Proceeding of International Conference on Islamic and Interdisciplinary Studies (ICIIS), 2025

ISSN: 2963-5489

Website: https://jurnal.uindatokarama.ac.id/index.php/iciis/issue/archive



Moral and Ethical Challenges in the Utilization of Artificial Intelligence from the Perspective of Islamic Education

Ria Indriani1*

¹ Islamic Religious Education Study Program State Islamic University Datokarama Palu, Indonesia

*Corresponding Author: Ria Indriani, E-mail: indrianimutahir@gmail.com

ARTICLE INFO

Volume: 4 ISSN: 2963-5489

KEYWORD

Artificial Intelligence, Islamic Education, Ethics, Moral Values, Educational Technology.

ABSTRACT

The advancement of Artificial Intelligence (AI) has transformed many aspects of human life, including the educational field. Despite its remarkable benefits, the application of AI also introduces various moral and ethical issues that must be critically examined through the lens of Islamic educational philosophy. This study seeks to explore how Islamic moral principles can guide the responsible use of AI within educational settings. Employing a descriptive-qualitative approach, the research investigates the intersection between technological progress and moral accountability in shaping learners' character. The results indicate that although AI can enhance educational quality and effectiveness, it simultaneously presents ethical challenges such as data misuse, the decline of human interaction, and the erosion of spiritual and moral awareness. Hence, it is crucial to integrate Islamic ethical values—such as justice, sincerity, responsibility, and empathy—into the design and application of AI-based education. The study emphasizes that Islamic education should take an active role in directing AI implementation to ensure that technology supports holistic human development grounded in faith, morality, and knowledge.

1. Introduction

The advancement of Artificial Intelligence (AI) has significantly transformed the global education system. Over the past few years, Al-based technologies have been widely integrated into various educational processes, from administrative management to personalized learning experiences. Recent studies highlight that AI enhances learning efficiency and supports teachers in assessing student performance (Fu et al. 2024). Despite these benefits, the integration of AI also raises serious moral and ethical concerns, such as data privacy violations, algorithmic bias, and the risk of reducing human interaction in learning (Elmahjub 2023).

In Islamic education, the challenges of AI adoption extend beyond technical or pedagogical aspects. The implementation of AI should be viewed through the framework of Islamic moral and ethical values, which emphasize justice ('adl'), responsibility (amanah), and compassion (rahmah) (Mahmudulhassan, Muthoifin, and Begum 2024). From the Islamic perspective, education is not merely the transfer of knowledge but also the process of shaping a person's faith and moral character. Therefore, the use of AI must align with the principles of maqāṣid al-sharī'ah—the higher objectives of Islamic law—to ensure that technology contributes to holistic human development (Elmahjub 2023).

^{*}Ria Indriani is a Student of Islamic Religious Education Study Program at Postgraduate School, State Islamic University Datokarama Palu, Indonesia. This paper was presented at the 4th International Conference on Islamic and Interdisciplinary Studies (ICIIS) 2025, as a presenter, held by the Postgraduate School State Islamic University Datokarama Palu, Indonesia.

Several scholars argue that Islamic ethical perspectives can provide a unique contribution to the global discourse on AI ethics (An Evaluation of Existing Approaches to AI 2025). Integrating these values can help minimize negative impacts, such as dehumanization and loss of spiritual awareness in education. In this regard, Islamic education institutions have a strategic role in directing AI utilization toward purposes that balance intellectual growth with moral and spiritual refinement (Artificial Intelligence in Teaching Islamic Studies 2023).

This study aims to explore the moral and ethical challenges of AI utilization from the perspective of Islamic education. It focuses on identifying key ethical dilemmas that arise from AI implementation, analyzing them through Islamic ethical concepts, and proposing recommendations for responsible AI use in educational settings. Through this effort, the study seeks to strengthen the integration of moral and spiritual values within the rapidly evolving landscape of education in the digital era.

