Exploring the Impact of Digital Media in Pesantren-Based Education: Enhancing Islamic Studies Learning and Fostering Character Development among Student

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Abstract:

The aims of this study is to examine how digital tools can enhance the educational experience and contribute to the moral and ethical development of students. This article explores the use of digital media in Islamic education learning to strengthen the character of students at school. A descriptive qualitative research method was employed, with data collected through observations, interviews, and documentation. Data analysis utilized data triangulation to ensure the reliability and validity of the findings. The research results indicate that the integration of digital media in Islamic boarding schools positively impacts learning outcomes by increasing student engagement, comprehension, and retention. However, the study also identifies challenges such as the need for adequate technological infrastructure and teacher training, as well as the importance of aligning digital content with Islamic values. Best practices include regular professional development for educators, a balanced approach combining traditional and digital methods, and ongoing evaluation of digital resources.

Key Words: *Digital Media Learning, Islamic Religious Education, Student Character*

Abstrak:

Tujuan dari penelitian ini adalah untuk menguji bagaimana alat digital dapat meningkatkan pengalaman pendidikan dan berkontribusi pada pengembangan moral dan etika siswa. Eksplorasi pemanfaatan media digital dalam pembelajaran PAI (Pendidikan Agama Islam) untuk penguatan karakter siswa di sekolah. Metode penelitian yang digunakan adalah deskriptif kualitatif, dengan pengumpulan data melalui observasi, wawancara, dan dokumentasi. Analisis data menggunakan triangulasi data untuk memastikan keandalan dan validitas temuan. Hasil penelitian menunjukkan bahwa integrasi media digital di pesantren memberikan dampak positif terhadap hasil pembelajaran dengan meningkatkan keterlibatan, pemahaman, dan retensi siswa. Namun, studi ini juga mengidentifikasi tantangan seperti perlunya infrastruktur teknologi dan pelatihan guru yang memadai, serta pentingnya menyelaraskan konten digital dengan nilai-nilai Islam. Praktik terbaik mencakup pengembangan profesional reguler bagi para pendidik, pendekatan seimbang yang menggabungkan metode tradisional dan digital, dan evaluasi berkelanjutan terhadap sumber daya digital.

Kata Kunci: *Pembelajaran Digital Media, Pendidikan Agama Islam, Karakter Siswa*

INTRODUCTION

The digitalization of learning in Islamic boarding schools presents a unique intersection between traditional religious education and modern technological advances (Kalimullina et al., 2021; Tapalova & Zhiyenbayeva, 2022; Rusdi et al., 2023). On the one hand, digital media can enhance the delivery of Islamic studies by providing a variety of resources, interactive content, and multimedia presentations that cater to different learning styles (Supriyanto et al., 2022; Kharismatunisa, 2023; Azizah et al., 2023). On the other hand, this creates challenges in ensuring that the content is in line with Islamic principles and supports holistic student development. Character education is a fundamental aspect of *pesantren* which aims to instill moral values, ethical behavior and a strong sense of spirituality in students (Purwanto et al., 2021). Incorporating digital media into this framework requires a careful balance to ensure that the core values of Islamic boarding school education are upheld. Digital tools can be utilized to strengthen character education through interesting and relevant content, but these tools must be curated to avoid exposure to inappropriate material and to maintain the focus on Islamic teachings.

Digitalization of education refers to the integration of digital technology into the teaching and learning process. Constructivist theory, developed by Jean Piaget and continued by Lev Vygotsky, states that learners build knowledge through experience and interaction with their environment (Islami & Gustiana, 2021; Saripudin et al., 2021; Ariansyah, 2023;). Digital technology provides a variety of interactive and immersive experiences that can foster deeper understanding and engagement (Okunlaya et al., 2022; Josué et al., 2023; Lakshmi & Kesavan, 2024). Tools such as virtual simulations, interactive multimedia, and online collaborative platforms allow students to explore concepts in dynamic and engaging ways. This is in line with the constructivist emphasis on active learning and critical thinking. The version of Connectivist Theory and Network Learning proposed by George Siemens and Stephen Downes, views learning as a process that occurs in a network of interconnected nodes, which can include humans, digital tools, and information sources (Kotzee & Palermos, 2021; Mujahid, 2021; Alimron et al., 2023). Within this framework, digital technologies are essential for creating and navigating these networks, facilitating access to large amounts of information and enabling collaboration beyond the boundaries of the traditional classroom.

