Challenges of Integrating Islamic Religious Education Learning Based on Artificial Intelligence

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Abstract

The integration of Artificial Intelligence (AI) into educational practices has brought about significant transformations in cross-disciplinary learning processes, including religious education. PAI which fundamentally emphasizes moral formation and spiritual development, faces serious challenges in adapting to AI-based learning environments. This study aims to examine the pedagogical, epistemological, and ethical implications of implementing AI-based PAI learning. This study uses a qualitative descriptive approach through a literature review by analyzing various literature related to AI in education, religious pedagogy, and technology ethics. The results of the study indicate that AI enables personalized learning according to individual learners' needs, increases learning accessibility, and supports the development of more interactive learning content and evidence-based data analysis for curriculum development. However, the main challenges relate to content accuracy, the ethical use of AI, and teacher readiness in integrating this technology into PAI learning. This article recommends strengthening teacher training and developing an adaptive PAI curriculum that aligns with the demands of Society 5.0 without neglecting the fundamental values of Islamic education.

Keywords: Artificial intelligence, integration, Islamic religious education.

Abstrak

Integrasi kecerdasan buatan ke dalam praktik pendidikan telah membawa transformasi yang signifikan dalam proses pembelajaran

lintas disiplin, termasuk pendidikan agama. PAI yang secara fundamental menekankan pada pembentukan moral dan pengembangan spiritual, menghadapi tantangan serius dalam beradaptasi dengan lingkungan belajar berbasis kecerdasan buatan. Penelitian ini bertujuan untuk mengkaji implikasi pedagogis, epistemologis, dan etika dari penerapan pembelajaran PAI berbasis kecerdasan buatan. Penelitian ini menggunakan pendekatan deskriptif kualitatif melalui tinjauan literatur dengan menganalisis berbagai literatur terkait kecerdasan buatan dalam pendidikan, pedagogi agama, dan etika teknologi. Hasil penelitian menunjukkan bahwa kecerdasan buatan memungkinkan pembelajaran yang dipersonalisasi sesuai dengan kebutuhan masing-masing peserta didik, meningkatkan aksesibilitas pembelajaran, dan mendukung pengembangan konten pembelajaran yang lebih interaktif dan analisis data berbasis bukti untuk pengembangan kurikulum. Namun, tantangan utama berkaitan dengan akurasi konten, penggunaan kecerdasan buatan yang etis, dan kesiapan guru dalam mengintegrasikan teknologi ini ke dalam pembelajaran PAI. Artikel ini merekomendasikan penguatan pelatihan guru dan mengembangkan kurikulum PAI adaptif yang selaras dengan tuntutan *Society 5.0* tanpa mengabaikan nilai-nilai dasar pendidikan Islam.

Kata Kunci: Kecerdasan buatan, integrasi, pendidikan agama Islam.

Introduction

The integration of Artificial Intelligence (AI) in education has become a key issue in transforming learning in the digital age. The development of AI-based technology not only affects how knowledge is produced and distributed but also reconfigures the pedagogical relationships between educators, learners, and learning resources.[1] Education is no longer limited to the conventional classroom, but is moving toward an adaptive, flexible, and data-driven learning ecosystem.[2] This transformation also extends to religious education, including Islamic Religious Education (PAI), which has long been positioned as a strategic instrument in shaping students' character, morality, and spirituality.

In the context of Indonesia's national education system, Islamic Religious Education has a strong legal foundation as an integral part of the national curriculum. Law Number 20 of 2003 concerning the National Education System emphasizes that religious education functions to shape the character,

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[1] W. Holmes et all, *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Boston: Center for Curriculum Redesign, 2019), hlm. 15.

