

Digital Multimodal Learning Materials in English Language Teaching

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Abstract - From the 1990s to the beginning of the 2010s, a number of systematic reviews on multimodal pedagogies in English language classrooms were carried out. However, multimodal digital learning materials in the English language classroom have not been the subject of a recent review. This gap is filled by looking at research papers on multimodal learning materials including MR, AR, and VR in English language classrooms that were published between 2012 and 2022. The use of critical, creative, and culturally responsive multimodal material, explicit teaching of multimodal literacy, affect in multimodal learning, and concerns regarding multimodal assessment were among the five common themes that emerged from a qualitative thematic analysis of 88 articles gathered from the search. The article offers suggestions for future research and discusses these themes in relation to the thematic findings of previous review studies with the same focus on multimodality in the English language classroom.

Keywords: Digital, Multimodal, Learning, ELT, Materials

INTRODUCTION

When we talk about multimedia education, a lot of thoughts come to mind about the impact that ICT (information and communication technology) has on our lives. Academics have the opportunity to create rich learning environments for their students thanks to information and communication technology (ICT), which includes a variety of multimedia-based learning elements and a wealth of information and resources on the Internet. According to Sankey & Birch (2005), multimodal courses involve the development of dynamic course resources that appeal to a variety of learning styles and sensory modes through the use of multimedia and ICT. Simulations, interactive diagrams, images, video and audio materials, interactive crosswords, PowerPoint lectures with audio, and hyperlinked examples are all examples of elements that might be included in a multimodal course. Major concepts in the course material can now be presented in a variety of modes (multiple

representations), such as both visually and auditory. Improved attention rates, improved learning performance, and a perception of ease of learning are the outcomes of this strategy for students. Due to the effects of these technologies, students' cognitive and computer skills are significantly different. We now have new thinking tools thanks to ICT; As a result, our thinking patterns would also shift (Sankey, 2006).

We are particularly interested in how these technologies affect the production and interpretation of languages. With the advent of the computer and its digital capabilities, our conceptions of language and communication have undergone significant transformations. Also, communication has changed a lot. The learning environment has been significantly affected by these modifications. The issue of ICT, multimedia learning, its principles, CALL, its benefits, and the implications of multimedia learning are discussed in this paper. The implications of multimodality in language learning and teaching will then be discussed, as will multimodality and second language acquisition.

DIGITAL MULTIMODAL LEARNING MATERIALS

Many educators, administrators, researchers, and policymakers have high expectations regarding the potential of digital devices as educational tools due to the rapid development of technology (Khotimah & Wahyu, 2020). Understanding literacy is essential for not only comprehending texts but also for broader learning, academic and professional success, and success in general. Because of email, texting, and social networking sites, it is even important for our social life (Khusniyah & Lustyantie, 2017). In Indonesia, the first digital media in the form of digital books in 1998 pushed authors and publishers to create and sell digital versions of their works (Khotimah & Wahyu, 2020). All of the teaching and learning tools that teachers and students have access to are being

fundamentally altered as a result of the rapid development of digital technology. Because of its potential to be used as an instructional tool for literacy or literacy education, this technological advancement has excited many people. Researchers find that multimodal-based media are very appealing because they not only replicate the experience of reading or listening to stories but also offer technological advancements that make the reading, viewing, and listening experience qualitatively distinct from that of a standard paper book. According to Bus et al., electronic media typically consists of a combination of features that dramatize the text, such as animated images, background sounds, and music. (2015; 2020) Sakulprasertsri Digital media is the process of combining narrative stories with digital content (such as images, sounds, music, and videos) to create an engaging short film that can be used as a teaching tool, a persuasive tool, a historical resource, or a reflection tool (Yi et al., 2019). According to Irawati (2018), the conclusion that can be drawn from the preceding statement is that multimodal based digital media books are widely utilized due to the fact that they offer a number of benefits, including ease of access and the capacity to support the process of teaching and learning. Digital media, according to a lot of education experts, can be used to teach a variety of subjects and accommodate a variety of learning styles for students (Moody, 2010; Wu, 2020). In addition, according to Moody (Moody, 2010), digital media possesses a variety of features that are equipped with sophisticated technology. In addition, previous research indicated that a multimodal approach is essential for English learning. However, it is abundantly clear that virtually none of them incorporate Islamic religious content into the learning and teaching processes.