However, the use of digital media in character education must be managed carefully so that it is in line with Islamic principles (Baderiah & Munawir, 2024). This includes selecting appropriate content, establishing digital usage guidelines, and balancing screen time with face-to-face interactions. The goal is to utilize digital tools to strengthen, not replace, traditional character education methods. Integrating digital media in *pesantren* requires an understanding of the theoretical foundations of digital education and the special

needs of Islamic character education.

Previous research on the integration of digital media in education has provided valuable insights into its benefits and challenges across various educational contexts. Numerous studies have explored the impact of digital media on learning outcomes in secular education. Research by Teng, (2023) highlights the effectiveness of multimedia learning, showing that combining text, images, and interactive elements can enhance student understanding and retention. Diana (2024) examined the use of digital resources in Islamic studies and found that students showed increased engagement and improved comprehension of religious texts. Digital tools, such as Qur'an apps and online hadith databases, were particularly effective in providing interactive and accessible learning experiences. A study by Tubagus et al., (2023) explored the use of digital media in Indonesian *pesantren* and identified several benefits, including enhanced access to educational resources and improved student motivation. However, the study also highlighted challenges such as inadequate infrastructure, lack of digital literacy among teachers, and concerns about maintaining the integrity of Islamic teachings. In Islamic education, Kharismatunisa (2023) examined the role of digital media in promoting Islamic values and found that multimedia content, such as videos and online discussions, can effectively reinforce moral lessons. Existing research indicates positive impacts on student engagement and learning, but also underscores the need for context-specific strategies to address challenges and maintain the integrity of Islamic teachings. This review underscores the importance of further research to develop a comprehensive understanding of how digital media can be effectively integrated into pesantren education to enhance both academic and moral development.

Despite the growing interest in the integration of digital media in educational settings, there is a notable research gap when it comes to understanding its specific impact within the context of Islamic boarding schools (pesantren). Existing studies on digitalization in education largely focus on secular institutions and often overlook the unique cultural, religious, and pedagogical characteristics of pesantren. This gap highlights the need for targeted research that addresses the Impact on Islamic Studies Learning Outcomes and Influence on Character Development. Filling this gap will provide valuable insights for educators and policymakers to optimize the use of digital media in pesantren, ultimately enhancing the educational experience and outcomes for students.

The integration of digital media in Islamic boarding schools (pesantren) is a novel research area with significant potential to transform traditional educational practices. This study aims to address unique aspects not comprehensively explored previously, contributing new insights to educational technology in religious contexts. It focuses on the contextualized integration of digital tools tailored to pesantren's cultural and pedagogical framework, offering

a holistic assessment of their impact on both academic and character development. By identifying practical solutions and best practices, the research provides actionable recommendations for educators and policymakers. Additionally, it explores balancing traditional practices with modern technology to respect and enhance pesantren's cultural and religious values. This comprehensive, contextualized, and practical approach aims to fill existing research gaps and guide the effective use of digital media to enhance educational outcomes in pesantren.

The primary purpose of this research journal is to explore and analyze the impact of digital media integration in Islamic boarding school-based education, particularly focusing on enhancing Islamic studies learning and fostering character development among students in SMA Islam Sabilurrasyad. This investigation aims to provide a comprehensive understanding of how digital tools can be effectively utilized within the unique context of pesantren, offering practical insights and recommendations for educators and policymakers. By addressing current gaps, offering practical solutions, and providing actionable recommendations, this study aims to enhance the educational experience for students in pesantren and support their holistic development in a digital age.

RESEARCH METHODS

This study employs a descriptive qualitative approach to explore and understand how digital media is integrated into Islamic Religious Education (PAI) within the pesantren environment, specifically at Sabilurrasyad Islamic High School in Malang, East Java. The qualitative approach was chosen due to its flexibility and its ability to uncover the complex dynamics within educational contexts, particularly in the effort to enhance student character development through digital media. Descriptive qualitative research allows the researcher to delve holistically into the views, experiences, and perceptions of participants (Stenberg & Maaranen, 2022). This method was preferred over quantitative approaches because this study focuses on exploring and understanding contextual and complex phenomena rather than measuring variables quantitatively or seeking generalizations. Thus, this approach is the most suitable to achieve this research's in-depth and comprehensive objectives.

