

THE USE OF ARTIFICIAL INTELLIGENCE (AI) IN PAI LEARNING STRATEGIES IN THE DIGITAL AGE

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Abstract

The rapid development of Artificial Intelligence (AI) has brought significant changes to the global educational landscape, particularly in learning design, the role of educators, and students' learning experiences. This study aims to systematically analyze the role and implications of AI implementation in education by emphasizing the integration of pedagogical, technological, and philosophical dimensions, especially within the context of Islamic education. This research employs a Systematic Literature Review (SLR) method following the PRISMA 2020 guidelines, examining internationally reputable articles indexed in Scopus Q1 journals. The findings indicate that AI contributes to the development of adaptive, personalized, and data-driven learning through smart learning environments, intelligent tutoring systems, and learning analytics. However, the adoption of AI also raises ethical, epistemological, and pedagogical challenges, particularly concerning the potential reduction of teachers' roles, algorithmic bias, and the commercialization of education. The integration of the Technological Pedagogical Content Knowledge (TPACK) framework with constructivist and transformative learning theories is essential to ensure that AI functions as a pedagogical support tool rather than a substitute for educators. The novelty of this study lies in its conceptual synthesis between AI in Education and the philosophy of Islamic education, which emphasizes a balance between technological rationality, spiritual dimensions, and character formation. This study concludes that value-based AI implementation can support a humanistic, ethical, and sustainable educational transformation while remaining relevant to the challenges of 21st-century education.

Keywords: Artificial Intelligence in Education, TPACK, Transformative Learning, Islamic Education, Systematic Literature Review

Abstrak

Perkembangan pesat kecerdasan buatan (Artificial Intelligence/AI) telah membawa perubahan signifikan dalam lanskap pendidikan global, termasuk pada desain pembelajaran, peran pendidik, serta pengalaman belajar peserta didik. Penelitian ini bertujuan untuk menganalisis secara sistematis peran dan implikasi penerapan AI dalam pendidikan dengan menekankan integrasi aspek pedagogis, teknologi, dan nilai-nilai

filosofis, khususnya dalam konteks pendidikan Islam. Metode yang digunakan adalah Systematic Literature Review (SLR) dengan mengacu pada pedoman PRISMA 2020, terhadap artikel bereputasi internasional yang terindeks Scopus Q1. Hasil kajian menunjukkan bahwa AI berkontribusi dalam menciptakan pembelajaran yang adaptif, personal, dan berbasis data melalui smart learning environments, intelligent tutoring systems, serta learning analytics. Namun, penerapan AI juga memunculkan tantangan etis, epistemologis, dan pedagogis, terutama terkait reduksi peran guru, bias algoritmik, dan komersialisasi pendidikan. Integrasi kerangka Technological Pedagogical Content Knowledge (TPACK) dan teori pembelajaran konstruktivistik serta transformatif menjadi kunci dalam memastikan AI berfungsi sebagai alat pendukung pedagogi, bukan pengganti pendidik. Novelty penelitian ini terletak pada sintesis konseptual antara AI in Education dan perspektif filsafat pendidikan Islam yang menekankan keseimbangan antara rasionalitas teknologi, dimensi spiritual, dan pembentukan karakter. Studi ini menegaskan bahwa implementasi AI yang berorientasi pada nilai (value-based AI) dapat mendukung transformasi pendidikan yang humanis, etis, dan berkelanjutan, sekaligus relevan dengan tantangan pendidikan abad ke-21.

Kata kunci: *Artificial Intelligence in Education, TPACK, Pembelajaran Transformatif, Pendidikan Islam, Systematic Literature Review*

INTRODUCTION

The rapid advancement of digital technology in the twenty-first century has significantly transformed educational systems across the globe. One of the most influential technological developments shaping contemporary education is Artificial Intelligence (AI). Artificial Intelligence refers to computational systems designed to perform tasks that typically require human intelligence, including learning, reasoning, decision-making, and problem-solving (Chen et al., 2020). In education, AI has been increasingly applied to support personalized learning, adaptive instruction, intelligent assessment, and data-driven decision-making processes. These developments signal a paradigm shift from traditional, teacher-centered instruction toward more learner-centered, technology-enhanced educational environments.

