



Artificial intelligence in islamic education: Ethics and its implications for islamic education

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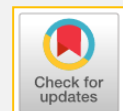
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ABSTRACT

The development of Artificial Intelligence (AI) has brought significant changes to the world of education, including Islamic education. This study aims to analyze the ethics of AI usage and its implications for Islamic education from the perspective of sharia values and the objectives of Islamic law (*maqāṣid al-sharī'ah*). Using a library research approach, data were collected from academic literature, scientific articles, and relevant documents discussing AI, Islamic ethics, and education. The findings indicate that Islam conditionally supports technological advancement, including AI, as long as it aligns with key ethical principles such as justice, trustworthiness (*amānah*), responsibility, transparency, and privacy protection. AI is considered capable of enhancing the quality of religious learning through personalized content, automated instruction, and expanded access to education, particularly in remote areas. However, AI also poses a number of ethical challenges, including the potential distortion of religious understanding, the dehumanization of the teacher's role, algorithmic bias, and violations of moral and spiritual values. Therefore, a clear Islamic ethical framework is essential, along with the active involvement of scholars (*'ulamā'*), increased digital literacy among educators, and the development of authentic Islamic content. With these foundations, AI can serve as a tool to support the holistic and ethical vision of Islamic education without compromising its core divine values.

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Introduction

The development of digital technology has entered a new phase with the advent of Artificial Intelligence (AI), which is capable of simulating human thinking processes and processing massive amounts of data to make decisions or perform actions automatically. AI is now widely used across various sectors, including education, as an intelligent tool for managing learning, supervision, and personalization of the learning process (Sucianingtyas et al., 2025). In the field of education, this technology offers adaptive learning solutions, automated assessment,

chatbot-based interaction, and learning behavior analysis that enable teachers to understand students' individual needs (Hakim et al., 2024).

In the realm of Islamic education, the integration of AI opens significant opportunities for the modernization of learning systems (Annisa et al., 2024). AI-based learning platforms can be utilized to teach the Qur'an, fiqh, hadith, and other Islamic sciences in a more systematic and engaging way. This technology even allows santri and Muslim learners worldwide to access Islamic materials in real time. However, the emergence of AI has also raised concerns about the potential distortion of fundamental Islamic values. Several studies indicate that the use of AI in religious education can lead to distortions in the understanding of religious values or misinterpretations of sacred teachings, and may also encourage dependence on automated systems that could reduce students' reasoning capacity and creativity (Hakim et al., 2024).

As an educational system that emphasizes not only cognition but also spirituality and morality, Islamic education focuses on the importance of values, ethics, and adab (proper conduct). In Islam, the goal of education is not merely to produce intellectually intelligent individuals, but also those with noble character and virtuous behavior. Therefore, the use of advanced technologies such as AI must be examined seriously from the perspective of Islamic ethics to ensure alignment with *maqāṣid al-sharī'ah*—the higher objectives of Islamic law—which include the preservation of religion (*ḥifẓ al-dīn*), intellect (*ḥifẓ al-'aql*), life (*ḥifẓ al-nafs*), lineage (*ḥifẓ al-nasl*), and wealth (*ḥifẓ al-māl*).

In Islam, ethics is not merely a set of rules distinguishing right from wrong but a manifestation of *tawḥīd* (oneness of God) in daily life, including in the use of technology. When applying AI, principles such as honesty, justice, responsibility, and sincerity must serve as guiding foundations. AI is not a neutral entity—it is developed by humans embedded with particular values. Therefore, it is essential for Muslims to ensure that the use of AI does not undermine the divine moral order that underpins Islamic education.

One crucial aspect that deserves special attention is *adab* (proper moral conduct). In the Islamic scholarly tradition, *adab* is considered even more important than knowledge itself. Imam Mālik once stated that a person without *adab*, even if knowledgeable, will ultimately corrupt the knowledge he possesses. *Adab* encompasses politeness, respect for teachers, humility, and an awareness of one's position before Allah the Almighty (Himmah et al., 2023). In this context, technological sophistication must never replace these noble values. *Adab* serves as the moral foundation of Muslim life, including in education, and the loss of *adab* signifies a loss of direction in the educational process itself (Yuliwinarti et al., 2023).