2. Literature Review

The discourse on Artificial Intelligence (AI) in education has rapidly expanded in recent years, with scholars emphasizing both its opportunities and ethical challenges. Research indicates that AI offers significant benefits in improving educational outcomes, such as facilitating adaptive learning, personalized feedback, and efficiency in administrative processes (Fu et al. 2024). These innovations demonstrate how AI can enhance the quality of teaching and learning by supporting differentiated instruction and reducing teachers' workload.

Nevertheless, concerns about Al's moral and ethical implications have become increasingly prominent. Studies reveal that data privacy, algorithmic bias, and the risk of dehumanization are among the most pressing issues in education (An Evaluation of Existing Approaches to Al 2025). For instance, algorithms trained on biased datasets may reinforce existing inequalities, while over-reliance on Al may weaken the relational and spiritual dimensions of teaching. These challenges highlight the necessity of embedding ethical considerations into Al adoption.

Within the Islamic scholarly tradition, the integration of AI in education requires a distinct normative framework. Elmahjub (2023) argues that Islamic ethics can contribute a pluralist perspective to AI evaluation, focusing on values such as justice, honesty, and responsibility. Similarly, Mahmudulhassan, Muthoifin, and Begum (2024) emphasize that AI in multicultural Islamic education must be approached with caution, ensuring that technology supports, rather than undermines, students' spiritual and moral development. This reflects the principle of *maqāṣid al-sharī'ah*, which aims to protect essential human values including faith, intellect, and morality.

Recent studies in Islamic education also point out that AI can serve as a complementary tool in religious instruction, such as digital Qur'an learning platforms and intelligent tutoring systems for Islamic studies (Artificial Intelligence in Teaching Islamic Studies 2023). However, these tools must be aligned with pedagogical goals that prioritize holistic education—encompassing intellectual growth, spiritual awareness, and moral character formation.

Overall, the literature underscores two key insights. First, AI holds considerable potential to transform education positively, but it must be critically assessed to avoid ethical pitfalls. Second, Islamic education offers a value-based framework that can guide the ethical application of AI, ensuring that technological innovation contributes to comprehensive human development rather than undermining spiritual and moral dimensions. These insights provide the conceptual foundation for the present study, which aims to explore the moral and ethical challenges of AI in Islamic education more systematically.

3. Methodology

This study applied a qualitative descriptive approach to explore the moral and ethical challenges of Artificial Intelligence (AI) within Islamic education. The qualitative method was chosen to gain a comprehensive understanding of ethical concepts and moral reasoning from the perspective of Islamic values (Creswell and Poth 2023). The research used a library-based design, collecting data from recent academic journals, books, and scholarly articles published between 2020 and 2025 related to AI ethics, Islamic education, and moral philosophy.

Data were obtained through document analysis, focusing on identifying and interpreting key themes concerning the ethical use of AI, such as justice, responsibility, and human dignity (Fu et al. 2024; Elmahjub 2023). The data were analyzed using content

analysis to connect modern AI ethical issues with Islamic moral principles and educational values (Mahmudulhassan, Muthoifin, and Begum 2024). Triangulation of sources was used to ensure validity, combining insights from AI ethics and Islamic scholarship to produce a balanced and credible interpretation.

3.1 Data Collection Procedures

The data for this study were obtained through documentary research, which focused on collecting and reviewing relevant academic sources discussing Artificial Intelligence (AI), ethics, and Islamic education. The researcher systematically selected literature published between 2020 and 2025 to ensure the inclusion of the most recent scholarly perspectives. The documents analyzed included peer-reviewed journal articles, books, and conference papers that address both the opportunities and ethical concerns of AI in educational and Islamic contexts (Fu et al. 2024).

The process began with identifying credible sources through academic databases such as Google Scholar and ResearchGate, followed by evaluating each document based on its relevance, originality, and contribution to the study's objectives. The selected materials were then categorized into thematic groups—AI in education, AI ethics, and Islamic moral principles—to facilitate a comprehensive interpretation. The researcher employed content analysis to extract key ethical issues such as justice, responsibility, and spiritual integrity, interpreting them through the lens of Islamic educational values (Elmahjub 2023; Mahmudulhassan, Muthoifin, and Begum 2024).