As a result, the purpose of this study was to determine how students viewed the lecturer's use of Islamic materials to complement English content for online English learning using a multimodal approach. Religious education is believed to be able to instill

noble values or good character in students' lives, so including it in the teaching and learning process is essential (Anshari & Widyantoro, 2020; Cahyo and co., 2019; 2020, Djamdjuri). In addition, students may acquire valuable skills and morals by combining language study with religious values. It is anticipated that Muslim students will have an easier time comprehending the English lesson as a result. According to Dewanti & Iskandar (2012), the learning design must be modified to meet the needs of students for this purpose. (Iskandar and Purnawati, 2019). On the basis of this, the students' perspectives on the use of Islamic materials in online, multimodal English instruction were the focus of this study.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ELT

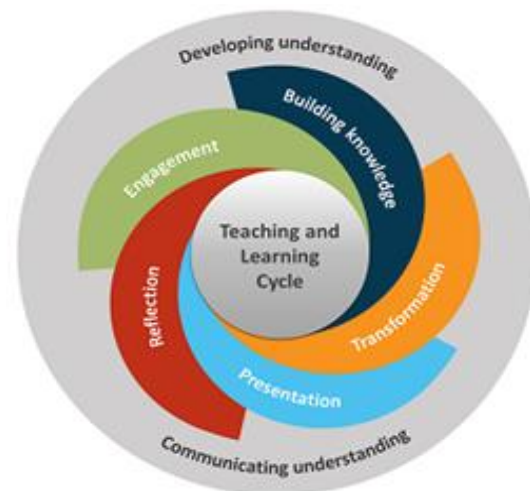
Information and communication technology (ICT) in science education aims to support both since language can be viewed as contents, such as the laws, theories, and facts, and processes, such as measuring, recording, and processing data (Wellington, 2000). By either describing reality or simplifying it to facilitate conceptual interpretation, simulations and modeling provide a wide range of opportunities. Models created by other people are referred to as simulations; Models made by students are referred to as modeling. Simulations demonstrate phenomena and processes that may be too fast or too slow to carry out in the classroom; they provide students with access to entities that do not exist and model activities that would be risky or costly for them to engage in (Wellington, 2000). Variables can be controlled through simulations, and teachers no longer have to worry about running the lab. Simulations aren't the only way to learn science: Models are hidden from students, so they can only manipulate factors within the model and cannot question the model. This means that simple manipulation of variables can lead to misunderstandings. Therefore, they might misinterpret the model as real. Some models are superior to others, and others are satires rather than accurate depictions of reality (Wellington, 2000). By emphasizing the limitations of simulations and stressing that they are models, the instructor can prevent such misunderstandings. ICT systems are useful for presenting and communicating information by processing large amounts of data, displaying them in a

variety of formats, performing complex calculations on stored data, and collecting and storing large amounts of data. Multimedia software, Internet browsing, and data logging are just a few of the many uses for computers. However, there are problems with using ICT in schools: The objectives are not always clear, there are low expectations for written results, students are allowed to reproduce information rather than analyze it, and glossy computer-generated effects are accepted without extending students' abilities (Wellington, 2000).

