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THE CONTRIBUTION OF DIGITAL CLASSROOM MEDIA TO STUDENTS' LEARNING ENTHUSIASM

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ABSTRACT

This study aimed to examine the contribution of digital classroom media to students' learning enthusiasm in the teaching and learning process. The research employed a quantitative approach using a correlational research design to investigate the relationship between digital classroom media and students' learning enthusiasm. The participants of this study consisted of 60 secondary school students selected through purposive sampling techniques. Data were collected using a questionnaire that measured students' perceptions of digital classroom media and their enthusiasm toward learning activities. The collected data were analyzed using descriptive statistics and simple linear regression analysis. The findings revealed that students had positive perceptions toward the use of digital classroom media in classroom instruction. Students considered digital learning tools more interactive, attractive, and effective in supporting their understanding of learning materials. The results also showed that students demonstrated higher levels of attention, participation, curiosity, and enthusiasm during learning activities involving digital media. Furthermore, the regression analysis indicated that digital classroom media had a positive and significant contribution to students' learning enthusiasm. The significance value obtained was lower than 0.05, indicating that the alternative hypothesis was accepted. The study concluded that digital classroom media play an important role in creating engaging and motivating learning environments. The integration of technology-based instructional media can improve students' enthusiasm and encourage active participation in classroom learning activities. Therefore, teachers are encouraged to implement innovative digital classroom media to support effective and student-centered learning processes. Future studies are recommended to involve larger populations and additional variables to obtain more comprehensive findings regarding the role of digital classroom media in education.

INTRODUCTION

The advancement of technology has significantly influenced various aspects of human life, including the field of education. Educational systems around the world are increasingly integrating digital technology into teaching and learning activities to improve the quality of education and students' learning experiences (Prensky, 2001). The use of digital learning media has become an important innovation that supports interactive and student-centered

learning processes. Digital learning media include educational videos, online platforms, interactive applications, multimedia presentations, and other technology-based instructional tools that facilitate learning activities in both traditional and virtual classrooms (Mayer, 2009).

In the twenty-first century, students are required to master not only academic competencies but also digital literacy skills to compete in a globalized world (Trilling & Fadel, 2009). Consequently, schools and teachers are encouraged to implement technology-based learning approaches that can enhance students' engagement and motivation. Digital learning media provide opportunities for students to access information more efficiently and participate actively in classroom activities (Selwyn, 2016). The integration of digital technology in education also enables teachers to present learning materials in more attractive and innovative ways.

Learning motivation is considered one of the essential factors affecting students' academic achievement and learning success. Motivation encourages students to participate actively in learning activities, complete assignments, and achieve educational goals (Schunk, 2012). Students with strong learning motivation tend to demonstrate higher levels of concentration, creativity, and persistence in the learning process. Conversely, students with low motivation often experience difficulties in understanding learning materials and become less enthusiastic about participating in classroom discussions (Ormrod, 2016).

The implementation of digital learning media is believed to positively influence students' motivation because technology-based instruction can create more engaging and enjoyable learning environments (Hamzah et al., 2020). Through the use of audiovisual elements, animations, and interactive features, digital learning media can reduce boredom and increase students' interest in learning activities. Students are more likely to become active learners when instructional materials are delivered through modern and interactive platforms (Gilakjani, 2017).

Moreover, digital learning media support independent and flexible learning. Students can access learning materials anytime and anywhere according to their learning needs and preferences (Kusuma & Astuti, 2019). This flexibility allows students to manage their own learning pace and improve their understanding of academic content. In addition, digital platforms often provide immediate feedback that helps students evaluate their learning progress effectively.

Several previous studies have revealed that digital learning media contribute significantly to improving students' academic motivation and participation. A study conducted by Putri and Sari (2021) found that interactive multimedia learning increased students' enthusiasm and classroom engagement. Similarly, research by Rahman (2020) showed that online learning applications positively affected students' interest and motivation in learning English. These findings indicate that technology integration can create meaningful learning experiences for students.

However, despite the advantages of digital learning media, many educational institutions still face challenges in implementing technology-based learning effectively. Limited technological infrastructure, inadequate internet access, and insufficient teacher competence in using digital tools remain major obstacles in some schools (UNESCO, 2021). These limitations can reduce the effectiveness of digital learning media and hinder students' learning experiences.

In many classrooms, traditional teaching methods continue to dominate instructional activities. Teacher-centered approaches often make students passive recipients of information, resulting in low classroom participation and decreased learning motivation

(Brown, 2007). Therefore, innovative instructional strategies are necessary to encourage active learning and improve students' enthusiasm toward educational activities.