Moreover, the application of AI in education raises additional ethical challenges such as algorithmic bias, excessive digital surveillance, student privacy violations, and the potential dehumanization of teacher-student interactions (Razilu, 2025). Within the Islamic framework, these issues must be analyzed through the lens of *maqāṣid al-sharī'ah* and the principle of justice to ensure that technology does not become an instrument of hidden oppression, but rather a *wasīlah* (means) to achieve the true objectives of education. Therefore, the urgency of examining AI through the framework of Islamic ethics cannot be overlooked—especially amid the powerful tide of global digitalization.

In this study, the author will discuss two main aspects. First, the ethics of using artificial intelligence in Islamic education from an Islamic perspective. Second, the implications of AI application for Islamic education in light of its values and objectives. Through this discussion, it is hoped that a set of Islamic ethical principles can be formulated as a guideline for developing and implementing AI technology in Islamic education—so that it excels not only technologically but also remains grounded in divine values. Artificial intelligence is merely a tool, but Islamic education is a civilizational mission.

Method

This study employs a library research approach, examining literature related to artificial intelligence (AI), Islamic education, ethics, and their implications from an Islamic perspective. Data were collected from academic journals, scholarly articles, and relevant documents discussing AI, Islamic ethics, and education. The data were analyzed using content analysis techniques, in which collected materials were classified and categorized according to emerging themes and patterns. The analysis focused on identifying Islamic ethical concepts relevant to AI technology and reviewing empirical findings on the impact of AI use in Islamic education. Through this approach, the study aims to provide a comprehensive understanding of the principles of Islamic ethics concerning AI and their practical implications within the context of religious education.

Results and Discussion

1. The Ethics of Using Artificial Intelligence in Islamic Education

The development of Artificial Intelligence (AI) technology has brought significant changes across various sectors of human life, including education. In the educational sphere, AI has been adopted in the form of intelligent learning platforms, automated assessment systems, student data management tools, and algorithm-based digital tutors. However, the emergence of AI also raises important ethical concerns that cannot be ignored—especially within the context of Islamic education, which upholds spiritual and moral values. As a comprehensive religion (syumūl), Islam provides ethical guidance that must serve as the foundation for the use of any form of technology, including AI. A review of the literature shows that Islam offers conditional support for technological advancement: support is granted insofar as the technology brings *maṣlaḥah* (benefit) and remains consistent with *sharī'ah* values (Paramansyah et al., 2023). This means that AI, as a product of modern technology, must be viewed through the lens of Islamic ethics to ensure that its use in education does not deviate from the noble objectives of the *sharī'ah*.

The key principles of Islamic ethics relevant to guiding the use of AI include justice, trustworthiness (*amānah*), responsibility, transparency, and prudence (*ifādah*) in managing potential risks (Al Kutsi & Kom, 2024). These principles are not merely normative ideals but serve as practical guidelines to ensure that technology does not become a tool of deviation, oppression, or misuse of authority. Among these, justice is a central value that must be realized in every aspect of AI design and implementation. In the context of Islamic education, justice demands that algorithms and AI systems avoid bias that may disadvantage particular groups. AI should be designed inclusively and sensitively to accommodate learners' diversity—avoiding discrimination based on ethnicity, religion, gender, social status, or other conditions (Baharuddin et al., 2025). This is crucial because AI algorithms operate based on training data; if such data contain bias, AI outcomes tend to be discriminatory. Therefore, the principle of justice should aim to prevent technological inequality in Islamic education and guarantee equal access and treatment for all students.