[2] Olaf Zawacki-Richter et al., *"Systematic Review of Research on Artificial Intelligence Applications in Higher Education,"* International Journal of Educational Technology in Higher Education 16, no. 39, 2019. hlm. 7.

morals, and ethics of students.[3] Thus, PAI at the secondary education level is not merely understood as a compulsory subject, but as the main means of internalizing spiritual and social values.[4]

The development of Artificial Intelligence brings forth various educational innovations, ranging from digital learning and automated assessment systems to personalized learning support. AI enables learning experiences that are personalized to meet the individual needs, preferences, and learning styles of students.[5] This technology is also manifested thru intelligent tutoring systems and adaptive learning platforms capable of providing contextual learning content and support. These innovations offer several benefits, such as automating administrative tasks, improving learning accessibility, and creating a more interactive and responsive learning environment.[6]

In line with these dynamics, the PAI curriculum is required to be developed adaptively, accommodating contemporary issues and the use of digital technology, including Artificial Intelligence as part of the learning strategy. Importantly, the integration of AI in PAI is not intended to replace the pedagogical, moral, and spiritual authority of educators; rather, it reframes their role within a human–AI collaborative model. Consistent with Luluk Ilma's view, AI may function as a partner that supports teachers by providing adaptive materials, facilitating automated formative assessment, and enabling structured reflective learning.[7]

However, to avoid a merely normative claim, these functions can be clarified through established educational theory and empirical findings. Drawing on adaptive learning theory and Intelligent Tutoring System (ITS) research, AI operationalizes adaptive instruction through algorithmic personalization based on learner analytics, prior knowledge modeling, response patterns, and real-time performance data.[8] Empirical evidence further indicates that AI-driven tutoring and adaptive platforms can dynamically adjust content difficulty, pacing, feedback, and learning pathways, and that such features are associated with

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[3] R. Murniyetti et al. *"Respon Guru terhadap Penggunaan Kecerdasan Buatan dalam Pembelajaran Pendidikan Agama Islam dan Budi Pekerti (Studi Kasus di Kota Padang),"* Jurnal Pendidikan Agama dan Keagamaan Islam 4, no. 2. 2023. hlm.15.

[4] W. Q. Suhendar et al, *"Strategi Pengembangan Karakter Kepemimpinan Mahasiswa melalui Pembelajaran Pendidikan Agama Islam di Politeknik,"* Humanika: Kajian Ilmiah Mata Kuliah Umum 23, no. 1. 2023. hlm 73.

[5] Y. B. Widodo et al, *"Kecerdasan Buatan dalam Pendidikan: Meningkatkan Pembelajaran Personalisasi,"* Jurnal Teknologi Informatika dan Komputer 10, no. 2. 2024. hlm. 10.

[6] R. Resnawita and D. Karmanita, *"Sistematik Literatur Review: Intelligent System di Dunia Pendidikan,"* Journal of Information System and Education Development 2, no. 4. 2024. hlm. 15.

[7] Luluk Ilma' Nun et al*, "The Integration of Artificial Intelligence as a Teacher's Partner in Islamic Religious Education Learning,"* Journal of Islamic Education Research. 2025.

[8] Olaf Zawacki-Richter et al., "Systematic Review of Research on Artificial Intelligence Applications in Higher Education—Where Are the Educators?," *International Journal of Educational Technology in Higher Education* 16, no. 39 (2019): 1–27, https://doi.org/10.1186/s41239-019-0171-0; Wayne Holmes, Maya Bialik, and Charles Fadel, *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning* (Center for Curriculum Redesign, 2019).

improved learning outcomes and metacognitive regulation in diverse learning contexts.[9] In PAI, these adaptive mechanisms can be aligned with differentiated instruction for example, by tailoring engagement with Qur'anic interpretation, ethical case analysis, and contextual religious problem-solving according to students' learning profiles and progress.

Moreover, AI-supported reflective learning can be operationalized through guided metacognitive prompts, dialogic feedback systems, and automated formative assessment that encourages learners to articulate moral reasoning, evaluate decisions, and revisit misconceptions in light of Islamic values. In this framework, "spiritual intelligence" should be conceptualized as a pedagogical-psychological construct referring to human capacities for meaning-making, value-oriented reflection, and transcendental awareness, rather than as an attribute of AI itself.[10] Accordingly, AI does not "produce" spirituality; it can only scaffold reflective inquiry by presenting ethically nuanced scenarios, structuring self-reflection prompts, and supporting teacher-led feedback loops. Thus, AI functions as a cognitive–pedagogical scaffold, while the cultivation of spiritual intelligence remains dependent on human intentionality, educator guidance, and ethical interpretation within the PAI tradition.