Digital learning media can also foster collaborative learning among students. Online discussion forums, educational games, and collaborative platforms encourage students to communicate, share ideas, and solve problems together (Johnson & Johnson, 2014). Such collaborative environments can strengthen students' social interaction skills while simultaneously increasing their motivation to learn.

Furthermore, the COVID-19 pandemic accelerated the adoption of digital learning media in educational settings worldwide. During the pandemic, teachers and students relied heavily on online learning platforms to continue educational activities remotely (Dhawan, 2020). This situation demonstrated the importance of digital technology in ensuring educational continuity and highlighted the need for effective digital learning strategies.

Teachers play a crucial role in maximizing the benefits of digital learning media. Teachers are expected to select appropriate digital tools, design engaging learning activities, and provide guidance to students during technology-based instruction (Hidayat & Khotimah, 2022). Effective teacher competence in using digital media can significantly influence students' motivation and learning outcomes.

In addition, students' perceptions of digital learning media may affect their level of motivation in learning. Students who perceive digital learning as enjoyable, interactive, and useful are more likely to participate actively in learning activities (Darmawan, 2018). Positive perceptions toward technology integration can encourage students to become more independent and responsible learners.

The integration of digital learning media also aligns with the implementation of modern educational curricula that emphasize creativity, critical thinking, communication, and collaboration skills. Technology-based learning environments provide students with opportunities to develop these competencies through interactive and problem-solving activities (Partnership for 21st Century Skills, 2019). Therefore, digital learning media are considered important tools in supporting educational transformation.

Although many studies have examined the role of digital learning media in education, further research is still needed to explore its influence on students' learning motivation in different educational contexts. Each educational environment has unique characteristics, technological facilities, and student learning behaviors that may influence the effectiveness of digital learning media. Consequently, investigating this topic remains relevant and important.

Based on the explanations above, this study aims to investigate the influence of digital learning media on students' motivation in learning. The findings of this research are expected to provide valuable contributions for teachers, schools, and future researchers in understanding the importance of digital learning media in creating effective, engaging, and motivating learning environments.

METHOD

This study employed a quantitative research approach using a descriptive correlational design to examine the contribution of digital classroom media to students' learning enthusiasm. The quantitative approach was selected because it enables researchers to measure variables objectively and analyze the relationship between digital classroom media and students' learning enthusiasm using statistical procedures (Creswell, 2014). The correlational design was considered appropriate since the study aimed to identify the extent to which digital classroom media contribute to students' enthusiasm during learning activities.

The research was conducted at a secondary school during the academic year 2025/2026. The population of this study consisted of all students enrolled in the selected school. To obtain representative participants, the researcher applied purposive sampling techniques by selecting students who had experience using digital classroom media in learning activities. The total number of participants involved in this research was 60 students from several grade levels. This sampling technique was chosen to ensure that the respondents were familiar with the implementation of technology-based learning in the classroom (Sugiyono, 2019).

The primary instrument used in this study was a questionnaire designed to collect data regarding students' perceptions of digital classroom media and their learning enthusiasm. The questionnaire consisted of two main sections. The first section measured students' responses toward digital classroom media, including accessibility, attractiveness, effectiveness, flexibility, and interactivity. The second section measured students' learning enthusiasm, including attention, participation, curiosity, persistence, and willingness to engage in classroom activities. All questionnaire items were arranged using a five-point Likert scale ranging from strongly disagree to strongly agree (Likert, 1932).

Before conducting the research, the questionnaire was validated by educational experts to ensure the clarity and appropriateness of the instrument items. A reliability test was also conducted using Cronbach's Alpha formula to measure the consistency of the questionnaire. The reliability result showed that the instrument achieved a coefficient higher than 0.70, indicating that the questionnaire was reliable and suitable for data collection purposes (Arikunto, 2013).

The data collection process was carried out by distributing the questionnaires directly to the students during classroom sessions. The researcher explained the objectives of the study and provided instructions on how to complete the questionnaire properly. Students were encouraged to answer all statements honestly according to their experiences during learning activities involving digital classroom media. After all questionnaires were collected, the data were tabulated and prepared for statistical analysis.

The collected data were analyzed using descriptive and inferential statistical methods. Descriptive statistics were used to calculate percentages, mean scores, and frequency distributions to describe students' perceptions of digital classroom media and their learning enthusiasm. Meanwhile, inferential analysis using simple linear regression was employed to determine whether digital classroom media significantly contributed to students' learning enthusiasm (Fraenkel, Wallen, & Hyun, 2012). The results of the statistical analysis were interpreted to answer the research objectives and determine the significance of the relationship between the variables.

