Artificial Intelligence as a Learning Medium for Islamic Religious Education (An Ethical and Effectiveness Review)

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Abstract

The development of Artificial Intelligence (AI) has provided various new opportunities in the world of education, including in Islamic Education learning. AI technology can be utilized to provide more interactive learning materials, help students obtain information quickly, and support educators in compiling and developing teaching materials. However, the use of AI in Islamic Education also raises a number of ethical issues, such as the accuracy of religious information, potential plagiarism, dependence on technology, data privacy, and the reduced role of educators in guiding character formation and Islamic values. This study aims to analyze the use of AI as a learning medium for Islamic Education by examining its ethical and effectiveness aspects. This study uses a library research method by analyzing various relevant scientific literatures on AI, Islamic education, technology ethics, and learning effectiveness. The results of the study show that AI has the potential to increase the effectiveness of Islamic Education learning through personalization of materials, provision of feedback, provision of learning resources, and increased learning interactivity. Nevertheless, its use needs to be accompanied by supervision and digital literacy so that the information generated remains in accordance with accountable Islamic sources. Thus, AI can be an effective supporting medium in Islamic Education if its use is based on the principles of ethics, responsibility, information verification, and continues to place educators as the main guides in the educational process.

Keywords: artificial intelligence, islamic education, learning media, ethics, learning effectiveness

Introduction

The rapid development of digital technology has brought significant changes to various aspects of life, including education. Digital transformation encourages educational institutions to develop various innovations in the learning process to become more adaptive to students' needs and the demands of the times. One technology that is currently developing rapidly and has considerable potential in the field of education is Artificial Intelligence (AI). AI enables the use of systems and applications capable of processing information, providing interactive responses, generating learning materials, and assisting students and educators in acquiring and processing knowledge more quickly and flexibly.

In the context of learning, the use of AI can serve as an alternative learning medium that supports a more personalized, interactive, and efficient learning process. This potential is also relevant to Islamic Religious Education (IRE). Islamic Religious Education plays a central role in the secondary school curriculum in Indonesia. In addition to teaching religious aspects, IRE provides instruction on moral and ethical values that are essential for shaping students' character. The IRE curriculum plays a crucial role in guiding students toward developing good personalities, particularly in facing the challenges of globalization driven by advances in technology and information (Kisno et al., 2023). Islamic Religious Education at the secondary school level is grounded in a strong legal framework. In Indonesia, IRE is formally regulated within the national legal framework as an integral part of the education system. Law No. 20 of 2003 on the National Education System emphasizes the importance of religious education in the curriculum as a means of shaping students' character and morality (Murniyetti et al., 2023). Consequently, IRE at the secondary school level is not merely regarded as a subject that students must study, but also as a primary means of developing their spiritual and social values (Suhendar et al., 2023). Therefore, the use of technology in IRE learning should be directed not merely toward facilitating access to information, but also toward supporting the comprehensive achievement of Islamic educational objectives. AI can be utilized to provide learning resources, explain Islamic concepts, present materials in more engaging ways, and encourage students to explore and discuss various religious issues.

The urgency of developing critical literacy and Islamic digital ethics cannot be separated from contemporary Islamic education (Nurhabibi et al., 2025). Critical literacy among students in Islamic Religious Education is essential for evaluating various religious interpretations that are extreme, radical, or inconsistent with the principle of religious moderation (wasathiyyah), which are readily accessible on digital platforms. Furthermore, the intensity of digital interactions necessitates the cultivation of Islamic digital ethics, including the application of adab (proper conduct and courtesy), tabayyun (verification and clarification before disseminating information), and mas'uliyyah (moral responsibility) in every digital footprint (Zuhdi, 2020). The considerable benefits of Artificial Intelligence (AI) are also accompanied by risks that cannot be ignored. Excessive dependence on technology can weaken critical thinking skills, reduce social interaction, and encourage plagiarism (Ni Luh Manik Puja Dewi, 2023). This situation necessitates clear regulations to ensure that AI does not merely become a shortcut for completing assignments, but genuinely functions to improve the quality of learning.

Several previous studies are relevant to this research. The first is a study by Tyana and Afifin (2026), which examined the role of AI in academic ethics in paper writing: a case study of first-year students in Islamic Religious Education. The findings indicated that excessive dependence on this technology could lead to serious negative consequences. Furthermore, the use of Artificial Intelligence without an ethical foundation could encourage plagiarism and undermine academic honesty, particularly in Islamic Religious Education, which serves as an important foundation in the teaching and learning process. The researchers also expressed the hope that better tools or methods would be developed to verify the accuracy of information generated by AI. They emphasized the importance of recognizing digital footprints, avoiding excessive disclosure of personal data, refraining from harmful digital practices, and upholding media ethics in accordance with general and Islamic principles.

