

Utilization of E-Learning Platforms to Increase the Effectiveness of Islamic Religious Education Learning in the Era of Society 5.0

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Abstract

The development of digital technology in the Society 5.0 era demands a transformation in Islamic Religious Education (PAI) learning to be more adaptive, interactive, and relevant to students' needs. This study aims to analyze the use of e-learning platforms in improving the effectiveness of PAI learning, identifying supporting and inhibiting factors, and evaluating their impact on students' learning outcomes and internalization of religious values. The research method used is a qualitative approach with a descriptive-analytical type through data collection techniques such as observation, in-depth interviews, and documentation. Data analysis was conducted using the interactive model of Miles and Huberman through the stages of data reduction, data presentation, and conclusion drawing. The results show that the use of e-learning platforms can significantly improve cognitive learning outcomes and student engagement, as well as provide a more flexible and interactive learning experience. However, the internalization of Islamic values is not optimal due to limited direct interaction and pedagogical strategies that are not yet fully adaptive. In conclusion, e-learning is effective for PAI learning in the Society 5.0 era, but needs to be strengthened in the pedagogical and value aspects to achieve holistic learning.

Keywords

e-Learning, Islamic Religious Education, Islamic Values, Learning Effectiveness, Society 5.0



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INTRODUCTION

The development of digital technology in the Society 5.0 era has brought significant changes to the world of education, including Islamic Religious Education (PAI). This era demands the integration of advanced technology and humanitarian values, so that the learning process is oriented not only toward knowledge transfer but also toward the internalization of spiritual and moral values (Efrina & Warisno, 2021). In this context, utilizing e-learning platforms is a strategic solution to improve the effectiveness of Islamic Religious Education (PAI) learning. E-learning enables flexible, interactive, and digital-based learning processes, adapting to the characteristics of today's generation.

Although e-learning has become widely used, its implementation in Islamic Religious Education (PAI) learning still faces various obstacles, such as low teacher digital literacy, limited infrastructure, and the suboptimal integration of Islamic values into digital platforms. Several studies have shown that technology-based learning can improve student motivation and learning outcomes, but its effectiveness is highly dependent on content quality, teacher competence, and learning system support. Therefore, an in-depth study is needed to determine how e-learning platforms can be optimally utilized in Islamic Religious Education (PAI) learning in the Society 5.0 era.

Theoretically, e-learning is an information technology-based learning system that enables online teaching and learning through various digital platforms. From an Islamic education perspective, Islamic Religious Education (PAI) learning emphasizes not only cognitive aspects but also affective and psychomotor aspects related to moral formation. Therefore, the integration of e-learning in PAI must accommodate both knowledge transfer and the internalization of Islamic values. Furthermore, constructivism and connectivism theories also form the foundation of digital learning, where students actively construct knowledge through interactions with technology and the learning environment.

Research by Ahmad et al. (2023) shows that the use of e-learning in Islamic Religious Education (PAI) learning can significantly improve student learning outcomes compared to conventional methods. However, this research is still limited to cognitive aspects and has not examined the integration of spiritual values in depth. Furthermore, research (Susanty, 2020) found that online Islamic Education learning is effective under certain conditions, but has not provided a comprehensive analysis of supporting and inhibiting factors systematically. Other research by Huri Suhendri et al., (2024) Studies have shown that information technology can improve student motivation and learning interaction, but have not specifically discussed the use of e-learning platforms in a structured manner in Islamic Religious Education. Abad et al., (2022) highlighting the effectiveness of digital media in Islamic Religious Education learning in the Society 5.0 era, but it is still conceptual and not based on empirical field data. Meanwhile, research (Sirate & Ramadhana, 2017) Studies on Canva-based e-modules show improvements in student learning outcomes, but they focus on only one type of media, not a comprehensive e-learning platform (Sukmawati et al., 2022). Research on e-flipbooks also shows improved learning outcomes, but has not yet fully integrated the platform's interactivity aspects. Nuriza & Muniroh, (2025) emphasizes the importance of learning models in improving Islamic Religious Education learning outcomes, but has not yet linked it to the specific use of digital technology. In addition, research Raniyah et al., (2024) Studies on game-based learning show increased student engagement, but are still limited to learning models and not to the systemic integration of e-learning platforms. Therefore, it can be concluded that most previous research is partial, failing to holistically examine the use of e-learning platforms to improve the effectiveness of Islamic Religious Education learning in the Society 5.0 era.