This is in line with research conducted by Rasyid & Hakim, which found that using AI-based chatbots can deepen the substantive understanding of Islamic concepts.[11] Furthermore, a study by Nur Faizin et al. highlighted factors influencing the acceptance of AI among Muslim students in Indonesia. The results show that the ease and usefulness of AI technology significantly influence students' positive attitudes and intentions to use AI in religious learning.[12] Meanwhile, research by Fadhia Anandal et al. shows that AI can create a more inclusive learning environment, especially for students with special needs, without neglecting Islamic moral and spiritual values.[13]

However, the challenges of integrating AI into Islamic Religious Education are complex. PAI is not only oriented toward the transmission of cognitive knowledge, but also toward moral formation, the internalization of Islamic values, and the development of students' spiritual awareness. Traditionally, PAI learning emphasizes a dialogical pedagogical relationship, exemplary behavior (uswah), and moral development, dimensions that are often

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[9] Kurt VanLehn, "The Relative Effectiveness of Human Tutoring, Intelligent Tutoring Systems, and Other Tutoring Systems," *Educational Psychologist* 46, no. 4 (2011): 197–221, https://doi.org/10.1080/00461520.2011.611369.

[10] Danah Zohar and Ian Marshall, *Spiritual Intelligence: The Ultimate Intelligence* (Bloomsbury Publishing, 2000); David B King, "Rethinking Claims of Spiritual Intelligence: A Definition, Model, and Measure" (Trent University, 2008).

[11] M. Rasyid dan L. Hakim*, "Inovasi Chatbot AI dalam Pembelajaran PAI,"* Jurnal Pendidikan Islam 12, no. 1. 2021. hlm. 23.

[12] Nur Faizin, Muhammad Alfan, Abdul Basid et al., *"Muslim Students' Acceptance of Artificial Intelligence in Islamic Religious Education: An Extended TAM Approach," Discover Education* (2025).

[13] Fadhia Anandal et al, *"The Role of Artificial Intelligence in Islamic Education for Inclusive Children,"* Iseedu: Journal of Islamic Educational Thoughts and Practices. 2024.

considered difficult to reduce to an algorithmic and instrumental technological system.[14] Therefore, the presence of AI in PAI learning practices raises a conceptual tension between technological logic oriented toward efficiency and the normative goals of Islamic education, which emphasize the formation of moral human beings.

Although the digitalization of education has been extensively examined in contemporary scholarship, empirical research specifically addressing the integration of Artificial Intelligence (AI) in PAI remains limited. Existing studies predominantly focus on conventional digital technologies such as e-learning platforms, learning management systems, and social media which primarily function as content delivery and communication tools. While these technologies enhance accessibility and flexibility, they do not fundamentally alter the pedagogical architecture of learning.

In contrast, AI-driven systems introduce qualitatively different dimensions of interaction, including algorithmic personalization, adaptive feedback loops, natural language processing–based dialogue, predictive analytics, and automated formative assessment. These systems are capable of dynamically responding to learners' inputs, modeling prior knowledge, and generating context-sensitive feedback in real time. Despite the rapid expansion of AI applications in general education contexts,[15] scholarly investigation into how such interactive AI mechanisms operate within the epistemological and moral framework of Islamic Religious Education remains scarce.

Specifically, limited attention has been given to how AI-mediated dialogue, adaptive ethical scenario modeling, and reflective prompt generation may influence students' religious understanding, moral reasoning, and value internalization. This gap indicates the need for a more systematic conceptual and empirical examination of AI not merely as a digital tool, but as an interactive pedagogical system within PAI learning environments.

For example, Setiawan's research titled "Conceptual of Blended Learning as Islamic Education Study Program Learning Reform Action in Digital Era 4.0" emphasizes that the implementation of e-learning in Islamic religious education is able to increase the flexibility and effectiveness of learning.[16] Furthermore, Kambali et al., thru their research "Religion in Cyberspace: Islamic Religious Education in Social Media," highlight how social media can be an effective means of widely disseminating religious values. However, they also emphasized the importance of applying Islamic communication ethics in the

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[14] Hosaini Hosaini, et al, *"Integration of School Curriculum and Islamic Boarding Schools in Preparing the Golden Generation with Holistic Intelligence,"* SHS Web of Conferences (2024): hlm. 3.