IMPLICATIONS OF MULTIMODALITY IN LANGUAGE LEARNING AND TEACHING

The significance of utilizing multiple modalities in actual learning environments is emphasized by a multimodal classroom approach. Children construct worldviews by choosing or negotiating the meanings conveyed by modalities. Information from each modality can be used by students to construct meaning. According to Kress et al., each modality covers a different aspect of phenomena that may challenge previous worldviews and provide resources for imagination and thought. 2001). Kress et al. state that (2001), teachers frequently use both speech and gestures in the classroom to emphasize images and other references. Specifically, they argue: Interaction and interaction are occurring in a variety of modes: drawings, speech, gestures, and objects. The construction of meaning is aided by each mode: cohesion is achieved through repetition, synchronization, similarity, and contrast, an image in the textbook for a stable summary, an image on the blackboard for a visual backdrop, action to demonstrate the dynamic nature of the concept, and an image in the textbook for a stable summary. The mode selection has meaning: Each situation will take a different metaphorical route. In the process of constructing the current entity, each mode plays a distinct role. Students must complete a variety of tasks in order to comprehend each mode (Kress et al., 2001). According to Moreno and Mayer (2007), multimodal learning environments use both verbal and nonverbal modes to represent content knowledge. The nonverbal mode is the pictorial mode, which includes both static and dynamic graphics. To appeal to students' various sensory modalities (visual and auditory), these different presentation styles—verbal and nonverbal—

are utilized. In addition, multimodal courses enable instructional events or components to be presented in multiple sensory modes (multiple representations), which has been utilized to enhance student learning (Shah & Freedman, 2003). According to Maguire (2005), the development of technology-enhanced courses may lead to a curriculum that is more up-to-date and pertinent, novel concepts and innovations, improved course quality, and a wider range of academic programs. Teaching, learning, and assessment have all been significantly altered by ICT. A more constructivist approach to course design may be supported by ICT adoption and integration, which may result in more student-centered approaches to teaching and learning. This is mostly because of the non-linear design of learning environments, which has been found to give students more control over how they move through the materials (Karagiorgi & Symeou, 2005).



Students' learning of digital multimodal composing skills was organized and supported by the three domains of the framework, according to the reflective dialogue with the teacher and lesson observations. The instructor acknowledged during the reflective discussion that the pedagogical framework "covers all the skills that students require to make a video production." Because "it might be very confusing for the students if we have loaded them with too much metalanguage and packed everything into the same lesson," he thought it was the right decision to focus on portions of the metalanguage to teach in the first lesson. The lesson implementation experience suggests that in future research, the teaching and learning of metalanguage should proceed gradually.

However, in order for students to have more time to work on content generation, the instructor suggested that "time given to it might need to be adjusted," particularly for the creative domain. The instructor was of the opinion that the framework provided students with a "logical way" to learn the skills and guided them through the various domains of skills required to create a video. The instructor noticed that the pedagogical framework had made learning for the students much "easier." The majority of students in the focus group and survey agreed that the pedagogical framework had helped them learn digital multimodal composing skills because they were able to "more effectively" express their ideas through the media texts they produced. Because they couldn't have made the video without any of the framework's three domains, students thought they were "equally important."

One of the ways that English language learning materials can be supported is through the use of technology in education. According to Yunus (2018), "the range of technologies that are available for use in language learning and teaching in this part of the 21st century has become very diverse, and the ways in which they are being used in classrooms have become central to language practice." "Technology is also having an impact on the development of pedagogy where the use of technology has enabled teachers to re-think what they are doing," Yunus (2018) wrote in her article. Currently, active learning and student-centered learning are encouraged to develop the learner's knowledge rather than focusing solely on the teacher. Prior to that, the chalk-and-talk method and one-way learning were not considered the sole methods for teaching and learning. Teachers can carry out a lesson in a variety of ways that are compatible with learning in the 21st century, particularly with the assistance of technology. There is a plethora of technologies that can be incorporated into education to assist educators in fostering active and student-centered learning.