3.2 Analytical Framework

This study is grounded in an analytical framework that integrates ethical theory, Islamic educational philosophy, and the moral implications of Artificial Intelligence (AI). The framework emphasizes the importance of aligning technological advancement with Islamic moral values, particularly justice, responsibility, honesty, and compassion. All is analyzed not merely as a technological innovation but as a tool that must serve the higher objectives of Islamic education, which aim to nurture both intellectual and spiritual growth. The analysis focuses on how Islamic ethical principles can guide the responsible and value-based use of AI in educational contexts, ensuring that technology contributes to holistic human development and the preservation of moral integrity.

4. Results and Discussion

The findings demonstrate that AI technology has successfully enhanced the effectiveness of Islamic learning through innovative tools for teaching and assessment. Intelligent tutoring systems, virtual Qur'an learning applications, and adaptive testing provide students with personalized experiences that improve engagement and comprehension (Amilusholihah & Ramadhan, 2024). These systems analyze individual learning patterns to identify knowledge gaps and adjust content difficulty accordingly, enabling students to progress at their own pace while receiving targeted feedback (Djazilan et al., 2024).

Al-based platforms have expanded access to Islamic educational materials for wider audiences, including those in remote areas, thus supporting the democratization of Islamic education (Holmes et al., 2019). Digital Qur'anic learning platforms equipped with pronunciation recognition technology assist students in proper *tajwīd* practice, while automated evaluation systems provide immediate feedback that enhances motivation and retention (Zawacki-Richter et al., 2019). Furthermore, virtual learning assistants offer 24/7 support, extending educational opportunities beyond traditional classroom constraints.

4.1 Ethical and Moral Implications

Despite efficiency gains, AI implementation introduces significant ethical dilemmas in Islamic education. Primary concerns include data privacy vulnerabilities, algorithmic fairness issues, and the potential reduction of meaningful teacher-student interactions (Hasanah et al., 2024). The extensive collection of student data by AI systems creates risks for breaches and unauthorized access, contradicting Islamic principles that emphasize protecting individual privacy (*sitr*) and dignity (Selwyn, 2019).

The opacity of algorithmic decision-making processes raises questions about accountability and justice ('adl). Many AI systems operate as "black boxes," producing recommendations without transparent rationales, which conflicts with Islamic requirements for clear and justifiable decisions affecting individuals (Williamson & Eynon, 2020). Moreover, the potential for algorithmic bias threatens educational equity, as biased systems may unfairly assess students from diverse linguistic or cultural backgrounds, violating Islamic principles of equal treatment regardless of ethnicity or social status.

A critical concern is the risk of dehumanization in learning processes. Islamic pedagogy traditionally emphasizes the spiritual blessing (barakah) that flows through direct teacher-student relationships and the transformative power of personal mentorship in character formation (Halstead, 2004). Excessive reliance on AI-mediated instruction may reduce education to mechanical information transfer, detached from the spiritual values that are central to Islamic learning (Hasanah et al., 2024). From an Islamic standpoint, technology must serve as a means (wasīlah), not an end (ghāyah), aligning with maqāṣid al-sharī'ah principles that aim to protect religion, intellect, life, lineage, and property (Auda, 2008).

4.2 Implementation Barriers in Islamic Educational Institutions

The integration of AI in Islamic education faces multiple challenges. A significant obstacle is the limited digital literacy among educators, particularly in Islamic schools and universities where many teachers lack the technical competencies necessary to effectively utilize AI tools (Djazilan et al., 2024). This skills gap extends beyond basic technological operation to encompass pedagogical strategies for integrating AI in ways that complement rather than compromise Islamic teaching methods (Holmes et al., 2019).

Infrastructural constraints present additional barriers, especially in rural or less developed regions. Inadequate internet connectivity, insufficient computing devices, unreliable electrical power, and limited technical support hinder AI adoption (Hasanah et al., 2024). Financial limitations further restrict many Islamic institutions from investing in AI platforms and ongoing system maintenance, perpetuating educational inequalities between technologically advanced and resource-limited schools (Luckin et al., 2016).