The second study, conducted by Darmawan et al. (2025), examined the use of artificial intelligence as a learning medium for developing critical literacy and Islamic digital ethics among Islamic Religious Education students. The findings showed that the use of artificial intelligence directly improved time efficiency in completing academic assignments and shifted students' focus from merely searching for information to processing it. However, the role of AI extended beyond that of a simple supporting tool, as IRE lecturers strategically employed it as a catalyst for cognitive critical literacy. The adoption of artificial intelligence in the Islamic Religious Education program at UIN Salatiga had successfully accelerated academic work and provided personalized tutoring that addressed students' difficulties in asking questions. Nevertheless, rapid access to artificial intelligence also created risks of dependence and violations of digital ethics, including instant plagiarism. In response, lecturers' roles evolved into evaluators of cognitive integrity. They combined digital analysis with in-depth oral assessments to ensure that artificial intelligence functioned only as a supporting tool rather than a substitute for substantive understanding and critical thinking skills. The successful integration of artificial intelligence ultimately depended on lecturers' ability to encourage students to analyze and validate AI-generated outputs while upholding Islamic ethical values throughout the academic process.

The third study, conducted by Nurhayati et al. (2024), examined the dynamics of Artificial Intelligence-based Islamic Religious Education learning. The findings explained how AI could transform Islamic Religious Education into a more personalized, inclusive, and efficient learning experience. AI technology enables learning materials to be adapted to individual students' needs, expands access, particularly for students in remote areas or those with special needs, and automates administrative tasks so that teachers can focus more on teaching. In addition, AI supports the development of more interactive content and data analysis for curriculum improvement, while increasing students' motivation and participation through more personalized approaches. Thus, the integration of AI into Islamic Religious Education is expected to create more meaningful and in-depth learning experiences for students.

The use of artificial intelligence has had a substantial impact on improving learning efficiency and quality. The integration of AI into learning has facilitated more individualized interactions between students and learning materials while improving the efficiency of educational administration (Hilmi & Hasaniah, 2023). By adopting AI technology, educational institutions can create learning environments that are more interactive, adaptive, and beneficial for both students and teachers. Furthermore, studies indicate that the use of AI in Islamic religious education has the potential to improve religious understanding, encourage critical learning, and strengthen moral values within the context of Islamic Religious Education. Therefore, AI integration can provide a strong foundation for developing higher-quality Islamic Religious Education that remains relevant to contemporary developments (Mambu et al., 2023).

Methods

This study employed a qualitative approach using library research. It focused on collecting, examining, and critically analyzing data from various written sources relevant to the use of Artificial Intelligence (AI) in Islamic Religious Education, technology ethics, and learning effectiveness.

Research Design

This research design adopts a systematic qualitative literature review (library research). The study relies on secondary textual analysis to synthesize perspectives regarding AI ethics, pedagogy, and Islamic education.

Data Sources

The data sources used in this study were divided into two categories:

Primary Data: Key scholarly literature discussing the application of AI in Islamic Religious Education, the ethics of using educational technology, and theories of learning effectiveness.

Secondary Data: Data obtained from various sources, including textbooks, scientific journals, conference articles, and reliable digital literature that supported and enriched the analysis of ethical issues, the accuracy of religious information, and data privacy.

Data Collection Technique(s)

Data collection was conducted using documentation techniques, which involved searching for, inventorying, and classifying accredited literature published within a relevant time frame. The procedures included the following steps:

- Searching the literature using keywords such as Artificial Intelligence, learning media, and technology ethics through scholarly databases.
- Selecting and verifying the eligibility of sources based on their relevance and the credibility of their authors or publishers.
- Categorizing the data according to the main themes: ethics (accuracy, plagiarism, and privacy), learning effectiveness (personalization and feedback), and the role of educators.

Data Analysis Technique

The data were analyzed using qualitative content analysis. The analytical process consisted of the following stages:

Data Reduction: Filtering and simplifying the literature data to align them with the research objectives.

Data Presentation: Organizing findings concerning the potential, ethical challenges, and effectiveness of AI into a systematic conceptual framework.