[15] Zawacki-Richter et al., "Systematic Review of Research on Artificial Intelligence Applications in Higher Education—Where Are the Educators?"; Holmes, Bialik, and Fadel, *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning.*

[16] A. Setiawan, *"Conceptual of Blended Learning as Islamic Education Study Program Learning Reform Action in Digital Era 4.0,"* SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education) 7, no. 2 2019.

digital space so that students do not fall into negative behaviors such as backbiting, slander, or cyberbullying.[17] Meanwhile, Munawir et al., in their research titled "The Use of YouTube Social Media in Islamic Cultural History Learning at Elementary Schools," examined the utilization of YouTube as a learning medium for Islamic Cultural History. The research results indicate that YouTube is effective in supporting the learning process by presenting material in video format that can be accessed flexibly without being limited by space and time. This media makes it easier for students to understand learning materials, especially in Islamic Cultural History.[18]

Based on the preceding review, a significant research gap can be identified in the absence of a comprehensive theoretical framework that systematically explains how AI-driven adaptive and interactive systems can be integrated into PAI without compromising its epistemological and moral foundations. While prior studies have examined digital tools in religious education, few have critically analyzed AI as an autonomous interactive system capable of personalization, dialogic engagement, and formative assessment within a value-based pedagogical environment.

Methodologically, this research employs a qualitative literature-based analysis to synthesize educational technology theory, AI in education scholarship, and foundational principles of Islamic pedagogy. By articulating a structured conceptual model, this study aims to contribute both theoretically through the formulation of an integrative AI–PAI framework and practically through guidelines for contextual and ethically grounded implementation in the digital era.

This research uses a descriptive qualitative approach with a literature review method. According to Creswell, qualitative research aims to understand phenomena holistically thru analysis of text and context.[19] This approach was chosen to deeply analyze the challenges of integrating Artificial Intelligence (AI) into PAI learning. The research data were obtained from various scientific sources, such as books, national and international journal articles, and other relevant publications discussing AI and PAI learning. The collected data were analyzed thru the stages of reduction, presentation, and drawing conclusions, referring to the Miles and Huberman analysis model.[20] The analysis was conducted critically and reflectively, linking educational theory, the concept of AI in learning, and the basic principles of Islamic education to draw conclusions based on an understanding focused on the research topic.

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[17] Kambali et al,*"Religion in Cyberspace: Islamic Religious Education in Social Media," Edukasi Islami* 12, no. 1 . 2023.

[18] L. I. Atiqoh et al, *"Penggunaan Media Sosial YouTube dalam Pembelajaran Sejarah Kebudayaan Islam di Madrasah Ibtidaiyah," Mimbar Kampus: Jurnal Pendidikan dan Agama Islam* 23, no. 1. 2023.

[19] John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. (Thousand Oaks: Sage Publications, 2014).

[20] Mathew B. Miles dan A. Michael Huberman, An Expanded Sourcebook: Qualitative Data Analysis (London: Sage Publications, 1994).

Discussion

The Presence of Artificial Intelligence in Education

The application of artificial intelligence (AI) in education offers various strategic benefits, ranging from time optimization and increased learning efficiency, strengthening school security and data management, to providing data-driven insights and utilizing innovative learning tools. AI has become an integral part of modern educational practices, both thru offline technologies like QR codes and Android-based applications, and thru online systems integrated with the internet.

The utilization of this technology not only simplifies the learning process but also contributes to increasing students' interest, engagement, and enthusiasm. Therefore, AI is seen as a relevant and adaptable solution to address educational challenges in the digital age.[21] The advancements in Artificial Intelligence (AI) technology, particularly in the fields of Big Data and Machine Learning, have brought significant changes to the world of education. This technology enables the creation of more adaptive and personalized learning processes. Thru a personalized learning system, the material, pace, approach, and learning sequence can be tailored to the needs and abilities of each student. This makes the learning process more efficient and comfortable, while also significantly improving learning outcomes.[22]

Additionally, AI plays a role in assisting teachers with administrative tasks such as automated grading, data management, and monitoring student progress. This technology allows teachers to focus on deeper pedagogical aspects, such as character development and student creativity. In this context, AI functions as a virtual assistant capable of providing independent learning guidance and material explanations, thereby facilitating interaction between teachers and students. As for the types of AI that have already been implemented in education, they include the following.