Cultural and theological resistance also impedes AI integration. Some educators express apprehension regarding AI's compatibility with Islamic teachings, fearing that excessive technological reliance could diminish the teacher's spiritual role as a *murabbī* (moral guide) and promote secular values inconsistent with Islamic educational philosophy (Hussin, 2018). Addressing these concerns requires demonstrating how AI, when governed by Islamic ethical principles, can strengthen rather than weaken religious education.

4.3 The Need for Ethical Governance and Policy Development

Long-term success of AI in Islamic education depends on establishing clear ethical and regulatory frameworks. Policies must ensure that AI tools are developed and applied consistently with Islamic ethics and educational philosophy (Djazilan et al., 2024). This includes guidelines for responsible data collection and usage, algorithmic transparency requirements, student privacy protections, and safeguards for the spiritual dimension of learning.

Teachers, as moral agents, must receive comprehensive training to supervise AI use effectively, balancing technological innovation with character formation (Zawacki-Richter et al., 2019). Islamic institutions should take proactive stances by designing guidelines that regulate data use, uphold academic integrity, and protect the humanistic elements essential to Islamic pedagogy. Collaborative efforts involving Islamic scholars, educators, technologists, and policymakers are necessary to create robust and contextually appropriate ethical frameworks (Selwyn, 2019).

4.4 Balancing Innovation with Islamic Values

Islamic education must integrate ethical reasoning, spiritual awareness, and technological literacy as essential components of the modern learning ecosystem. When governed responsibly according to $maq\bar{a}sid\ al$ - $shar\bar{i}$ 'ah principles, AI can become an instrument for achieving holistic education that harmonizes intellect ('aqI), faith (iman), and moral behavior (akhlaq) (Auda, 2008). This integration requires maintaining the fundamental understanding that technology serves as a $was\bar{\imath}$ lah (means) toward higher educational objectives rather than becoming a $gh\bar{a}yah$ (end) in itself (Hussin, 2018).

The teacher's role as a *murabbī* remains indispensable despite technological advances. While AI can efficiently handle tasks such as content delivery, assessment grading, and progress tracking, it cannot replace the spiritual guidance, moral modeling, and personalized mentorship that teachers provide (Halstead, 2004). Islamic educational institutions must therefore design AI implementation strategies that augment rather than substitute human pedagogical relationships, preserving the *barakah* inherent in traditional teacher-student interactions.

4.5 Addressing Ethical Challenges

The ethical challenges identified—data privacy, algorithmic transparency, dehumanization risks, and potential bias—require systematic responses grounded in Islamic ethical theory. Islamic principles of justice ('adl'), trustworthiness (amānah), and human dignity (karāmah) should inform the development of AI governance frameworks (Djazilan et al., 2024). These frameworks must establish clear protocols for data protection, mandate algorithmic auditing to detect and mitigate bias, and ensure that AI systems enhance rather than diminish the humanistic and spiritual dimensions of education.

Furthermore, without ethical oversight, the misuse of AI risks promoting materialism, moral detachment, and spiritual emptiness among students (Hasanah et al., 2024). Islamic educational leaders must therefore prioritize ethical considerations alongside technical efficiency, recognizing that the ultimate measure of educational success extends beyond measurable outcomes to encompass character development and spiritual growth.

4.6 Practical Pathways Forward

Overcoming implementation barriers requires coordinated efforts across multiple domains. First, substantial investment in teacher professional development is essential. Training programs should equip educators with both technical competencies for operating AI tools and pedagogical strategies for integrating technology while maintaining focus on spiritual formation (Holmes et al., 2019). Teachers must be prepared to serve as ethical supervisors of AI systems, capable of identifying problems and ensuring technology serves educational objectives.