"The emergence technology such as cloud computing, Augmented Reality (AR), and 3D printing are paving the way for the future of education," Hashim (2018) agreed. Among the various types of technology, augmented reality (AR) has begun to be utilized in teaching and learning. Danaei et al. claim that (2020), "As a result of its potential for instructional use, AR has been utilized in educational settings and the publishing industry." The use of augmented reality

(AR) in education was supported by numerous studies due to its numerous benefits for a variety of factors, including student performance, motivation, and the new teaching pedagogy of teachers. Due to its numerous features and capacity to connect the virtual and real worlds, augmented reality (AR) has the potential to engage students in learning. Chen and co. AR "deepens learning interactions by imposing digital information on top of physical settings," as stated by (2019). The ability of augmented reality (AR) as a teaching tool to create blended learning experiences by combining virtual and real classroom environments or materials is what makes it appealing (Barrow et al., 2019). In addition to the Ministry of Education's efforts to close the achievement gap between students from diverse backgrounds and locations, this is unavoidably beneficial. The most recent education plan also mentions this. The Ministry "aspires to halve the current urban-rural, socio-economic, and gender achievement gaps by 2020" out of concern for education equity (Ministry of Education, 2013). As a result, teachers will be able to bridge the gap between the real and virtual worlds during the teaching and learning process by incorporating augmented reality (AR) into the classroom.

THE PEDAGOGICAL FRAMEWORK'S UTILITY IN THE CLASSROOM FOR TEACHING AND LEARNING THROUGH DIGITAL MULTIMODAL

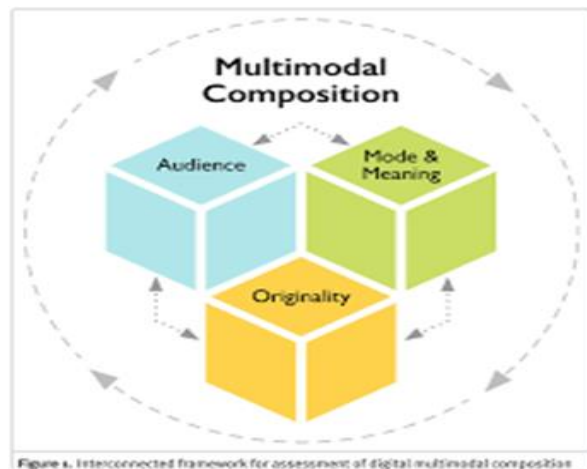


Figure 4. Interconnected framework for assessment of digital multimodal composition

In terms of the critical domain, major number of students reported being able to identify the effects of the metalanguage used in video production and its report being able to incorporate engagement strategies into their video production. Students said they learned

how to use specific engagement strategies to ‘more precisely’ engage their target audience. This was also shown in their artifacts, where each group’s shots made use of address, distance, and angle to produce the desired effects. The majority of groups made effective use of close-up shots to convey the character’s mood and facial expressions. For instance, the use of a close-up shot in Figure 1 brought to light the character’s nervous body language. The students’ video production also demonstrated the effective use of angle. With a direct gaze and a low angle, the father at home in Figure 2 captured the viewer’s attention and created a powerful and authoritative image. In terms of the creative domain, many students said that the design thinking process helped them be more creative, and agreed that the design thinking process made it easier and more systematic for them to make the video. Through the stages of design thinking, students said they learned to be more flexible with their plans and better organize their ideas. The students' artifacts show that they were able to come up with imaginative storylines that were appealing to their intended audience, convey a clear message, and use effective engagement strategies. An example of a storyboard is shown in Figure 3, which includes a thorough plan, description of the plot, and engagement strategies for each scene.

CONCLUSION

Instructional strategies and learning resources help teachers grow as professionals. In conclusion, the recognition of the necessity of equipping students with competencies relevant to the twenty-first century and the significance of connecting students' outside-of-school experiences has led to significant progress in the teaching of multiliteracies in recent years. Multiliteracies instruction in the classroom has also been the focus of educational research. We hope that the study's findings will spark interest in the best ways to help our students develop multiliteracy skills worldwide.

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