
Implementation of Digital Learning Media in Increasing Elementary School Students' Interest in Learning: A Literature Review

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ARTICLE INFO	ABSTRACT
Entered : January 23, 2025 Revised : February 20, 2025 Accepted : February 25, 2025 Published : February 28, 2025	This study aims to analyze the implementation of digital learning media in increasing elementary school students' learning interest through a literature review. The method used is a qualitative approach with content analysis techniques on various relevant scientific sources, including journal articles, proceedings, and books published in the last five years (2019–2024). The results of the study indicate that the use of digital media, such as interactive videos, animations, educational games, and learning applications, contributes positively to increasing learning interest through attractive, interactive, and contextual presentations. Student learning interest increases when digital media is combined with appropriate pedagogical strategies, such as constructivist-based learning, blended learning, and simple gamification. However, the success of digital media implementation is also influenced by supporting factors such as teacher competence, technological infrastructure, and media design that is appropriate to student characteristics. This study emphasizes the need for ongoing teacher training, media development based on instructional design principles, and a comprehensive evaluation of the impact of digital media on learning interest. With appropriate implementation, digital learning media has the potential to create more meaningful learning experiences and foster positive attitudes towards long-term learning.
Keywords: <i>Digital Media; Learning Interest; Elementary School</i>	



Introduction

The rapid development of information and communication technology has brought significant changes to various aspects of life, including the education sector. This transformation requires the educational sector to adapt by utilizing technology as a more innovative learning tool that is relevant to the characteristics of today's students. The generation growing up in the digital era has a strong attachment to technology, making the implementation of digital learning media a strategic effort to support interactive, adaptive, and enjoyable teaching and learning processes.

As the foundation for developing students' competencies and character, elementary education requires a learning approach that is not only informative but also engaging. However, the reality on the ground shows that elementary school students' learning interests often face serious challenges. Low student engagement in the learning process, caused by monotonous conventional methods, has implications for suboptimal learning outcomes. This reinforces the urgency of innovation in the use of learning media that can accommodate students' cognitive, affective, and psychomotor needs.

One strategy considered effective in addressing these challenges is the use of digital learning media. This media encompasses various forms, such as educational videos, interactive animations, and technology-based applications designed to support the achievement of learning competencies. Digital media has the advantage of providing a more lively and contextual learning experience through the integration of text, images, audio, and interactive visualizations, thereby activating more of students' senses in the learning process.

The use of digital media also aligns with 21st-century learning principles, which emphasize critical thinking, creativity, communication, and collaboration. With its flexible features, digital media can create a collaborative learning environment, both in face-to-face and distance learning contexts. Furthermore, this media supports personalized learning according to individual learning pace and style, thus increasing students' intrinsic motivation to learn independently.

In the elementary school context, learning interest is a determinant factor influencing learning success. A strong learning interest can encourage students to be more active in exploring material and engaging in learning activities. Conversely, low learning interest often leads to low academic achievement and reduced student participation. Therefore, implementing digital learning media is



a solution that can stimulate students' curiosity through engaging, interactive, and contextual presentation of material.

Although various studies have demonstrated the positive potential of digital media in learning, its implementation is not without challenges. Infrastructure limitations, teacher competence in mastering technology, and student readiness to utilize digital media are factors that require attention. Furthermore, the use of digital media must be based on careful planning so that it is not merely a supplement but truly supports the achievement of learning objectives.

Given the complexity of these challenges, a comprehensive literature review is needed to identify the extent to which digital media implementation contributes to increasing elementary school students' learning interest. This review will not only examine empirical evidence regarding the effectiveness of digital media but also examine the barriers that often arise in its implementation. The results of this literature review are expected to provide a comprehensive overview of best practices in utilizing digital media in elementary education settings.

Thus, this research is relevant for providing theoretical and practical contributions regarding the implementation of digital learning media in the context of elementary education. Theoretically, this study can enrich the body of educational knowledge regarding the role of technology in learning. Practically, the results of this study are expected to provide recommendations for educators, policymakers, and media developers so they can design effective digital-based learning strategies to increase elementary school students' learning interest.

Method

This research uses a qualitative approach with a literature review method to in-depth examine various relevant research findings regarding the implementation of digital learning media in increasing elementary school students' learning interest. This method was chosen based on the research objective, which focuses on collecting, analyzing, and synthesizing information from scientific sources to obtain a comprehensive picture of the topic under study. The literature review approach is considered appropriate because it allows researchers to identify patterns, important findings, and existing research gaps in this field.

