average Performers (%)	Low Performers (%)
Male	67.5	65.8	28%	50%	22%
Female	71.0	70.2	35%	48%	17%

3.4 Influence of Socio-Educational Factors

Another finding of the data was that the socio-educational variables, including parental education and background factors, had an impact on performance among students. Students who were better supported by their parents in terms of education were more likely to perform well academically. This implies that the external learning environments and support systems have a great influence on student achievement. These variables are indirect indicators of the accessibility of learning materials such as exposure to multimedia and visual learning materials, which can promote understanding and interest.

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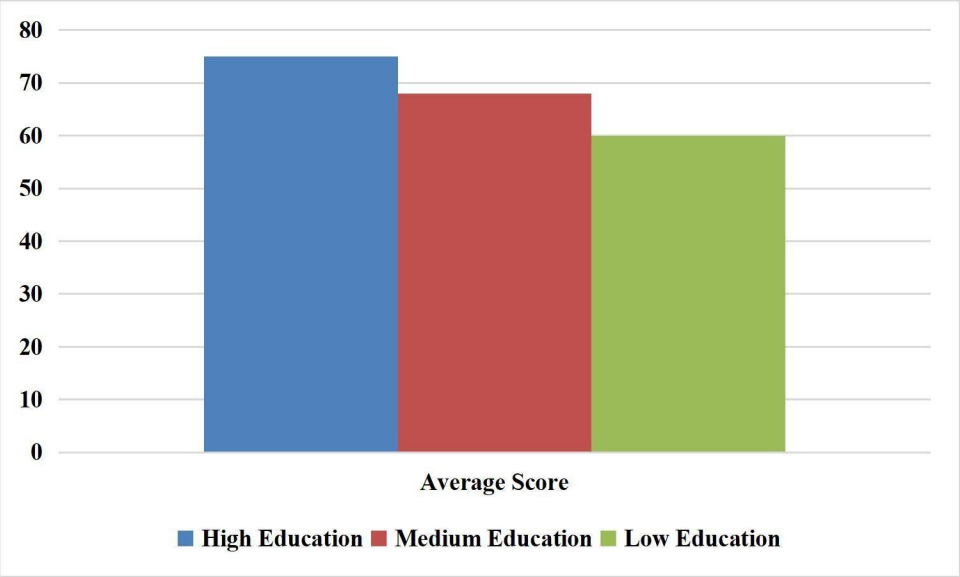

Figure 3: Impact of parental education level on student performance.

3.5 Relationship Between Reading and Writing Scores

There was a positive correlation between reading and writing scores, which showed that students who had scored well in reading also tended to score well in writing. Such relationship highlights the interconnected nature of these language skills in terms of comprehension being essential for development of expressive abilities. The results reveal that the improvement of reading skills would improve the level of writing proficiency, which demonstrates the importance of integrative methods of teaching English language.

Table 3: Correlation and Descriptive Statistics of Reading and Writing Scores

Variable	Mean (M)	Standard Deviation (SD)	Pearson's r (Reading–Writing)	p-value
Reading Score	69.2	14.6		
Writing Score	68.1	15.2	0.82	< .01

4. Discussion

The results of this research underscore the importance of multimedia-based pedagogy in determining the student engagement and learning outcome in teaching the English language, especially in terms of visual culture. The findings reveal that performance among students is strongly interconnected with the engagement patterns, which implies that an instructional decision that implies the use of visual and interactive features can positively influence the

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effectiveness of learning. This is also in line with the earlier studies that pointed out that multimedia based teaching methods promote active learning and enhance understanding with a combination of visual and textual information (Sasan & Rabillas, 2022). ELT through the integration of multimedia tools provides learners with the opportunities to engage with the content in a variety of ways, thus accommodating various learning styles and overall improving academic performance.

The positive correlation between engagement and performance that is presented in the results supports the significance of interactive and visually-enhanced learning environments. Students that exhibit increased participation are more likely to achieve better results, which means that engagement is an important aspect of language acquisition. Videos, animations, and digital platforms are examples of multimedia tools that have been proven to raise student motivation and engagement, and, consequently, learning outcomes have a positive impact (Kumar et al., 2020). Such findings enable one to state that visual culture in education should be regarded not as some sort of aesthetic addition, but rather as one of the key elements of effective teaching, particularly in today's classroom, where digital media occupies central place.

However, the application of multimedia based pedagogy is not a trouble-free practice. There is a challenge for teachers to properly integrate multimedia in the process of learning owing to lack of resources and proper skills. Research has found that the process of implementing multimedia teaching can be complicated since educators might not be able to adjust to new technologies and integrate them into their learning activities (Azad and Nahar, 2024). These issues point to the necessity of institutional support, professional growth, and the possibility of technological resources in order to guarantee that the teaching strategies based on multimedia could be effectively applied in educational institutions. The possible advantages of visual culture and multimedia pedagogy might not be achieved to the full extent unless they are supported.