The principles of *amānah* (trust) and responsibility are also fundamental to the ethical use of AI. In Islamic thought, *amānah* is not limited to trust but encompasses moral and spiritual accountability for every action and decision. When AI is integrated into educational processes, developers, educators, and Islamic educational institutions are obligated to uphold this value of *amānah* (Sabri, 2020). They must ensure that AI is not used for unethical purposes and remain fully responsible for its content, data, and impact. Fitriannor (2024) emphasizes that technology developers and educational institutions must recognize that AI should never replace human roles—particularly in the cultivation of moral and spiritual values. Teachers must remain the primary educators, while AI should function merely as an auxiliary tool to support this process. Within this framework, moral and spiritual responsibility toward learners becomes a non-negotiable priority.

Transparency also serves as an essential ethical principle in the use of AI within Islamic education. AI systems must be understandable to users—both teachers and students. The

decisions, recommendations, or analyses produced by AI should not be mysterious or difficult to interpret. Desisca et al. (2025) argue that transparency in AI operations helps prevent data manipulation and builds trust in system validity. Islam values clarity, openness, and honesty in all social and technological interactions; therefore, opaque or “black box” systems that lack accountability are inconsistent with Islamic principles. In this context, privacy protection also becomes a crucial ethical concern. Islam commands the safeguarding of human dignity and privacy as an integral religious duty. Student data collected through AI must remain confidential and never be misused for purposes beyond education. Bahrain et al. (2024) remind that protecting students’ personal data is part of preserving human rights and dignity, which hold sacred status in Islam. Consequently, AI systems in Islamic education must be equipped with strict data protection mechanisms, transparent audits, and clearly defined consent procedures.

Despite its ethical challenges, AI also holds tremendous potential for advancing the mission of Islamic education—particularly in character formation and the innovative delivery of religious content. In this regard, AI can serve as a medium for internalizing Islamic values through interactive and adaptive learning content. Widarti and Abidin (2025) note that AI-based learning systems allow students to engage with Islamic materials more effectively and contextually, making it easier to instill values such as honesty, discipline, and responsibility. Fitri Barokah et al. (2024) further demonstrate that AI can provide new pedagogical approaches for teaching the Qur’an, creed (‘aqidah), and ethics (akhlāq). For example, speech-recognition technology can help students improve their Qur’anic recitation, while AI-based evaluation systems can adapt teaching methods to each learner’s progress and needs. Rusdiana and AR (2024) add that AI can also foster Islamic habits in students’ daily lives through digital simulations of worship practices. However, all these applications must be supervised by qualified educators and scholars to prevent misinterpretation or deviation from authentic Islamic teachings.

Nevertheless, the major literature emphasizes that the use of AI in Islamic education cannot escape complex ethical dilemmas. One critical issue is the potential misinterpretation of religious teachings if such processes are automated without the involvement of religious experts. Hakim et al. (2024) warn that AI used to answer Islamic questions or issue fatwas may lead to distortions in religious understanding because AI relies solely on pre-fed data without possessing spiritual insight or divine guidance. Therefore, the use of AI in Islamic education must include strict oversight mechanisms. Direct involvement of ‘ulamā’ and Muslim scholars is essential to ensure that AI-generated Islamic content remains authentic and free from doctrinal errors (Nasoha et al., 2025).

To address these challenges, scholars advocate for collaboration among ‘ulamā’, technology developers, and Islamic educators to formulate ethical guidelines for the use of AI in Islamic education. Such interdisciplinary collaboration is vital to ensure that AI applications align with maqāṣid al-sharī‘ah—the preservation of religion, life, intellect, lineage, and wealth. Furthermore, governments and Islamic educational institutions are encouraged to establish specific regulations and digital literacy training programs so that teachers and students can use AI wisely and responsibly. Ethical technology education should be integrated into the curriculum so that Muslim generations engage with AI not merely as technical users but as morally conscious and spiritually grounded individuals. In this regard, AI must never replace the role of the teacher as a moral guide and value guardian—it should serve instead as a tool that enhances these functions.