Data collection techniques in this study include observations, in-depth interviews, and documentation. The research was conducted at Sabilurrasyad Islamic High School, located at Jl. Raya Temple VI C No. 303, Karangbesuki, Sukun, Malang City, East Java 65146. This location was selected due to its unique characteristics as a pesantren that integrates Islamic religious education with the advancements of digital technology in the learning process. Moreover, Sabilurrasyad Islamic High School has the necessary infrastructure to implement digital technology in education, making it an ideal site for exploring the impact of digital media on PAI learning and character development among students. The respondents of this study consist of 10 PAI teachers, five administrative staff

members involved in the implementation of educational technology, and 30 students, who were purposively selected based on their involvement in using digital media during the learning process. This number of respondents was chosen to adequately represent various perspectives relevant to the research topic and ensure the depth of analysis.

The data analysis technique employed in this study is thematic analysis using an inductive approach. The analysis process begins with open coding, where data collected from interviews, observations, and documentation are broken down into smaller units of meaning. These units are then grouped into categories that represent the main themes emerging from the data. The next stage is axial coding, where the relationships between the identified themes are analyzed to provide a more comprehensive understanding of the phenomena under study (Alam, 2021). The data is then triangulated to ensure validity and reliability by comparing findings from various data sources and collection methods. This approach was chosen to provide clarity and accuracy in the data interpretation and minimize researcher bias in analyzing and concluding the research findings.

RESULTS AND DISCUSSION

The theoretical study of learning Islamic religion and fostering character development in Islamic boarding schools draws on several key educational theories and principles. Constructivist theory, as advocated by Piaget and Vygotsky, emphasizes that learning is an active, contextualized process where students construct knowledge through their experiences and interactions (Lakshmi & Kesavan, 2024; Josué et al., 2023). In the context of Islamic education, this means that students engage deeply with religious texts and principles, internalizing and applying them in their daily lives (Firdaus et al., 2024). Kohlberg's stages of moral development also provide a framework for understanding how students' progress in their moral reasoning, guided by Islamic teachings that emphasize virtues such as honesty, compassion, and justice (Bahri et al., 2022). Character education theories, such as those by Lickona, highlight the importance of creating a supportive educational environment that fosters ethical and moral development (Hafizallah, 2023). In Islamic boarding schools, this involves integrating religious instruction with character-building activities, ensuring that students not only learn about Islamic beliefs and practices but also embody these values in their behavior (Hidayatulloh et al., 2024). This holistic approach to education aims to develop individuals who are

knowledgeable about their faith and committed to living out its moral and ethical teachings in all aspects of their lives.
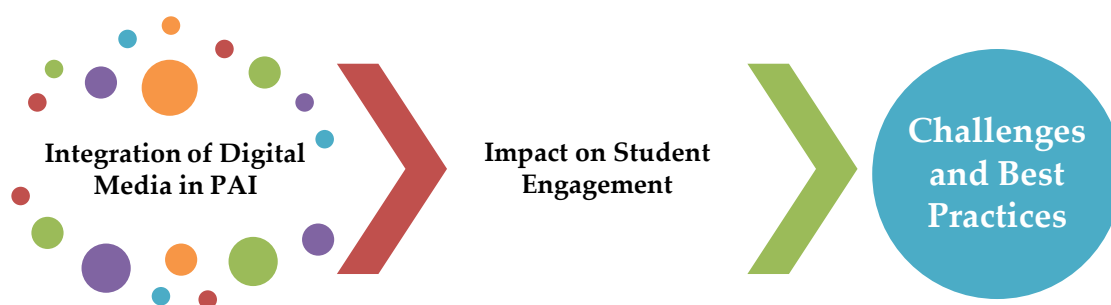

Figure 1. Impact of Digital Media in Pesantren-Based Education

Integration of Digital Media in PAI

The integration of digital media into PAI at Sabilurrasyad Islamic High School has transformed the traditional approach to Islamic education, offering new ways to engage students and enhance their understanding of religious concepts. Teachers have reported that digital tools such as multimedia presentations, Qur'an apps, and online discussions have made lessons more interactive and accessible.

"Using digital media helps students visualize the concepts we discuss, which is especially helpful when we cover more abstract topics like Islamic jurisprudence (I_24)."
Some students are visual learners, and when I use multimedia presentations, they grasp the material much faster (I_24)."
"Sometimes the internet connection is unstable, which can disrupt the flow of the lesson and frustrate both the students and me." (I_24)."