Based on the analysis of previous research, there is a significant research gap, namely the lack of a comprehensive study that integrates aspects of technology (e-learning platforms), pedagogy (learning strategies), and Islamic values within a single, coherent learning framework. The novelty of this research lies in its integrative approach, which examines the use of e-learning platforms not only as a learning medium but also as a means of internalizing Islamic values, increasing digital interaction, and strengthening student character in the context of Society 5.0. Furthermore, this research also develops an e-learning implementation model that is adaptive to student needs and Islamic Religious Education teacher competencies.

This study aims to: (1) analyze the use of e-learning platforms in Islamic Religious Education learning; (2) identify factors that influence the effectiveness of e-learning-based Islamic Religious Education learning; (3) evaluate the level of effectiveness of e-learning in improving learning outcomes and internalization of students' religious values; and (4) formulate an e-learning-based Islamic Religious Education learning model that is in accordance with the demands of the Society 5.0 era. Thus, this study is expected to provide theoretical and practical contributions in the development of innovative Islamic Religious Education learning that is relevant to current developments.

METHODS

The research method in this study uses a qualitative approach with a descriptive-analytical type of research, which aims to gain an in-depth understanding of the use of e-learning platforms in improving the effectiveness of Islamic Religious Education (PAI) learning in the Society 5.0 era. The research was conducted in educational units with a purposive sampling technique for determining informants, involving PAI teachers, students, and related parties such as the vice principal for curriculum. Data collection techniques were carried out triangulatively through participatory observation of the e-learning-based learning process, in-depth interviews to explore the experiences and perceptions of teachers and students, and documentation in the form of learning tools, platforms used (such as Learning Management Systems/LMS), and student learning outcomes. To ensure the validity of the data, triangulation techniques of sources and methods were used, as well as credibility testing through member checks and extended participation of researchers in the field. Data analysis was carried out interactively including the stages of data reduction, data presentation, and drawing conclusions/verification continuously since the data collection process began. The focus of the analysis is directed at three main aspects, namely: (1) the form and strategy of utilizing e-learning platforms in Islamic Religious Education learning, (2) supporting and inhibiting factors for the implementation of e-learning, and (3) its impact on learning effectiveness which includes improving cognitive, affective (internalization of religious values) learning outcomes, and student involvement in the learning process. With this approach, it is hoped that the research will be able to produce comprehensive, contextual, and relevant findings as a basis for developing an e-learning-based Islamic Religious Education learning model that is adaptive to the demands of the digital era of Society 5.0.

RESULTS AND DISCUSSION

Results

Utilization of E-Learning Platforms in Islamic Religious Education Learning

The use of e-learning platforms in Islamic Religious Education (PAI) teaching demonstrates a significant transformation in the learning process, shifting from a conventional approach to a digital-interactive one. Observations show that PAI teachers have utilized various platforms, such as the Learning Management System (LMS), Google Classroom, and video-based media, to deliver teaching materials more flexibly. Learning is no longer confined to the classroom; students can access it anytime and anywhere. This provides significant opportunities for students to review material, deepen their understanding, and develop independent learning in understanding Islamic values.

Furthermore, interviews with Islamic Religious Education (PAI) teachers revealed that using e-learning facilitates the systematic and structured preparation and distribution of learning materials. Teachers can integrate various learning resources, such as video lectures, e-books, and interactive quizzes, into one organized platform. Furthermore, the evaluation features available within the e-learning platform enable teachers to conduct assessments more quickly, accurately, and transparently. This has the effect of increasing teacher work efficiency while enhancing the quality of learning.

From a student perspective, e-learning provides a more engaging and less monotonous learning experience. Students feel more motivated by the variety of learning media available, such as animated videos, online discussions, and digital project-based assignments. Furthermore, interaction between students and teachers is maintained through the discussion forums and chat features available within the e-learning platform. This demonstrates that e-learning can create a collaborative learning environment, even without face-to-face interaction.