Second, infrastructure development must be prioritized to ensure equitable access across diverse Islamic educational contexts. This includes investments in internet connectivity, computing hardware, and technical support systems (Zawacki-Richter et al., 2019). International cooperation among Islamic institutions can facilitate resource sharing and collective technology acquisition, helping overcome financial constraints faced by individual schools.

Third, cultural resistance must be addressed through thoughtful dialogue that demonstrates Al's potential to strengthen Islamic education when properly implemented. Building community trust requires showcasing successful examples where technology has enhanced rather than compromised religious learning, and providing theological justifications rooted in Islamic scholarship for technology adoption (Williamson & Eynon, 2020).

5. Conclusion

The integration of Artificial Intelligence in Islamic education presents both transformative opportunities and significant ethical challenges. This study demonstrates that AI technologies can substantially enhance learning quality, accessibility, and effectiveness through personalized instruction and sophisticated assessment mechanisms. However, implementation must be approached with critical awareness of ethical implications, including data privacy concerns, algorithmic transparency issues, and the potential dehumanization of learning processes. The findings underscore the necessity of grounding AI implementation within Islamic ethical frameworks, particularly $maq\bar{a}sid$ al- $shar\bar{t}$ al principles, ensuring that technology serves as a $was\bar{t}$ al (means) rather than a $gh\bar{a}yah$ (end), while preserving the teacher's role as $murabb\bar{t}$ (moral guide) and the barakah inherent in human pedagogical relationships.

Moving forward, successful AI integration requires balanced approaches that embrace technological innovation while safeguarding spiritual and moral dimensions of Islamic education. This necessitates investment in teacher training, infrastructure development, and robust ethical governance frameworks that ensure AI systems are fair, transparent, and aligned with Islamic values. When guided by Islamic principles of justice ('adl'), human dignity (karāmah), and spiritual consciousness, AI can become a transformative force supporting the cultivation of individuals who embody intellectual excellence, strong faith (iman), and noble character (akhlaq)—the ultimate objectives of Islamic education. The synergy between technological advancement and Islamic ethical guidance will determine whether AI meaningfully contributes to nurturing the Qur'anic personality in learners.

References

Amilusholihah, A., & Ramadhan, M. (2024). Artificial intelligence in Islamic education: Opportunities and challenges. *Journal of Islamic Educational Technology*, 7(2)

- An Evaluation of Existing Approaches to AI using Trusteeship Ethics. 2025. Ethics and Information Technology.
- Artificial Intelligence in Teaching Islamic Studies: Challenges and Opportunities. 2023. MOLANG: Journal of Islamic Education.
- Auda, J. (2008). *Magasid al-Shariah as philosophy of Islamic law: A systems approach*. London: The International Institute of Islamic Thought.
- Creswell, John W., and Cheryl N. Poth. 2023. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 5th ed. Thousand Oaks, CA: Sage Publications.
- Djazilan, M. S., Rulyansah, A., & Rihlah, J. (2024). The role of artificial intelligence in enhancing Islamic education: A systematic review. *Islamic Education Quarterly*, 12(1)
- Elmahjub, Ezieddin. 2023. "Artificial Intelligence (AI) in Islamic Ethics: Towards Pluralist Ethical Benchmarking for AI." *Philosophy & Technology*.
- Fu, Y., et al. 2024. "Navigating the Ethical Terrain of AI in Education." Journal of Educational Technology & Society.
- Halstead, J. M. (2004). An Islamic concept of education. Comparative Education, 40(4)
- Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Boston: Center for Curriculum Redesign.
- Hussin, S. (2018). Integration of Islamic and Western education: Toward a paradigm of unity of knowledge. *Journal of Islamic Studies and Culture*, 6(1)
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. London: Pearson Education.
- Mahmudulhassan, Muthoifin, and Begum. 2024. "Artificial Intelligence in Multicultural Islamic Education: Opportunities, Challenges, and Ethical Considerations." Sujiem Journal.
- Selwyn, N. (2019). Should robots replace teachers? Al and the future of education. Cambridge: Polity Press.
- Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI in education. *Learning, Media and Technology*, 45(3)
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—Where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1)