By grounding the design, implementation, and evaluation of AI systems in Islamic ethical principles, technological progress will not pose a threat but rather serve as an opportunity to strengthen an Islamic civilization that is principled, just, and rahmatan lil ‘ālamīn (a mercy to all creation). AI in Islamic education should be understood as a strategic tool that supports value-based learning. When designed and used with full responsibility and ethical awareness,

AI can become an integral part of a competitive Islamic education system—one that remains firmly rooted in faith (īmān), knowledge (‘ilm), and righteous action (‘amal). Islamic ethics, therefore, are not merely normative guidance but the foundation ensuring that technology evolves within the bounds of goodness and blessing.

2. The Implications of Artificial Intelligence in Islamic Education

The utilization of Artificial Intelligence (AI) in Islamic education carries a range of dual implications—both positive and negative—that must be examined carefully. The development of AI not only affects the technical aspects of learning but also directly influences values, methodologies, and spiritual relations within the educational process. On one hand, AI offers vast opportunities to enhance the efficiency, accessibility, and quality of religious learning. On the other, there are concerns that AI may displace the essential role of teachers, diminish the depth of understanding of Islamic values, and create complex ethical and social challenges (Zubaidi, 2025).

From a positive perspective, AI opens new pathways for Islamic education to provide more personalized, engaging, and adaptive learning experiences (Hadziq et al., 2024). AI-based learning technologies can adjust teaching materials according to the needs, abilities, and interests of individual learners. A concrete example is the use of speech recognition technology in Qur’anic tajwid learning. Through this feature, students can independently practice pronunciation and recitation rules, receiving instant and accurate feedback on errors related to makhraj (articulation points) or sifat al-huruf (letter characteristics). This approach is particularly helpful in addressing the shortage of competent tajwid teachers in some regions.

Furthermore, AI-integrated e-learning platforms enable the presentation of Islamic materials in more varied and interactive formats. Subjects such as Islamic history, hadith, fiqh, and aqidah can be delivered through animations, simulations, or augmented reality (AR) applications, making the learning experience more dynamic and meaningful. For digital-native learners, these visual and immersive methods have proven effective in increasing engagement and comprehension of Islamic teachings (Dilonia & Melki, 2024). AI also enables students from remote areas to access quality Islamic education without being physically present in classrooms (Putro et al., 2023). This is particularly valuable given the shortage of qualified Islamic teachers in many remote, frontier, and underdeveloped regions. With AI systems that operate automatically and continuously learn from user interactions, Islamic education can be accessed anytime and anywhere—flexibly and efficiently.

However, despite its great potential, the use of AI in Islamic education also carries serious negative implications. One major concern is the risk of distorting religious understanding. Hakim et al. (2024) note that when AI is used independently without the guidance of ulama or religious experts, it may generate misinterpretations of Islamic teachings or present them out of context. Essentially, AI is a tool that learns from data; it lacks moral consciousness, spiritual experience, or religious intuition necessary to grasp the subtleties and depth of sharia. When AI assumes the role of conveying or interpreting religious teachings, there is a significant risk that the conveyed message becomes superficial, shallow, or even misleading.

Another concern is the diminishing role of teachers in the educational process. In Islam, teachers are not merely transmitters of knowledge but also mentors in character and moral development. Direct interaction between teachers and students is a vital component of the tarbiyah process. When AI takes over many of the teacher’s functions—such as providing automated feedback, monitoring attendance, or scheduling lessons—the human relationships that form the foundation of Islamic education may weaken (Dahnial, 2024). This phenomenon, known as the dehumanization of education, refers to the reduction of human dimensions in teaching and learning. Islamic education emphasizes both *habl min Allah* (the vertical relationship with God) and *habl min an-nas* (the horizontal relationship with fellow humans), both of which depend heavily on the quality of personal interaction that cannot be replaced by machines or algorithms.