In the context of global educational reform, the integration of AI is often associated with the demand for more effective, efficient, and inclusive learning systems. AI-based educational technologies, such as intelligent tutoring systems, adaptive learning platforms, learning analytics, and educational chatbots, enable educators to respond to individual learner needs in real time (Zawacki-Richter et al., 2019). These technologies have demonstrated potential in improving learning outcomes, enhancing student engagement, and supporting teachers in instructional planning and evaluation. Consequently, AI is no longer viewed merely as an optional innovation, but as a strategic component of modern education systems in the digital age (OECD, 2021).

Amid this technological transformation, Islamic Religious Education (Pendidikan Agama Islam/PAI) faces distinctive challenges and opportunities. PAI plays a crucial role in shaping students' religious understanding, moral character, and ethical behavior based on Islamic values. Traditionally, PAI learning has relied heavily on conventional pedagogical approaches, such as lecturing, memorization, and textual analysis of

religious sources. While these methods remain important, they may be insufficient to address the learning characteristics of contemporary students who are digital natives and accustomed to interactive, technology-mediated learning environments (Fisher et al., 2015).

The digital age has fundamentally altered students' access to religious knowledge and their modes of learning. Today's learners are exposed to a vast array of online religious content, social media discussions, and algorithm-driven information that shape their religious perceptions and moral reasoning. This phenomenon presents both risks and opportunities for Islamic education. On the one hand, uncontrolled digital content may lead to superficial understanding, misinformation, or radical interpretations of religion. On the other hand, digital technology, when strategically integrated into formal education, can support critical thinking, reflective learning, and contextual understanding of Islamic teachings (Huda et al., 2017).

In this regard, the use of Artificial Intelligence in PAI learning strategies emerges as a promising approach to enhance the relevance and effectiveness of Islamic education in the digital era. AI-based learning systems can support personalized religious learning by adapting instructional content to students' prior knowledge, learning pace, and cognitive styles. For example, intelligent tutoring systems can assist students in understanding complex Islamic concepts by providing customized explanations and feedback, while learning analytics can help teachers monitor students' moral and cognitive development over time (Luckin et al., 2016).

From a pedagogical perspective, AI integration in PAI aligns with contemporary learning theories that emphasize constructivist, adaptive, and transformative learning. Constructivist theory posits that learners actively construct knowledge through interaction with their environment, rather than passively receiving information. AI-supported learning environments facilitate such interaction by enabling dynamic feedback, simulation-based learning, and problem-solving activities (Spector, 2014). In PAI learning, this approach allows students to engage more deeply with Islamic values by applying them to real-life contexts and ethical dilemmas relevant to the digital age.

Moreover, the integration of AI in PAI learning strategies is closely related to the discourse on digital ethics and moral education. The widespread use of AI technologies raises ethical concerns, including data privacy, algorithmic bias, surveillance, and the potential erosion of human agency (Selwyn, 2019). Islamic education, grounded in ethical and moral principles derived from the Qur'an and Sunnah, has a strategic role in guiding students to engage with AI and digital technologies responsibly. By incorporating AI as both a pedagogical tool and a subject of ethical reflection, PAI can contribute to the development of morally grounded digital citizens who are capable of critically evaluating technological advancements from an Islamic ethical perspective (Nasr, 2010).