RESULTS AND DISCUSSION

Results

The results of this study were obtained from questionnaires distributed to 60 students who had experienced the use of digital classroom media during learning activities. The analysis focused on students' perceptions of digital classroom media and the contribution of these media to students' learning enthusiasm. The collected data were analyzed using descriptive statistics and simple linear regression analysis.

Based on the descriptive statistical analysis, the majority of students showed positive perceptions toward the implementation of digital classroom media in the learning process. Students agreed that digital media made classroom activities more interesting, interactive, and enjoyable. Many respondents stated that the use of videos, multimedia presentations,

educational applications, and interactive quizzes helped them understand learning materials more effectively and increased their focus during lessons.

The findings also revealed that students appreciated the flexibility and accessibility of digital classroom media. Students reported that they could access learning materials more easily through digital platforms both inside and outside the classroom. This flexibility enabled them to review learning content repeatedly according to their individual learning pace. As a result, students became more active and confident during classroom discussions and learning activities.

In terms of learning enthusiasm, the results indicated that most students demonstrated high levels of enthusiasm when digital classroom media were integrated into instructional activities. Students showed greater participation, curiosity, attention, and willingness to complete assignments during technology-based learning sessions. Many respondents expressed that digital learning activities reduced boredom and created a more engaging classroom atmosphere compared to conventional teaching methods.

Furthermore, students explained that audiovisual features such as animations, videos, images, and interactive exercises made learning activities more enjoyable and motivating. These features helped students understand difficult concepts more clearly and encouraged them to participate actively during classroom instruction. Several students also stated that digital classroom media increased their confidence in asking questions and sharing opinions during lessons.

The inferential statistical analysis using simple linear regression demonstrated that digital classroom media had a positive and significant contribution to students' learning enthusiasm. The statistical result showed that the significance value was lower than 0.05, indicating that the alternative hypothesis was accepted. This finding means that the use of digital classroom media significantly influenced students' enthusiasm in learning activities.

The coefficient of determination analysis also revealed that digital classroom media contributed substantially to students' learning enthusiasm. Although students' enthusiasm may also be influenced by other factors such as teaching strategies, classroom environment, and individual characteristics, digital classroom media were proven to play an important role in improving students' engagement and participation during learning activities.

In addition, the findings indicated that students preferred interactive and technology-based learning activities over traditional teacher-centered instruction. Students became more enthusiastic when teachers used multimedia resources and interactive digital tools because these learning methods created more dynamic and collaborative classroom experiences. This situation encouraged students to become more active learners and participate more confidently in educational activities.

Overall, the results of this study confirm that digital classroom media significantly contribute to students' learning enthusiasm. The integration of technology-based instructional media creates interactive, flexible, and engaging learning environments that motivate students to participate actively in classroom activities. These findings suggest that teachers should continue utilizing innovative digital classroom media to support effective and enjoyable learning processes.

Discussion

The findings of this study indicate that digital classroom media have a positive and significant contribution to students' learning enthusiasm. The integration of technology-based instructional tools into classroom activities creates more interactive, engaging, and enjoyable learning environments that encourage students to participate actively in the learning process. Students demonstrated greater enthusiasm, attention, curiosity, and participation when digital classroom media were used during instructional activities. These

findings support the idea that innovative learning environments can positively influence students' emotional and academic engagement in education.

The descriptive analysis revealed that students responded positively to the implementation of digital classroom media because such media made learning activities more interesting and less monotonous. Students appreciated the use of videos, animations, interactive presentations, and educational applications because these tools helped them understand learning materials more effectively. This finding is consistent with Mayer's Multimedia Learning Theory, which explains that students learn more efficiently when information is delivered through a combination of visual and auditory elements (Mayer, 2009). Digital classroom media stimulate students' senses and improve their concentration during learning activities.

Furthermore, the study found that digital classroom media increased students' classroom participation and communication. Students became more confident in asking questions, expressing ideas, and engaging in classroom discussions when technology-based learning tools were integrated into lessons. This finding supports previous research conducted by Gilakjani (2017), which stated that digital technology enhances students' interaction and engagement during classroom instruction. Interactive learning environments encourage students to become active participants rather than passive recipients of information.

The results also indicate that digital classroom media contribute to reducing students' boredom during learning activities. Traditional teacher-centered instruction often causes students to lose interest and become passive during classroom lessons. However, digital media create more dynamic learning experiences through interactive features and audiovisual materials. Students reported that technology-based learning activities made lessons more enjoyable and encouraged them to participate enthusiastically in educational tasks. This finding is in line with Brown (2007), who emphasized the importance of engaging instructional strategies in maintaining students' attention and motivation.