AI-Powered Chatbot

A chatbot is a technology that can simulate human conversation and provide instant responses to user questions. In the world of education, chatbots play an important role in increasing student engagement and learning outcomes, while also providing emotional support for students experiencing stress or anxiety. For example, ChatGPT is used to answer questions and explain material concepts, while platforms like Duolingo adjust learning content based on each user's abilities.[23]

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[21] Aldya, R., Arifendi, R., & Sari, N. *"Pemanfaatan artificial intelligence dalam meningkatkan efektivitas pembelajaran di era digital"*. Jurnal Pendidikan Teknologi, 6(2), 2022.

[22] I. Begum, *"Role of Artificial Intelligence in Higher Education—An Empirical Investigation,"* International Research Journal on Advanced Engineering and Management (IRJAEM) 2. 2024.

[23] M. A. A. Eisenring et al*, "The Use of Chatbots in the English Language Teaching to Promote Modern Language Learning: A Literature Review,"* Indonesian Journal of Innovation in English Language Teaching 8, no. 1. 2024.

Generative AI

Generative AI technology has been used to create creative educational content, such as animated videos, interactive modules, and learning materials tailored to students' abilities. With this capability, AI not only speeds up content production but also enhances the appeal and relevance of learning in the digital age.[24]

Adaptive Learning

The adaptive learning model emphasizes learning effectiveness by adjusting teaching methods and resources to individual needs. This system provides rapid feedback and supports two-way communication between teachers and students. Various strategies such as active debate, synergetic teaching, and jigsaw learning are examples of adaptive learning applications that utilize technology to enhance interaction and collaboration in the classroom.[25]

The Role of Artificial Intelligence and Islamic Religious Education Learning

Artificial intelligence (AI) serves as a means to enhance human capabilities and support the learning process, making it more effective and efficient. AI integration in education can be achieved thru various approaches that are constantly evolving with technological advancements. Therefore, all sectors, including education, are required to be able to adapt and collaborate in responding to and finding solutions to the various challenges that arise.[26]

In line with this view, Yashpal asserts that AI has the potential to automate and expand access to adaptive learning personalized to the needs of learners. This technology plays a role in reducing educational disparities, increasing learning motivation, developing cognitive abilities, strengthening language comprehension, and accelerating the overall learning process.[27]

The purpose of artificial intelligence (AI) is to simplify various tasks and solve complex problems efficiently. In the context of PAI, AI has significant potential to improve the effectiveness of learning thru the application of adaptive learning tailored to the individual needs of students. This technology also allows for the use of virtual assistants, such as chatbots, to answer questions about Islamic teachings, as well as data analysis to monitor learning progress. Additionally, AI can be utilized in the development of interactive simulations, educational games, religious text translation, strengthening online learning, and designing curricula that are more flexible and adaptable to future learning needs.

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[24] A. Timokhin and L. Khoronko, *"Virtual Reality as a Main Basis for Forming Modern Educational Technologies,"* E3S Web of Conferences 273. 2021.

[25] E. Manik, Y. Marbun, R. A. B. Simanjuntak, and R. J. Simarmata, *"Video YouTube dalam Proses Pembelajaran dengan ChatGPT,"* Jurnal Pendidikan dan Konseling (JPDK) 5, no. 2. 2023.

[26] Rubini and Herwinsyah, *"Penerapan Artificial Intelligence pada Pembelajaran Pendidikan Agama Islam,"* Komunikasi dan Pendidikan Islam 12, no. 2. 2023. hlm. 79.

[27] Dr. Yashpal Netragaonkar, *"Artificial Intelligence (AI) in Higher Education".* 2024.

Thus, the utilization of artificial intelligence (AI) in Islamic religious education opens up significant opportunities for enhancing the effectiveness and inclusivity of learning. AI enables faster and easier access to Islamic resources, such as the Quran, commentaries, hadiths, and religious literature, thus supporting a deeper learning process. Thus, AI becomes an important instrument in the development of Islamic religious education in the modern education era.[28]

Challenges of Integrating Artificial Intelligence in Islamic Religious Education Learning