The interviews reveal that the use of digital media in the classroom significantly enhances students' understanding of complex and abstract concepts, particularly for visual learners who benefit from multimedia presentations. This approach allows students to grasp material more quickly and effectively by providing visual aids that complement traditional teaching methods. However, the effectiveness of this strategy is sometimes hindered by technological challenges, such as unreliable internet connections, which can disrupt the lesson flow and lead to frustration for both teachers and students. This underscores the need for stable technological infrastructure to fully leverage the benefits of digital media in education.

Digital media is also not just a means of promoting *pesantren* as educational institutions (Muiz, 2023; Tarihoran & Nikmatullah, 2023). More than that, digital media also becomes a *wasilah* (intermediary) to transform *pesantren* knowledge, traditions, and values as a form of community empowerment. Through digital platforms, *pesantren* can share their rich heritage and educational

practices with a wider audience, thereby extending their influence beyond the immediate school environment. This digital transformation allows for the preservation and dissemination of local cultural wisdom, Islamic teachings, and the values inherent in pesantren education.

Digital media plays an important role in improving educational experiences, especially in the context of Islamic Religious Education. Digital learning tools, such as multimedia presentations, improve the delivery of learning materials, making religious texts and visualizations more accessible and engaging for students (Susilawati et al., 2021; Sutrisna & Nursikin, 2023; Lakshmi & Kesavan, 2024). This approach is in line with Constructivist Theory, which emphasizes the importance of active and student-centered learning where students build knowledge through experience and interaction (). By catering to a variety of learning styles, these tools support better understanding and retention of Islamic knowledge, consistent with differentiated teaching principles that advocate teaching methods that meet the diverse needs of learners.

Impact on Student Engagement

The use of digital media in PAI has had a significant impact on student engagement at Sabilurrasyad Islamic High School. Many students have reported that they find digital lessons more engaging than traditional methods. One student shared, "I used to find PAI classes boring, but now that we use videos and apps, I'm more interested and I feel like I understand the material better." This shift in student attitude suggests that digital media can play a crucial role in increasing student motivation and involvement in their studies.

> Another student mentioned, "The interactive quizzes we do on our tablets make learning fun, and I can immediately see how well I'm doing (I_24)."
> A third student pointed out, "Sometimes I get distracted by other things on the internet during class, and it's hard to focus. (I_24)."

The interpretation of the student interviews suggests a dual impact of digital media in the classroom. On one hand, interactive quizzes on tablets enhance the learning experience by making it more enjoyable and providing immediate feedback, which helps students track their progress effectively. On the other hand, the presence of the internet during class introduces potential distractions, which can negatively affect students' ability to maintain focus on the lesson. This highlights the need for careful management and structuring of digital media use in educational settings to maximize its benefits while minimizing its drawbacks.

The use of teaching media is instrumental in enhancing the quality of the teaching and learning process, ultimately leading to improved student learning outcomes (Asim et al., 2021). By incorporating various media tools into the educational framework, educators can present complex concepts more clearly and effectively, ensuring that students grasp the material more thoroughly. This

clarity in delivering learning messages is crucial, as it directly impacts students' ability to retain and comprehend the information being taught. In particular, the integration of digital media in teaching Islamic subjects has shown significant benefits (Tubagus et al., 2023).

Students who experienced this digital media learning treatment demonstrated increased engagement and a deeper understanding of the subject matter. This heightened level of interaction not only makes the learning process more enjoyable but also fosters a more dynamic and interactive classroom environment. Consequently, students become more motivated and active participants in their own learning journey, which enhances their overall educational experience. The strategic use of teaching media, therefore, plays a pivotal role in modern education by bridging gaps in understanding and making learning more accessible and engaging for all students.

Challenges and Best Practices

The integration of digital media into Islamic Religious Education (PAI) at Sabilurrasyad Islamic High School has introduced both significant challenges and valuable opportunities for improving the educational experience. These challenges, particularly in technological infrastructure and teacher preparedness, have highlighted the need for strategic approaches and best practices to maximize the benefits of digital tools while minimizing potential drawbacks.

> A teacher expressed frustration over this issue, stating, "We often face issues with the internet during class, which disrupts the lesson flow and makes it difficult to keep the students engaged (I_24)."
> Another teacher shared a similar concern, saying, "When the internet is slow, it feels like we're wasting valuable class time waiting for videos or apps to load (I_24)."