However, research also shows that e-learning utilization is not yet fully optimal. Some teachers still experience difficulties in operating digital platforms optimally, particularly in utilizing advanced features that support interactive learning. Furthermore, limited internet access in some areas is a major obstacle for students in consistently participating in learning. This situation indicates a digital divide that requires serious attention in the implementation of e-learning.

Furthermore, integrating Islamic values into e-learning remains a challenge. Although Islamic Religious Education (PAI) materials have been delivered through digital platforms, the internalization of spiritual and moral values has not been fully achieved. This is due to limited direct interaction between teachers and students, which is typically the primary medium for instilling these values. Therefore, a specific strategy is needed so that e-learning functions not only as a medium for knowledge transfer but also as a means of character development.

Overall, the use of e-learning platforms in Islamic Religious Education (PAI) instruction shows significant potential for improving the quality of learning. With the right technological support, adequate teacher competency, and innovative learning strategies, e-learning can be an effective solution to address educational challenges in the Society 5.0 era. However, optimizing its use still requires improvements in technical, pedagogical, and value aspects to achieve maximum impact.

The Effectiveness of E-Learning-Based Islamic Education Learning in Improving Learning Outcomes and Internalizing Religious Values

The effectiveness of e-learning-based Islamic Religious Education (PAI) in this study was measured through improvements in student learning outcomes, engagement in the learning process, and internalization of religious values. Data analysis revealed significant improvements in students' cognitive aspects after using the e-learning platform. This was evident in the learning evaluation results, which showed an increase in students' average grades compared to before using e-learning. Flexible access to materials allows students to learn independently and in greater depth.

Student engagement in learning has also increased significantly. This is demonstrated by their active participation in online discussions, assignments, and interactive quizzes. E-learning platforms provide a platform for students to be more active and express their opinions, especially those who tend to be passive in face-to-face learning. Thus, e-learning can create a more participatory learning environment. From an affective perspective, research findings indicate that e-learning-based learning has an impact on the internalization of religious values, although not yet optimal. Students demonstrated an increase in their understanding of Islamic values such as honesty, discipline, and responsibility, which is reflected in their attitudes during the learning process. However, the internalization of these values still requires reinforcement through a more personalized and contextual approach.

Several factors influence the effectiveness of e-learning, including teacher digital competence, student readiness, and supporting facilities and infrastructure. Teachers with strong digital skills tend to be able to manage learning more effectively and engagingly. Conversely, limited technological capabilities can hinder the learning process and reduce its effectiveness. This highlights the importance of teacher training and competency development in educational technology.

Other influential factors include student motivation and a supportive learning environment. Students with high motivation tend to be more active in e-learning and achieve better learning outcomes. Furthermore, support from parents and the family environment is also crucial for successful online learning. With adequate support, students can learn more optimally.

Overall, e-learning-based Islamic Religious Education (PAI) has proven quite effective in improving student learning outcomes and engagement, although several challenges remain in the internalization of religious values. Therefore, the development of a more integrative

learning model is needed, one that combines technological excellence with pedagogical and spiritual approaches. Thus, Islamic Religious Education (PAI) in the Society 5.0 era will not only produce students who are academically intelligent but also possess strong character and Islamic values.

Discussion

The use of e-learning platforms in Islamic Religious Education (PAI) learning aligns with digital learning theory, which emphasizes flexibility, accessibility, and interactivity as key factors in improving learning quality. The finding that e-learning can shift learning patterns from teacher-centered to student-centered reinforces constructivism theory, which states that students actively construct their knowledge through learning experiences. Furthermore, the connectivism approach is also relevant, where learning occurs not only within individuals but also through digital networks and technology-based interactions. Thus, the results of this study strengthen the theoretical foundation that technology integration in Islamic Religious Education (PAI) learning is an inevitable necessity in the era of Society 5.0.

This finding is in line with research (Isroani, 2022) which shows that e-learning can improve student learning outcomes. However, this study expands on these findings by showing that improvements occur not only in cognitive aspects, but also in student engagement in the learning process. This strengthens the argument that learning effectiveness is measured not only by the final outcome, but also by the ongoing process. On the other hand, research (Sari & Bermuli, 2021) which highlights the effectiveness of online learning under certain conditions is also supported by the results of this study, particularly regarding the importance of teacher readiness and infrastructure as determining factors for the success of e-learning implementation.