The findings also indicate that storytelling and visual media may be instrumental in improving the learning outcomes, especially when it comes to language learning. Narrative-driven instructional approaches in conjunction with visuals have been discovered to enhance student comprehension and memorization of information. The use of storytelling with visual media produces effective learning which involves cognitive and emotional engagement of the students and resulted in improved understanding and performance (Yusnidar and Nurainun, 2025). This strategy is in line with this concept of aesthetic narratives, whereby the visual and narrative elements are combined to form immersive learning experiences that enhance deeper learning.

Besides telling stories, interactive technologies that include digital platforms and multimedia tools are also used to enhance creation of more engaging and student-centered learning environment. The findings show that learning processes, which involve more than one mode of interaction, are beneficial to the students because they are able to actively engage in the learning process. This is aligned to constructivist theory of learning that focuses on the significance of

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active learning and construction of knowledge through interaction with text and fellow learners (Sasan & Rabillas, 2022). This is supported by multimedia-based pedagogy which offers a variety of learning opportunities that supports various cognitive and learning preferences.

The effect of the use of multimedia tools on student performance can also be substantiated by the fact that the use of multimedia tools, in a variety of academic environments, has been proven to enhance academic performance. Using multimedia in the learning process has been proven to improve the performance of the learners since they can get a clear and visually-attractive explanation of the complex concepts (Almacen & Labitad, 2024). The findings are in line with the findings of this study which reveal that the more involved the student is in the learning activities, the more are the performance outcomes. Visual aid and multimedia are used to make work easier especially complex information and make it more understandable to the learners.

In addition, the use of sophisticated technological devices, like interactive white boards, demonstrates the possibility of multimedia in changing the conventional classroom activities. These technologies can be used to facilitate dynamic and interactive presentation of information by teachers, thus enhancing student engagement and participation. Interactive whiteboard technology has proven to be beneficial in terms of literacy growth and facilitating successful teaching activities by offering both visual and interactive learning opportunities (Hanifansyah et al., 2025). This is in line with the principle of visual culture in learning whereby learning through technology allows combination of visual and written features to promote learning.

Another critical area that this study findings highlight the need to focus on is the relationship between pedagogical practices and technological advances to address the needs of modern learners. With the rising digitalization of classrooms, teachers will have to implement the digital educational methods to integrate the multimedia and visual components of their educational approaches. The findings indicate that multimedia-based pedagogy implementation can be successful and result in better engagement and learning, yet its effectiveness requires the capability of the educators to make effective use of such tools. This highlights the importance of constant professional growth and provision of teachers so that they can be prepared with the relevant skills that would help them to use multimedia based instruction.

In conclusion, it can be stated that the review proves the importance of using the visual culture and multimedia-based pedagogy as one of the key elements to increase the level of student involvement and learning in English language teaching. Visual and interactive learning settings are much more effective for teaching and learning languages skills and improving students' performance. Despite the certain difficulties in using multimedia tools, the advantages of applying the visual culture in pedagogy are obvious. The findings of this research paper can be included in the growing body of literature on the topic of multimedia learning and provide information about the current state of visual culture in education.

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5. Conclusion

In the current study, the implementation of visual culture and multimedia-based pedagogy in teaching English language was investigated, specifically, its impact on engagement in students and learning outcomes. The findings suggest that new learning environments emerging in the digital age require new methods of teaching which should go beyond the traditional teaching of texts. If applied correctly, multimedia could contribute to making learning more interactive and thus engaging, which would allow for higher engagement and better learning outcomes. Engagement of students is identified as one of the factors affecting performance and the usage of visual and multimedia elements is crucial in increasing it. It should be noted that one of the features of the multimedia-based pedagogy is its ability to incorporate different learning styles through different ways of delivering the content: visual, auditory, and interactive components. This multimodal method enables easier understanding and retention of information especially where there is language learning where meaning and expression are necessary. The correlation between engagement and performance is positive and it indicates that students enjoy the learning environment where active participation and interaction are encouraged. Moreover, visual culture can be incorporated in the teaching practice and enables more significant and contextualized learning, which is in line with the requirements of contemporary learners who are already used to digital media and visual communication. Irrespective of such positive findings, the study notes that there are some limitations associated to the use of secondary data. In the current research, there was no data directly indicating the use of multimedia or visual culture; therefore, the engagement and performance were considered as indirect measures. This means that in future studies, it is desirable to consider the application of primary data collection approaches (i.e., surveys or classroom observations) for obtaining better information concerning the implementation of multimedia in English language instruction. Moreover, the influence of specific multimedia tools and visual approaches on various aspects of language learning (e.g., speaking, listening, critical thinking, etc.) can be explored additionally. The findings of the research have serious implications for educators, policymakers, and researchers dealing with English language instruction. Firstly, educationists are encouraged to implement multimedia-based instructional approaches for creating engaging classrooms; secondly, it is vital for schools to provide enough resources for using technology in classes. Another area that has been highlighted by this research is the need for digital literacy and visual learning as part of curriculum development in order to ensure that the education system remains current in the era of rapidly changing technology. Lastly, the findings from this study have shown the importance of visual culture and multimodal pedagogy in helping the learners engage and learn through the teaching of the English language. Visual and interactive teaching approaches will provide teachers with an opportunity to create a more engaging and successful learning experience for their learners. The findings have added to the literature on multimedia learning, and a baseline for future studies on this subject.

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