The development of artificial intelligence (AI) technology has brought significant changes to the world of education, including in the learning of PAI. AI offers various conveniences, such as adaptive learning, analysis of student learning data, and quick access to Islamic resources. However, the integration of AI in PAI learning is not without a number of challenges that need to be critically examined to ensure its use remains aligned with the values, goals, and character of Islamic education. As for some of the challenges, they are as follows:

Epistemological Challenges

The main issue that arises is the shift in the authority of knowledge. When AI is used as the primary reference in answering religious questions, there is a risk of blurring the roles of scholars, teachers, and the Islamic scholarly tradition (turāth). Religious knowledge, which is truly acquired thru the processes of talaqqi, tadabbur, and ijtihad, has the potential to be reduced to mere computational results. Additionally, AI lacks epistemic and spiritual awareness.[29] Knowledge in Islam is not only informative (ʿilm), but also transformative and of devotional value. AI is unable to distinguish between valid knowledge and that which is ideologically charged or biased, except to the extent of the data used in its training. This raises epistemological problems related to truth (ḥaqq) and the authority of interpretation in PAI. To avoid these epistemological risks, the use of AI in PAI must be placed proportionally as an epistemic aid, not as an authoritative source of religious knowledge. PAI teachers and educators will continue to play a central role in selecting, verifying, and contextualizing AI-generated knowledge to align it with Islamic epistemology.

Ethical Challenges

Beside opening up opportunities, the use of AI in education also raises various ethical issues that cannot be ignored. One of the main ethical issues is the validity of the material contained in AI. AI works based on algorithms and data

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[28] Rubini and Herwinsyah, *"Penerapan Artificial Intelligence pada Pembelajaran Pendidikan Agama Islam,"* Komunikasi dan Pendidikan Islam 12, no. 2. 2023.

[29] L. Casal-Otero, A. Catala, C. Fernández-Morante, et al*., "AI Literacy in K–12: A Systematic Literature Review,"* International Journal of STEM Education 10, no. 29 (2023), https://doi.org/10.1186/s40594-023-00418-7

developed by humans with specific cultural backgrounds and interests.[30] In the context of PAI, this has the potential to introduce bias in the presentation of Islamic materials, especially regarding differences in schools of thought, text interpretation, and religious practices. If not closely monitored, AI can oversimplify Islamic teachings and disregard the complexities of Islamic scholarly traditions.

The next issue concerns the question of epistemic authority and the legitimacy of religious knowledge in AI-mediated learning environments. Within the Islamic intellectual tradition, authoritative knowledge is grounded in primary sources the Qur'an and Hadith as well as in the interpretive scholarship of recognized scholars ('ulama), transmitted through a structured chain of knowledge (isnād) and validated interpretive methodologies (usul al-fiqh and 'ulum al-hadith). This epistemological structure ensures not only textual authenticity but also contextual interpretation and ethical accountability.

The increasing use of AI systems as instant response generators particularly large language models capable of producing religious explanations introduces a potential shift in epistemic mediation. AI-generated answers, while computationally efficient, are derived from probabilistic language modeling rather than from recognized chains of transmission or doctrinal accountability. Educational technology scholarship has noted that algorithmic systems can create an "automation bias," where users tend to over-trust machine-generated outputs without sufficient critical evaluation. In the context of PAI, such a tendency may risk attenuating the dialogical, teacher-guided process of meaning negotiation that has traditionally characterized religious learning. Rather than functioning merely as neutral tools, AI systems may subtly reshape patterns of authority, shifting students' cognitive reliance from scholarly interpretation toward algorithmic synthesis.

This concern does not imply a rejection of AI, but rather calls for a clearer pedagogical framework in which AI outputs are positioned as provisional informational resources subject to verification, critical scrutiny, and teacher mediation. In this regard, the role of educators remains central as epistemic gatekeepers who contextualize, validate, and ethically frame AI-generated content within established Islamic interpretive traditions.

Additionally, data protection and student privacy represent critical ethical dimensions of AI integration. AI-based educational platforms typically rely on large-scale data collection, including behavioral analytics, learning patterns, performance metrics, and user interaction histories. From the perspective of contemporary data ethics, such practices raise concerns related to surveillance, profiling, and algorithmic bias. Within Islamic ethical thought, the preservation of human dignity and personal honor (hifz al-'ird) constitutes one of the essential

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[30] Yao Fu, Zhenjie Weng, *"Navigating the ethical terrain of AI in education: A systematic review on framing responsible human-centered AI practices,"* Computers and Education: Artificial Intelligence, Volume 7, 2024.

objectives of the maqāṣid al-sharī‘ah, alongside the protection of religion, life, intellect, and property. Unauthorized data exploitation, intrusive monitoring, or opaque algorithmic decision-making may therefore conflict with foundational principles of dignity (karāmah), trust (amānah), and justice (‘adl).