However, the use of AI in Islamic Religious Education also presents significant challenges. One major issue concerns teachers' readiness and competence in integrating

AI into instructional practices. Many PAI teachers have limited technological literacy and may lack the pedagogical skills required to design AI-supported learning activities effectively. This challenge can be analyzed using the Technological Pedagogical Content Knowledge (TPACK) framework, which emphasizes the intersection of technology, pedagogy, and subject matter knowledge as a prerequisite for effective technology integration in education (Mishra & Koehler, 2006). Without adequate professional development and institutional support, the adoption of AI in PAI learning may remain superficial and fail to achieve its pedagogical potential.

Another critical concern relates to the epistemological and theological implications of using AI in religious education. Islamic knowledge is rooted in divine revelation, authoritative interpretation, and ethical responsibility, whereas AI systems operate based on data-driven algorithms and probabilistic reasoning. This raises important questions regarding the role of AI in interpreting religious texts, providing religious guidance, and mediating students' understanding of Islamic teachings. Scholars emphasize that AI should function as a supportive instructional tool rather than an authoritative source that replaces human educators and religious scholars (Rahman, 1982; Popenici & Kerr, 2017).

In the Indonesian educational context, the integration of AI in PAI learning strategies is particularly relevant. Indonesia is home to the world's largest Muslim population and is simultaneously experiencing rapid digital transformation. National education policies increasingly emphasize digital literacy, technological innovation, and the integration of information and communication technologies in teaching and learning. However, empirical research focusing specifically on the use of AI in Islamic Religious Education remains limited. Existing studies on digital technology in PAI tend to focus on e-learning platforms, multimedia learning, or social media utilization, rather than advanced AI-based systems (Huda et al., 2017).

Furthermore, most AI-in-education research has been conducted in general subject areas such as mathematics, science, and language learning, leaving a significant research gap in religious education, particularly Islamic education (Zawacki-Richter et al., 2019). This gap highlights the need for systematic and theory-driven research that explores how AI can be strategically integrated into PAI learning strategies to support not only cognitive learning outcomes, but also moral development, character education, and spiritual growth in the digital age.

The novelty of this study lies in its focus on Artificial Intelligence as an integral component of PAI learning strategies, rather than merely as a technological supplement. By examining AI through pedagogical, ethical, and Islamic educational perspectives, this research seeks to contribute to the emerging field of digital religious education. It aims to provide a conceptual and empirical foundation for understanding how Islamic education can remain relevant, transformative, and value-oriented in an era characterized by intelligent digital technologies (Williamson & Eynon, 2020).

In addition, this study has important practical implications for educators, curriculum developers, and policymakers. Insights into the effective use of AI in PAI learning strategies can inform curriculum design, instructional innovation, teacher training programs, and education policy development. By leveraging AI responsibly and ethically, PAI educators can create learning environments that resonate with students' digital experiences while preserving the core spiritual and moral objectives of Islamic education. Ultimately, the strategic integration of AI in PAI learning has the potential to strengthen the role of Islamic education in shaping ethically grounded, digitally literate, and socially responsible Muslim learners in the digital age.

METHOD

This study employed a qualitative research design with a systematic literature review (SLR) approach to examine the use of Artificial Intelligence (AI) in Islamic Religious Education (PAI) learning strategies in the digital age. The SLR method was selected to provide a comprehensive, transparent, and replicable synthesis of existing scholarly evidence related to AI integration in religious and moral education. This approach enables the identification of research trends, theoretical frameworks, methodological patterns, and research gaps within the field (Kitchenham & Charters, 2007; Zawacki-Richter et al., 2019).

The data sources consisted of peer-reviewed journal articles indexed in Scopus and Web of Science databases. The literature search was conducted using a combination of keywords, including "Artificial Intelligence in Education," "Islamic Religious Education," "PAI learning strategies," "digital religious education," and "ethical and moral education." Boolean operators (AND, OR) were applied to refine the search process. The inclusion criteria were: (1) articles published between 2015 and 2024, (2) empirical or conceptual studies focusing on AI applications in education, religious education, or moral learning, and (3) publications written in English. Exclusion criteria included non-peer-reviewed articles, conference abstracts, editorials, and studies unrelated to educational contexts.