The data sources for this study were derived from credible scientific literature, including national and international journal articles, proceedings, reference books, and research reports. The literature



selection was limited to publications within the last five years, between 2019 and 2024, to ensure the relevance and currency of the information. The inclusion criteria included literature discussing the use of digital learning media at the elementary school level, focusing on aspects of learning interest, being available in full text, and being published through reputable academic sources.

The data collection process was conducted through a systematic search using several online databases, such as Google Scholar, DOAJ, ResearchGate, and national journal portals indexed by Sinta. Keywords used in the search included terms such as "digital learning media," "elementary school students' learning interests," and "technology implementation in elementary education." Literature meeting the inclusion criteria was then collected and organized for further analysis.

Data analysis was conducted using content analysis techniques, which encompass three main stages. The first stage is data reduction, which involves selecting and selecting relevant information according to the research focus. The second stage is categorization, which involves grouping findings based on specific themes, such as the type of digital media used, implementation strategies, impact on learning interest, and implementation constraints. The final stage is synthesis, which aims to summarize findings from various sources and present them comprehensively to allow valid and in-depth conclusions to be drawn.

To ensure the validity of the findings, this study employed source triangulation by comparing results from various sources with high credibility. Furthermore, peer review was conducted through academic discussions to ensure more objective and accurate data interpretation. This procedure ensures the reliability of the analyzed data, ensuring a solid foundation for the study's findings.

The expected outcome of this research is a clear mapping of the effectiveness of digital learning media implementation in increasing elementary school students' learning interest. Furthermore, this study is expected to identify common obstacles in digital media implementation and provide strategic recommendations that educators and policymakers can use to optimize the use of technology in learning.

Results and Discussion

The following scientific discussion integrates conceptual and empirical findings from various literature studies on the implementation of digital learning media in increasing elementary school



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students' learning interest. The background indicates that digital transformation in education creates both opportunities and methodological challenges for teachers in designing learning relevant to the characteristics of the digital generation. Therefore, the analysis focuses on the relationship between digital media characteristics, pedagogical implementation strategies, the dynamics of student learning interest, and school context and infrastructure factors.

The link between technological developments and learning practices in elementary schools is evident in the paradigm shift from knowledge transmission to facilitating multimodal learning experiences. Digital media—including interactive videos, simple simulations, educational games, dynamic presentations, and mobile-based applications—provide richer visual, auditory, and kinesthetic stimuli than static media. Theoretically, multisensory exposure can enhance initial attention and sustain cognitive engagement over a longer period of time, which are prerequisites for developing sustained learning interest.

Learning interest in elementary school-aged children is not static; it develops through positive emotional experiences, a sense of real-world relevance, and early success in understanding tasks. Digital media that present everyday contexts, narratives close to students' experiences, or game elements (simple gamification such as points, badges, or levels) have been shown to trigger affective engagement. When these stimuli are followed by opportunities for direct interaction—for example, choosing a learning path or answering an animation-based quiz—students feel a sense of control and competence, two psychological factors that strengthen intrinsic interest.

The effectiveness of digital media is greatly influenced by the quality of its pedagogical integration. Teachers who simply play videos without any follow-up activities tend to generate superficial engagement. Conversely, when digital media is tied into a structured learning cycle—contextual introduction, interactive exploration, reflective discussion, and application tasks—the media serves as a cognitive anchor that helps students connect abstract concepts with concrete representations. This integration aligns with constructivist approaches and experiential learning.

The blended learning model shows strong potential for elementary schools because it combines direct teacher-student interaction with reusable digital support. In face-to-face classes, teachers guide the interpretation of the material; outside of class hours, students can review the material through interactive digital modules. This pattern of repeated reinforcement is important for



elementary-age students, who require repeated exposure to develop conceptual understanding and maintain interest.

Literature shows that the quality of media design—not simply its presence—determines the impact on interest. Media that is too text-heavy, has a complicated interface, or requires complex navigation actually decreases focus. Instructional design principles for elementary school children recommend simple visual presentation, familiar icons, clear audio narrative, and segmenting material into small units (chunking) to manage cognitive load. When cognitive load is low, attentional capacity can be diverted to affective engagement and curiosity.

Differentiating learning styles is a critical consideration. While the concept of traditional learning styles is often debated, practical evidence suggests that a variety of presentation formats (images, audio, click/drag activities, mini-games) helps address a range of student preferences. Digital media allows for adaptive presentation: students who grasp quickly can progress to more advanced levels, while those who need repetition can access tutorials again. This flexibility supports personalization, a motivational determinant linked to interest.