Consequently, the implementation of AI in Islamic Religious Education must be accompanied by transparent governance mechanisms, informed consent protocols, data minimization practices, and institutional accountability structures. Embedding AI within a value-oriented ethical framework ensures that technological innovation remains aligned with both contemporary standards of digital ethics and the normative objectives of Islamic education.

Thus, the utilization of AI in Islamic Religious Education needs to be placed within a comprehensive Islamic ethical framework. AI should be positioned as a learning tool, not as a religious authority. Strengthening the role of teachers, overseeing religious content, protecting student data, and developing ethical guidelines based on Islamic values are the main prerequisites for AI integration to proceed responsibly and be oriented toward forming individuals with noble character.

Pedagogical Challenges

One prominent pedagogical issue concerns the reconfiguration of the educator's role. In the Islamic educational tradition, teachers function not merely as transmitters of knowledge, but as *murabbi* figures who guide intellectual growth, model ethical conduct, and nurture students' spiritual development. AI-supported learning environments, particularly those relying heavily on automated tutoring and content generation, may unintentionally shift instructional authority toward algorithmic systems.[31] If not carefully mediated, such reliance risks reducing learning to procedural interaction with technology, thereby weakening the dialogical, relational, and exemplary dimensions that are foundational to Islamic pedagogy.

A second challenge relates to epistemic reductionism. Many AI systems are optimized for measurable cognitive outcomes such as mastery of content, response accuracy, and efficiency of progression through data-driven analytics. While these metrics are valuable within educational technology research, an exclusive emphasis on cognitive performance may marginalize the affective and psychomotor dimensions of learning. In the context of PAI, education is integrative, encompassing not only intellectual understanding (*‘ilm*), but also moral refinement (*akhlaq*) and embodied ethical practice (*‘amal*). A purely performance-oriented AI model risks privileging informational acquisition over value internalization and character formation.

To address these challenges, the integration of AI in PAI requires a clearly articulated holistic and value-based implementation framework.

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[31] Xiao Tan, Gary Cheng, dan Man Ho Ling, *"Artificial Intelligence in Teaching and Teacher Professional Development: A Systematic Review,"* Computers and Education: Artificial Intelligence 8 (2025).

Conceptually, such a framework may be structured around three interrelated dimensions: Epistemic Mediation Layer AI functions as a supportive analytical and adaptive tool, while teachers retain epistemic authority and responsibility for contextualization, validation, and ethical framing of content. AI-generated outputs are treated as provisional resources subject to scholarly verification. Pedagogical Balance Model Learning design integrates cognitive personalization (adaptive feedback, differentiated pathways) with structured affective and reflective components, such as guided moral dialogue, value clarification exercises, and supervised discussion. AI supports metacognitive reflection but does not replace relational mentorship and Ethical Governance and Oversight Institutional mechanisms ensure responsible AI use through teacher training, algorithmic transparency, data protection policies, and alignment with Islamic ethical principles, including dignity (*karāmah*), trust (*amānah*), and justice (*'adl*).

AI is positioned as a pedagogical augmentation system rather than an autonomous instructional authority. The educator remains central as moral exemplar and interpretive guide, while AI enhances adaptive instruction and structured reflection. Such a framework ensures that technological innovation operates in harmony with the integrative objectives of PAI: cultivating individuals who are intellectually competent, spiritually aware, and ethically grounded.

Conclusion

Integration of Artificial Intelligence (AI) in PAI learning presents both strategic opportunities and multidimensional challenges. On the one hand, AI offers great potential in improving the effectiveness and quality of PAI learning thru personalizing teaching materials according to student characteristics, more accurate analysis of learning needs and development, and support for data-driven pedagogical decision-making. The use of AI technology also allows the learning process to become more adaptive, interactive, and sustainable, thus meeting the dynamic needs of students in the digital age.

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