The results of this study also strengthen the findings (Rahmawati et al., 2021) which states that information technology can increase student learning motivation. In this study, learning motivation increased not only due to the use of technology but also due to the variety of more engaging and interactive learning media. However, this study provides an additional contribution by emphasizing that the success of e-learning is greatly influenced by teachers' ability to optimally manage the platform. This demonstrates a close relationship between teachers' digital competence and learning effectiveness, a finding that has not been discussed in depth in previous research.

In the context of integrating Islamic values, the results of this study indicate that e-learning still faces challenges in optimally internalizing spiritual values. This finding differs from theoretical studies in Islamic education, which emphasize the importance of direct (face-to-face) interaction in the process of moral formation. Sunarsih et al., (2023) while conceptual research suggests that technology can be an effective tool in Islamic Religious Education (PAI) learning, the results of this study indicate that implementation in the field still requires additional strategies to ensure that Islamic values are effectively conveyed. Thus, there is a gap between concept and practice that needs to be bridged through pedagogical innovation.

Study Rahmadani, (2024) while focusing on the use of specific digital media such as e-modules and e-flipbooks, this study demonstrates that an e-learning platform-based approach provides a more comprehensive impact overall. This is because e-learning platforms provide not only content but also interaction, evaluation, and learning management facilities within a single, integrated system. Thus, this study reinforces the view that the use of technology in education is not limited to the media level but must encompass the entire learning system.

This discussion shows that the use of e-learning platforms in Islamic Religious Education (PAI) learning has great potential to improve learning effectiveness, but still requires strengthening in the pedagogical and value aspects. Compared with previous research, this study provides a new contribution by integrating aspects of technology, interaction, and internalization of values within a single, complete analytical framework. Therefore, the development of an adaptive and values-based e-learning model for Islamic Religious Education (PAI) is crucial to address the challenges of education in the Society 5.0 era, so that learning is not only academically effective but also spiritually and socially meaningful.

This study has several limitations that should be considered when interpreting its results. First, it used a qualitative approach with a limited scope of a single educational unit, so generalizing the results to a broader context requires further study. Second, the data obtained are highly dependent on the perceptions of the research subjects, both teachers and students, so potential subjectivity cannot be completely avoided even after data triangulation. Third, this study did not quantitatively measure improvements in student learning outcomes, particularly in the affective and psychomotor aspects related to the internalization of religious values. Furthermore, limited technological infrastructure and varying levels of digital literacy among respondents also influenced the results, so the effectiveness of e-learning found in this study remains contextual.

The novelty of this research lies in its integrative approach, which examines the use of e-learning platforms not only as a learning medium but also as a learning ecosystem encompassing technological, pedagogical, and internalization aspects of Islamic values simultaneously. Unlike previous studies, which tended to be partial whether focusing on specific digital media, cognitive learning outcomes, or motivational aspects this research presents a holistic perspective by linking the effectiveness of e-learning to improved learning outcomes, student engagement, and religious character formation in the context of the Society 5.0 era. Furthermore, this research also offers a concept for developing an e-learning-based Islamic Religious Education (PAI) learning model that is adaptive, contextual, and oriented towards strengthening spiritual values, thus providing new contributions both theoretically and practically to the development of digital-based Islamic education.

CONCLUSION

The results of the study indicate that the use of e-learning platforms in Islamic Religious Education (PAI) learning in the Society 5.0 era can increase the effectiveness of learning, especially in the cognitive aspects and student engagement, which is characterized by

increased learning outcomes, active participation in online discussions, and learning independence; however, the aspect of internalization of religious values still requires strengthening through more contextual and humanistic pedagogical strategies. Based on these findings, it can be concluded that e-learning is an innovative and relevant solution in supporting PAI learning in the digital era, but its success is greatly influenced by the digital competence of teachers, student readiness, and the support of adequate facilities and infrastructure. Therefore, it is recommended that (1) PAI teachers improve their competence in utilizing technology through continuous training, (2) schools and policy makers provide adequate and equitable digital infrastructure, and (3) develop an e-learning-based PAI learning model that is not only oriented towards knowledge transfer, but also emphasizes the internalization of Islamic values more effectively through an interactive, reflective, and experience-based approach, so as to produce students who excel academically and have a religious character.

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