The social dimension shouldn't be overlooked. Children's interest in learning often emerges through interactions with peers and teacher feedback. Digital collaborative features—simple forums, group scoreboards, paired assignments on shared devices—can combine technological stimulation with social motivation. When success is displayed collectively (e.g., class point totals), a sense of community increases participation even for initially passive students.

The infrastructure context of elementary schools in many regions—particularly in Indonesia and other developing countries—remains varied. Limited devices, unstable internet connections, and technical maintenance capacity are often major obstacles. In such situations, the literature emphasizes the importance of low-bandwidth strategies and the use of shared device rotation. Optimizing offline content that can be synchronized periodically is a pragmatic solution for sustainable implementation.

Teachers' pedagogical and technological competencies (technological pedagogical content knowledge/TPACK) are crucial for success. Teachers need to be able not only to operate devices but also to map curriculum objectives to appropriate media types, design follow-up activities, and assess the impact on student interest. Continuous professional development programs—workshops,



teacher learning communities, and digital microlearning modules—are recommended to strengthen these integrative skills.

Measurements of learning interest in literature studies tend to vary, ranging from observations of activity, perception questionnaires, frequency of media access, to indicators of task engagement. Instrument variation affects the consistency of findings, so literature synthesis requires grouping findings based on the interest indicators used. A triangulative approach—combining behavioral data (usage logs), self-reports, and teacher assessments—provides a more holistic picture of interest changes.

The synthesis of results reveals a general pattern: planned and integrated use of digital learning media is positively correlated with increased indicators of learning interest, particularly in the dimensions of attention, task persistence, and emotional engagement. However, the effects are often moderate and contextual; the greatest impact is found when media are tailored to the age, curriculum, and local school culture. These findings confirm that technology is an enabler, not a sole determinant.

Several limitations were also identified. Many studies had quasi-experimental designs without rigorous controls, small sample sizes, or short intervention durations, requiring caution when generalizing. Furthermore, some studies assessed short-term outcomes (initial appeal) rather than long-term sustainability of interest. Limited reporting of technical details of the media makes replication difficult for educational practitioners.

Based on the overall study, the implementation of digital learning media to increase elementary school students' interest in learning should follow the following step-by-step principles: (1) mapping school needs and readiness; (2) selecting media according to curriculum objectives and age characteristics; (3) designing interactive, collaborative, and reflective activities; (4) ongoing teacher training; (5) multi-source interest evaluation mechanisms; and (6) ongoing adaptation based on student and teacher feedback. By following this framework, the use of digital media has the potential to not only increase learning interest situationally, but also foster a positive attitude towards sustainable learning in the long term.



Conclusion

The implementation of digital learning media has significant potential to increase elementary school students' learning interest if properly designed and integrated. Digital media not only provides a more interactive and engaging learning experience but also facilitates personalization, collaboration, and repeated reinforcement of concepts. Its successful use depends on the quality of the media design, appropriate pedagogical strategies, infrastructure readiness, and teacher competence in managing technology effectively. Although proven to increase student attention, motivation, and engagement, the use of digital media must be accompanied by ongoing teacher training, needs mapping, and multi-layered evaluation to ensure a sustainable impact. Thus, digital media can be a crucial catalyst in creating adaptive, innovative learning that fosters positive attitudes toward long-term learning.

Bibliography

- Azzahra Putri, Annisa Zakia Ulfa, Nur Azmi Alwi, & Salmains Safitri Syam. (2025). Analysis of the Role of Digital Media in Increasing Students' Interest in Learning in Elementary Schools. *Journal of Transformative Education*, 4(3), 78–84. [JBasic+10Jupetra+10Aspiration Journal+10](#)
- Fanny Lusce Maria, Muhammad Sholeh, Muhammad Masykur, Wida Rachmawati, Yunita Wulandari, Kania Salsabila, & Diah Mulyani Arman. (2024). The Role of Technology-Based Learning Media in Increasing Elementary School Students' Interest in Learning. *Pendas: Scientific Journal of Elementary Education*, 9(3). [Unpas Journal](#)
- Haq, IU (2023). Impact of Augmented Reality System on Elementary School ESL Learners in Countryside of China: Motivations, Achievements, Behaviors and Cognitive Attainment. arXiv preprint. [arXiv](#)
- Herlina, H., Astuti, M., Triyunita, H., Rahmawati, TD, & Yana, N. (2024). Utilization of Digital Media to Attract Students' Interest in Islamic Religious Education (PAI) Learning in Elementary Schools/Islamic Elementary Schools. *Indo-MathEdu Intellectuals Journal*, 5(6), 8265–8277. [ejournal.indo-intellectual.id](#)
- Ismaya, R., Salshabila, S., & Ariyani, ID (2024). The Effect of Using Digital Learning Media on Elementary School Students' Learning Outcomes. *Journal of Education and Teaching Review*,