Conclusion Drawing: Formulating a logical synthesis and conclusions regarding the integration of AI as a learning medium in Islamic Religious Education based on ethical principles and responsible use.

Results

Based on an analysis of various scholarly works concerning Artificial Intelligence (AI) and Islamic Religious Education, the empirical findings of this study are categorized into two major thematic pillars:

Potential and Effectiveness of AI as a Learning Medium in Islamic Religious Education

Personalization of Learning Materials

AI adaptive systems fit individual student speeds and styles to bolster comprehension of complex Islamic subjects.

Rapid Feedback Mechanism

AI-based educational platforms support real-time feedback and immediate assessment of students' conceptual understanding.

Provision of Interactive Learning Resources

AI facilitates interactive content creation and provides accelerated access to digital religious reference materials.

Enhanced Interactivity

AI tools create a highly responsive, engaging, and participatory educational environment.

Ethical Issues and Operational Challenges in AI Integration

Accuracy of Religious Information

Unverified AI models risk outputting narratives, interpretations, or rulings inconsistent with authentic Islamic jurisprudence.

Potential for Plagiarism and Over-dependence

Unregulated reliance on AI tools risks undermining critical thinking abilities and fostering academic dishonesty or instant plagiarism.

Data Privacy & Limitations in Character Building

AI algorithms process extensive personal data raising confidentiality concerns, while inherently lacking spiritual depth, empathy, and the ability to mentor character (al-akhlaq al-karimah).

Discussion

The responsible use of artificial intelligence (AI) is essential to minimizing risks and maximizing its educational benefits. Measures required for responsible AI integration include verifying the accuracy and absence of bias in AI-generated text, prohibiting unethical utilization, and considering social and ethical implications (Helsa, 2025). In educational settings, ethical standards center on principles of fairness, integrity, and respect for individual rights and dignity (Atenas et al., 2023). Educational data collection and assessment platforms raise pressing questions around student privacy, informed consent, and data protection (Wang & Liang, 2025). Consequently, educators must navigate the complex balance between leveraging data to optimize instruction and safeguarding confidentiality (Alfredo et al., 2024).

Furthermore, AI utilization must strictly align with broader social values and ethical norms, prioritizing public welfare (Social Benefits) and prohibiting harmful implementations such as mass surveillance, systematic discrimination, or autonomous weaponry (Helsa, 2025). A review of literature on digital ethics reveals that students often display higher permissiveness toward AI-assisted text generation than human-to-human plagiarism, viewing platforms like ChatGPT as tools for digital collaboration rather than misconduct (McGuire, 2023). This reflects an evolving paradigm of originality in academic writing (Hutson, 2024; Kotsis, 2024).

As a learning medium, AI offers continuous availability and personalized, context-sensitive interaction (Johar et al., 2021). However, in the context of Islamic Religious Education, AI content is not inherently immune to theological inaccuracies (Maliki, 2024). AI models operate probabilistically based on training data and lack inherent religious authority or theological integrity (Fuad & Fakhruddin, 2024). Without rigorous validation against primary Islamic sources (Qur'an and Hadith), automated outputs risk propagating misleading interpretations.

Therefore, AI must be positioned exclusively as a supporting medium rather than an authoritative source of religious truth. Effective integration relies on blended learning approaches where teachers leverage AI to stimulate critical inquiry while actively evaluating

output, correcting errors, and guiding moral formation (Umam, 2020). While AI optimizes administrative efficiency and interactive access (Hilmi & Hasaniah, 2023; Mambu et al., 2023), essential human elements—such as character development (al-akhlaq al-karimah), spiritual guidance, and digital ethics (tabayyun and mas'uliyyah)—remain strictly under the domain of human educators (Zuhdi, 2020; Sutrisno, 2025).

Conclusion

Based on the comprehensive synthesis of findings and discussion, three primary conclusions emerge:

Learning Effectiveness Optimization

AI as a learning medium substantially optimizes Islamic Religious Education by providing personalized learning paths, real-time feedback, interactive materials, and expanded access to educational resources.

Ethical and Pedagogical Limitations

AI integration entails significant risks, including potential theological inaccuracies, academic plagiarism, technological dependency, data privacy vulnerabilities, and the absolute inability of AI to provide spiritual and character guidance.

Essential Role of Educators

AI can only function effectively as a supporting tool when governed by rigorous information verification (tabayyun), Islamic digital ethics, and strong digital literacy, with human educators remaining the central authority for moral, spiritual, and character education.

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Conflict of interests

The authors declare that they have no conflict of interest.

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