The article selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor and transparency (Page et al., 2021). After removing duplicates, titles and abstracts were screened to assess relevance. Full-text analysis was then conducted to determine eligibility based on the predefined criteria. Data extraction focused on research objectives, methodological approaches, types of AI technologies used, pedagogical implications, and ethical considerations relevant to PAI learning.

Data analysis was carried out using thematic analysis to identify recurring patterns and conceptual themes across the selected studies. The analysis emphasized pedagogical strategies, integration models, ethical dimensions, and implications for Islamic Religious Education. To enhance trustworthiness, the review process involved iterative coding, peer debriefing, and cross-checking of findings with established educational and Islamic

pedagogical theories. This methodological approach ensured that the findings were analytically robust and theoretically grounded, providing a reliable foundation for advancing AI-based learning strategies in PAI education in the digital era (Braun & Clarke, 2006).

RESULTS AND DISCUSSION

This section presents the findings of the systematic literature review on the use of Artificial Intelligence (AI) in Islamic Religious Education (PAI) learning strategies in the digital age. The findings are organized into four main subsections: (1) the PRISMA-based article selection process, (2) characteristics of the selected studies, (3) thematic findings related to AI integration in PAI learning strategies, and (4) pedagogical and ethical implications emerging from the reviewed literature.

PRISMA-Based Article Selection Results

The systematic review followed the PRISMA 2020 guidelines to ensure transparency, rigor, and replicability in the literature selection process (Page et al., 2021). The initial database search was conducted using Scopus and Web of Science, resulting in a total of 432 records. After removing duplicates and screening titles and abstracts, 86 articles were selected for full-text review. Following the application of inclusion and exclusion criteria, 27 articles were deemed eligible and included in the final synthesis. The screening process revealed that although AI in education is a rapidly growing research area, studies explicitly addressing AI applications in Islamic Religious Education or religious and moral education remain limited. Most excluded studies focused on technical AI development without educational implications or addressed AI integration in non-religious subject areas such as STEM and language learning.

Table 1. PRISMA Flow Diagram Summary

PRISMA STAGE	DESCRIPTION	NUMBER OF ARTICLES
IDENTIFICATION	Records identified through database searching (Scopus & WoS)	432
IDENTIFICATION	Duplicate records removed	94
SCREENING	Records screened (title & abstract)	338
SCREENING	Records excluded	252
ELIGIBILITY	Full-text articles assessed	86
ELIGIBILITY	Full-text articles excluded (irrelevant focus, non-educational context)	59
INCLUDED	Studies included in final review	27

The PRISMA results indicate a significant narrowing of the literature, reflecting the novelty and underexplored nature of AI integration within Islamic Religious Education.

Characteristics of the Included Studies

The analysis of the 27 selected studies shows a growing interest in AI-supported learning strategies across diverse educational contexts. Most studies were published between 2019

and 2024, indicating that research on AI in education is relatively recent and rapidly evolving. In terms of research design, qualitative approaches dominated the sample, followed by mixed-methods and conceptual studies. Quantitative experimental studies were comparatively limited. Geographically, the majority of studies originated from Asia, Europe, and the Middle East, with Indonesia, Malaysia, and Saudi Arabia emerging as key contributors to research on Islamic education and digital learning. However, only a small number of studies explicitly addressed PAI or Islamic Religious Education, while others focused more broadly on moral education, ethics, or values-based learning using AI technologies.

Regarding AI technologies, the most frequently discussed tools included intelligent tutoring systems, adaptive learning platforms, learning analytics, educational chatbots, and recommendation systems. These technologies were primarily used to support personalized learning, formative assessment, and student engagement. Notably, none of the reviewed studies positioned AI as a replacement for teachers; instead, AI was consistently framed as a supportive tool that enhances instructional effectiveness and learning outcomes.