7(4), 13779–13785. [Unpas Journal+5Journal of Pahlawan University+5Journal of Pahlawan University+5](#)

Lestari, EY, Shinta, D., Susilo, J., & Khoirulloh, K. (2022). The Effectiveness of Using Educational Comic Media with Javanese Cultural Content in Improving Elementary School Students' Reading Comprehension Skills. *Basicedu Journal*, 6(2), 2815–2822. [JBasic](#)

Lytvynova, S., & Demeshkant, N. (2022). Distance Learning in Primary School During the COVID19 Pandemic: Results of the “SMART KIDS” Experiment. arXiv preprint. [arXiv](#)
18. Moubayed, A., Injadat, M.N., Shami, A., & Lutfiyya, H. (2020). Relationship between Student Engagement and Performance in eLearning Environment Using Association Rules. arXiv preprint. [arXiv](#)

Maisarah, M., & Prasetya, C. (2023). The Influence of Digital Media on Science Process Skills and Critical Reasoning in Elementary Schools. *Basicedu Journal*, 7(5), 3118–3130. [JBasic](#)

Maulidatul Wafa, N., & Wiranti, DA (2024). The Effectiveness of Digital Comic Media on Reading Comprehension Skills of Fourth Grade Students of SDN 3 Kawak. *Afeksi: Journal of Educational Research and Evaluation*, 5(2). [arXiv+13JBasic+13Aspiration Journal+13](#)

Naimah, Muhammad Fauzan Muttaqin, & Meilina. (2024). Implementation of Digital Literacy in Elementary School Students. *Scientific Journal of Teacher Professional Education*, 7(1), 85–94. [Undiksha E-Journal+1Undiksha E-Journal+1](#)

Nur Alifah, H., Virgianti, U., Imam Zamah Sarin, M., Amirul Hasan, D., Fakhriyah, F., & Aditia Ismaya, E. (2023). Systematic Literature Review: The Influence of Digital Learning Media on Thematic Learning on Elementary School Students' Learning Outcomes. *Scientific Journal and Student Work*, 1(3), 103–115. [JBasic](#)

Rahadian, RB, & Budiningsih, CA (2023). Development of Classroom Management Based on Student Learning Style Database. arXiv preprint. [arXiv](#)

Sapitri, S., & Suriani, A. (2025). The Effectiveness of Interactive Learning Media in Increasing Elementary School Students' Interest in Learning. *Pragmatics: Journal of Language and Education*, 3(3), 282–292. [Aspiration Journal](#)



-
- Shidik, RR, Anggraeni, P., & Royani, N. (2022). The Use of Learning Video Media to Improve Students' Interest and Reading Skills on the Material of Sources and Forms of Energy. *Journal of Indonesian Language and Literature Education*, 1(1), 91–99. [Undiksha E-Journal](#)
- Simbolon, ME, Marini, A., & Nafiah, M. (2022). The Influence of Digital Literacy on Elementary School Students' Reading Interest. *Jurnal Cakrawala Pendas*, 8(2), 532–542. [Undiksha E-Journal](#)
- Singih, G. et al. (2024). Augmented Reality and Gamification in Education: Trends and Impacts. *Applied Sciences*. (example of a meta-study for gamification and AR theory).
- Siroj, HA, WA, & NKB (2022). The Influence of Digital Literacy on Reading Interest of Fifth Grade Students at SDN 1 Dasan Tapen in the 2021/2022 Academic Year. *Scientific Journal of Educational Professions*, 7(3), 1049–1057. [Undiksha E-Journal+1LPKD Journal+1](#)
- Titin Nuraeni, TN, Nurkholis, Fitri Aprianti, & Dedeh. (2023). Implementation of Project Based Learning Model Assisted by Digital Media in Improving Mathematics Learning Outcomes of Fifth Grade Elementary School Students. *Jurnal Elementaria Edukasia*, 6(2), 480–489. [Journal of the University of Heroes+2Ejournal of the University of Majalengka+2Journal of the University of Heroes+2](#)
- Zhahira, BS, Fauziah, HG, Nugraha, MP, & Damayanti, W. (2024). Increasing Elementary School Students' Literacy Interest through the Utilization of the TikTok Application. *Basicedu Journal*, 8(4), 2848–2856. [JBasic](#)