The interview excerpts reveal that unreliable internet connectivity during class is a significant challenge, disrupting the flow of lessons and making it difficult for teachers to maintain student engagement. The slow internet speeds result in delays that lead to wasted class time, as teachers and students are left waiting for digital content to load. This technical issue not only hampers the effectiveness of the lesson but also diminishes the overall educational experience, causing frustration among educators and potentially disengaging students from the learning process. Integrating digital media into Islamic religious education learning can significantly strengthen students' character in various ways. First, digital media provides access to a variety of educational resources, including interactive lessons, multimedia presentations, and virtual simulations, that can deepen students' understanding of Islamic principles and values. By utilizing these diverse materials, students can develop a more comprehensive and nuanced appreciation of their beliefs, encouraging a stronger internalization of moral and ethical teachings. This is as shown in table 1.

Table 1. Challenges and Best Practices

Challenges	Best Practices
Inconsistent Internet Connectivity	Invest in reliable internet infrastructure to ensure smooth and uninterrupted lessons.
Limited Availability of Digital Devices	Ensure equitable access to digital tools by increasing the number of devices available for student use.
Inadequate Teacher Training	Provide ongoing professional development that covers both technical skills and effective integration of digital media.
Difficulty Aligning Content with Islamic Values	Establish clear guidelines for evaluating and selecting digital content that aligns with Islamic teachings and values.
Potential for Student Distraction	Develop strategies to minimize distractions, such as clear guidelines for digital device use during lessons.
Need for Collaboration Among Teachers	Encourage peer review and collaborative planning to share best practices and improve the quality of digital content used.

While there are clear benefits to integrating digital media into teaching, there are several challenges that must be overcome to realize its full potential (Baidoo-Anu & Ansah, 2023). One of the main obstacles is the limited availability of resources, especially in schools with limited budgets. Many institutions struggle to obtain the necessary technology, such as laptops, projectors, and high-speed internet access, which is critical for effective digital learning. There is often a lack of adequate training for educators on how to effectively implement digital tools into their teaching practices. Without proper training, teachers may struggle to make the most of this technology, reducing its impact on student learning outcomes. Another important concern is the suitability of digital content.

Ensuring that the digital media used is appropriate, relevant and aligned with educational standards is essential to maintaining the quality of teaching (Tan et al., 2021). There are also concerns about potential distractions and the need to protect students from inappropriate online content. Addressing these challenges requires a concerted effort by educational policymakers, school administrations, and society at large to invest in resources, provide comprehensive training programs for educators, and develop strong content guidelines to ensure that digital media is used effectively and take responsibility in class.

The research contributes significantly to the understanding of how digital media can be effectively integrated into Islamic Religious Education (PAI) within pesantren-based schools, highlighting both the opportunities and challenges associated with this integration. By identifying key challenges, such as inconsistent technological infrastructure and the need for comprehensive teacher training, the study provides actionable insights for educators and policymakers to enhance the implementation of digital tools in religious education. Additionally, the research offers best practices, including ongoing professional

development and the balanced use of traditional and digital methods, which can serve as a framework for other educational institutions aiming to modernize their curricula while preserving their religious and cultural values. Ultimately, this study bridges the gap between technology and Islamic education, offering a model for how digital media can be used to enrich the learning experience and support the holistic development of students.

CONCLUSION

This study has revealed several significant findings related to integrating digital media in Islamic Religious Education (PAI) learning in Islamic boarding schools, especially at SMA Islam Sabilurrasyad. One of the main lessons from this study is the importance of reliable technological infrastructure and ongoing teacher training to ensure that digital media integration can effectively enhance student engagement and understanding. This study also shows that, although digital media has great potential to enhance the learning experience, challenges such as limited access to digital devices and inconsistent internet connectivity can hinder these benefits. The lessons learned from this study emphasize the need for a balanced approach between traditional and digital teaching methods to achieve optimal educational outcomes.

Scientifically, this study makes a significant contribution by updating the perspective on the use of technology in Islamic education, especially in the context of Islamic boarding schools. This study not only enriches the understanding of the existing challenges and opportunities but also offers methods and best practices that other educational institutions can adopt. However, this study has limitations, especially in focusing on one specific location and the lack of variation in respondent demographics, such as gender and age. Therefore, further research is needed to accommodate differences in gender and age and use methods such as surveys to obtain a more comprehensive picture. This further research will be a more substantial basis for formulating more appropriate and targeted educational policies, especially in technology integration in religious education.

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