Thematic Findings on AI Integration in PAI Learning Strategies

The thematic analysis identified four dominant themes related to the use of AI in PAI learning strategies: (1) personalization of religious learning, (2) enhancement of student engagement and motivation, (3) support for moral and character education, and (4) ethical and pedagogical challenges of AI integration.

1. Personalization of Religious Learning

A prominent finding across the reviewed literature is the role of AI in enabling personalized learning experiences. AI-based systems allow instructional content to be adapted to individual learners' cognitive levels, learning pace, and prior knowledge (Chen et al., 2020). In the context of PAI, personalization is particularly important due to students' diverse religious backgrounds, levels of religious understanding, and moral development stages. Several studies reported that adaptive AI platforms helped students better understand abstract Islamic concepts by providing customized explanations, examples, and feedback. Learning analytics were also used to monitor students' progress in understanding religious values and ethical reasoning. These findings suggest that AI can support differentiated instruction in PAI, making learning more inclusive and responsive to individual learner needs.

2. Enhancement of Student Engagement and Motivation

Another significant theme concerns the impact of AI on student engagement and motivation. The reviewed studies indicate that AI-supported learning environments tend to be more interactive and student-centered than traditional instructional approaches (Luckin et al., 2016). Features such as real-time feedback, interactive simulations, and conversational agents were found to increase students' interest and active participation in

learning activities. In Islamic Religious Education, engagement is a critical factor influencing students' internalization of values and moral principles. The findings suggest that AI can help transform PAI learning from passive knowledge transmission into an active and reflective process. For example, AI-driven scenarios and simulations allow students to explore ethical dilemmas based on Islamic values, encouraging deeper reflection and moral reasoning.

3. Support for Moral and Character Education

A central objective of PAI is the development of moral character (*akhlak*) and ethical behavior. The reviewed literature highlights the potential of AI to support moral and character education by facilitating reflective learning and ethical decision-making processes. Several studies emphasized that AI-based learning environments can present contextualized moral scenarios that require students to apply religious principles in realistic situations (Spector, 2014). These findings align with the broader discourse on transformative learning, which emphasizes critical reflection and perspective transformation. AI technologies, when designed with ethical and pedagogical considerations, can support PAI objectives by fostering students' moral awareness, empathy, and responsibility in navigating digital and social challenges.

4. Ethical and Pedagogical Challenges of AI Integration

Despite its potential benefits, the reviewed literature also highlights several challenges associated with AI integration in PAI learning strategies. Ethical concerns, such as data privacy, algorithmic bias, and digital dependency, were frequently discussed (Selwyn, 2019). In religious education contexts, these concerns are further complicated by theological and epistemological considerations regarding the authority of AI systems in interpreting religious knowledge. Additionally, teacher readiness emerged as a critical issue. Many studies noted that educators often lack the technological and pedagogical competencies required to integrate AI effectively into learning strategies. This finding underscores the importance of professional development programs based on the Technological Pedagogical Content Knowledge (TPACK) framework to support teachers in adopting AI responsibly and meaningfully.

Synthesis of Findings

Overall, the findings of this systematic review indicate that Artificial Intelligence has significant potential to enhance PAI learning strategies in the digital age. AI supports personalized learning, increases student engagement, and contributes to moral and character education when aligned with pedagogical principles and Islamic values. However, the successful integration of AI in PAI learning requires careful consideration of ethical issues, teacher competence, and the preservation of human and religious authority in educational processes. The limited number of empirical studies focusing specifically on AI in Islamic Religious Education highlights a substantial research gap. This gap presents opportunities for future research to explore context-specific implementations, empirical evaluations, and theory-driven models of AI integration in

PAI learning. By addressing these gaps, future studies can contribute to the development of Islamic education that is both technologically advanced and ethically grounded in the digital era

DISCUSSION

This discussion section interprets the findings of the systematic literature review by situating them within established educational theories, Islamic pedagogical frameworks, and contemporary debates on Artificial Intelligence (AI) in education. The discussion emphasizes theoretical integration, critical analysis, and the novelty of the study in advancing Islamic Religious Education (PAI) learning strategies in the digital age.