Beyond these substantial issues, there are also practical challenges in implementing AI within Islamic educational institutions. One major challenge is the digital divide. Not all

madrasahs, pesantrens, or Islamic schools in Indonesia have adequate technological access. In many rural or remote areas, devices, internet connectivity, and electricity remain limited, hindering the equitable application of AI technologies (Hasmiza, 2025). Even in regions with existing infrastructure, digital literacy poses another issue. Many teachers, particularly in traditional pesantren settings, still lack the necessary digital competence to effectively use, manage, or supervise AI-based technologies.

Additionally, learning content developed with the assistance of AI must be closely monitored. Without oversight, AI systems may produce materials that are inconsistent with Islamic teachings or prioritize technical aspects over moral values (Christia, Abdi, et al., 2024). The religious literacy embedded in AI systems heavily depends on the quality of their training data. If AI is trained with shallow, biased, or non-sharia-compliant data, it risks delivering misleading information. Therefore, it is crucial to ensure that all AI-generated educational content used in Islamic education is reviewed and approved by religious authorities or institutions with recognized sharia competence.

Given these complexities, it can be concluded that the implications of AI in Islamic education are indeed dual in nature. On one hand, AI serves as a powerful tool to enhance the quality, efficiency, and reach of Islamic education, offering solutions to classical challenges such as teacher shortages, limited access, and low student motivation. On the other hand, if mismanaged, AI may erode the foundational values and ethical framework of Islamic education. Hence, the development and implementation of AI must be framed within policies and guidelines aligned with Islamic principles (Setiawati et al., 2025).

Several recommendations can be proposed to ensure that AI truly becomes a partner in strengthening Islamic education rather than undermining it. First, it is necessary to formulate sharia-based ethical guidelines for AI usage, involving ulama, technologists, and education practitioners. Second, digital literacy training should be provided to teachers in Islamic educational institutions so that they become critical users and supervisors of the technologies employed. Third, the development of AI-based Islamic content should be conducted collaboratively, taking into account both the richness of Islamic tradition and the needs of the digital generation. Finally, governments and stakeholders in Islamic education must accelerate technological infrastructure development, particularly in underdeveloped regions, to ensure equitable access to AI benefits.

By addressing all these aspects, Islamic education can harness AI as a supportive tool that strengthens the holistic mission of Islamic pedagogy—to nurture individuals who are not only intellectually intelligent but also spiritually and morally mature. AI is not an ultimate goal but rather a means that must be directed in alignment with *maqasid al-shari'ah* and the noble values of Islam. Through the synergy of technology, ethics, and policy, AI can complement the vision of a modern Islamic civilization firmly grounded in *tawhid*, knowledge, and morality.

Cocclusion

The integration of Artificial Intelligence (AI) in Islamic education is an inevitable phenomenon in today's digital era. AI holds great potential to enhance access, efficiency, and the quality of Islamic learning through adaptive and interactive technologies. It can serve as a medium for delivering subjects such as *tajwid*, *fiqh*, *aqidah*, and *akhlaq* in more engaging and contextual ways, reaching learners even in remote areas. However, AI also presents serious challenges that touch upon the fundamental aspects of Islamic education, such as the distortion of religious teachings, the diminishing role of teachers as moral and spiritual mentors, violations of privacy, and the risks of bias or data misuse.

Islamic education, as a system emphasizing values, spirituality, and morality, requires that AI not be used arbitrarily or in a value-neutral manner, but instead guided by Islamic ethical principles. These principles include justice within algorithmic systems, trustworthiness (*amanah*) in managing information, moral responsibility in technological development,

transparency in processes, and respect for adab and noble Islamic values. Therefore, it is essential to develop Sharia-based ethical guidelines for AI, ensure religious content is supervised by qualified scholars (ulama), and improve digital literacy among teachers and students in Islamic educational institutions.

AI in Islamic education should not be positioned as a replacement for human roles but as a strategic tool to strengthen the mission of education grounded in iman (faith), 'ilm (knowledge), and 'amal (righteous action). When managed with Islamic ethics and values as its foundation, AI can contribute to building a modern Islamic civilization that advances not only technologically but also remains steadfast in moral and spiritual integrity.

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