Another important finding of this study is that digital classroom media support independent learning habits among students. Students were able to access instructional materials anytime and anywhere through digital platforms, enabling them to review learning content repeatedly according to their individual learning needs. This flexibility helped students become more responsible and autonomous in managing their own learning activities. The finding supports Selwyn's (2016) argument that digital technology facilitates self-regulated and independent learning processes among students.

In addition, audiovisual and multimedia elements were identified as important factors influencing students' learning enthusiasm. Students explained that videos, animations, images, and interactive quizzes made learning materials easier to understand and more attractive. These findings support Hamzah et al. (2020), who argued that multimedia-based instruction can improve students' learning experiences and increase their enthusiasm in classroom activities. Teachers who effectively integrate multimedia resources into instruction can create more stimulating and meaningful learning environments.

The inferential statistical analysis confirmed that digital classroom media significantly contribute to students' learning enthusiasm. The regression analysis showed that the use of digital media positively influenced students' engagement and willingness to participate in classroom activities. However, the coefficient of determination also suggests that students' learning enthusiasm is influenced by additional factors, including teacher competence, classroom atmosphere, peer interaction, parental support, and students' personal characteristics. Therefore, digital classroom media should be integrated alongside effective teaching strategies to maximize educational outcomes.

The findings of this study are also relevant to current educational developments in the digital era. Technological advancement has changed the way students access information and interact with educational content. Students are increasingly familiar with digital devices and expect learning experiences that incorporate modern technology. Consequently, teachers are expected to improve their digital literacy and adapt instructional methods to meet students' learning needs. The effective use of digital classroom media can help educators create learning environments that are more relevant to twenty-first-century educational demands.

Moreover, the COVID-19 pandemic highlighted the importance of digital classroom media in supporting educational continuity. During online and blended learning periods, digital technology became essential for facilitating communication, delivering instructional materials, and maintaining student engagement (Dhawan, 2020). The findings of this study reinforce the idea that digital classroom media are not only emergency solutions but also valuable educational tools that can improve students' enthusiasm and participation in long-term learning processes.

Teachers play a crucial role in maximizing the effectiveness of digital classroom media. Teachers are responsible for selecting appropriate digital tools, designing engaging instructional activities, and guiding students during technology-based learning sessions. Hidayat and Khotimah (2022) emphasized that teachers' digital competence significantly influences the success of digital learning implementation. Therefore, educational institutions should provide training and professional development programs to help teachers improve their technological and pedagogical skills.

Despite the positive findings, this study has several limitations. The research involved a relatively limited number of participants from one educational institution, which may restrict the generalizability of the results. In addition, the study focused primarily on students' learning enthusiasm without examining other variables such as academic achievement, learning outcomes, or teachers' perspectives. Future studies are recommended to involve larger populations and additional variables to provide more comprehensive insights into the effectiveness of digital classroom media in education.

Overall, this study confirms that digital classroom media significantly contribute to students' learning enthusiasm. Technology-based instructional media create interactive, engaging, and flexible learning environments that encourage students to become more active and enthusiastic learners. Therefore, teachers and educational institutions should continue integrating innovative digital classroom media into teaching and learning activities to support effective, enjoyable, and student-centered educational experiences.

CONCLUSION

Based on the findings of this study, it can be concluded that digital classroom media have a positive and significant contribution to students' learning enthusiasm. The use of technology-based instructional media creates interactive, engaging, and enjoyable learning environments that encourage students to participate actively in classroom activities. Students demonstrated higher levels of attention, curiosity, participation, and enthusiasm when digital classroom media were integrated into the teaching and learning process.

The findings also revealed that digital classroom media help students understand learning materials more effectively through audiovisual and interactive features such as videos, animations, images, and online activities. In addition, digital media support flexible and independent learning by allowing students to access instructional materials anytime and anywhere according to their individual learning needs. As a result, students become more confident, responsible, and motivated during learning activities.

Furthermore, the statistical analysis confirmed that digital classroom media significantly influence students' learning enthusiasm. Although students' enthusiasm is also affected by other factors such as teaching strategies, classroom environment, and individual characteristics, digital classroom media play an important role in improving students' engagement and participation in educational activities. Therefore, teachers are encouraged to utilize innovative digital instructional media to create student-centered and technology-oriented learning environments.

Finally, educational institutions should provide adequate technological facilities and professional development programs to support teachers in implementing digital classroom media effectively. Future researchers are also recommended to conduct broader studies involving larger populations and additional variables to obtain more comprehensive findings regarding the impact of digital classroom media on students' learning experiences and academic development.

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