AI and the Transformation of PAI Pedagogical Paradigms

The findings indicate that the integration of AI in PAI learning strategies represents a significant shift from traditional teacher-centered pedagogy toward learner-centered and adaptive learning models. This transformation aligns closely with constructivist learning theory, which posits that knowledge is actively constructed by learners through interaction, reflection, and contextual engagement (Piaget, 1972; Vygotsky, 1978). AI-supported learning environments operationalize constructivist principles by enabling dynamic feedback, personalized content delivery, and interactive learning experiences that respond to learners' cognitive and affective needs. In the context of PAI, this pedagogical shift is particularly significant. Islamic Religious Education has historically emphasized transmission of religious knowledge (ta'lim) and moral instruction (tarbiyah akhlāqiyyah) through authoritative teaching. While these elements remain essential, the digital age demands pedagogical approaches that foster critical reflection, contextual understanding, and moral reasoning. The findings suggest that AI can facilitate this transition by supporting reflective and experiential learning processes, enabling students to internalize Islamic values in ways that are meaningful and relevant to their lived realities.

Personalized Learning and Differentiated Religious Instruction

One of the most salient findings of this review is the role of AI in enabling personalized learning within PAI. From a theoretical standpoint, personalized learning aligns with differentiated instruction theory, which emphasizes tailoring learning experiences to individual learners' readiness, interests, and learning profiles (Tomlinson, 2014). AI technologies, such as adaptive learning systems and learning analytics, provide practical mechanisms for implementing differentiated instruction at scale. In PAI learning, personalization addresses a critical pedagogical challenge: students' diverse levels of religious understanding, moral development, and socio-cultural backgrounds. The reviewed studies demonstrate that AI can support differentiated religious instruction by adjusting content complexity, pacing, and instructional strategies. This finding extends existing literature on AI in general education by highlighting its applicability to value-laden and normatively oriented subjects such as Islamic Religious Education. Thus, AI is

not limited to cognitive skill development but can also support affective and moral learning domains when appropriately designed.

AI, Engagement, and Transformative Learning in PAI

The enhancement of student engagement identified in the findings can be interpreted through the lens of transformative learning theory. Transformative learning emphasizes critical reflection, perspective transformation, and the reconstruction of meaning structures (Mezirow, 1997). AI-supported learning environments, particularly those incorporating simulations, scenario-based learning, and conversational agents, create opportunities for students to engage in reflective dialogue and moral reasoning. In PAI contexts, transformative learning is essential for fostering deep internalization of Islamic values rather than superficial compliance. The findings suggest that AI-driven scenarios presenting ethical dilemmas grounded in Islamic teachings encourage students to reflect on their beliefs, assumptions, and actions. This supports the argument that AI can function as a catalyst for transformative religious learning, provided that pedagogical design prioritizes ethical reflection and spiritual development.

Moral and Character Education: Integrating AI with Islamic Ethical Frameworks

A central contribution of this study lies in its exploration of AI's role in supporting moral and character education within PAI. Islamic education is fundamentally concerned with the formation of *akhlak* (moral character) and ethical conduct. The findings indicate that AI can support these objectives by facilitating reflective learning processes, contextual moral reasoning, and continuous feedback. From an Islamic philosophical perspective, moral education involves the integration of knowledge (*'ilm*), action (*'amal*), and ethical intention (*niyyah*). AI technologies, when used responsibly, can support this integration by providing learning environments that encourage reflection on ethical choices and consequences. However, the discussion also underscores that AI must remain a pedagogical tool rather than a moral authority. This distinction is critical to preserving the epistemological foundations of Islamic education, which are rooted in divine revelation and scholarly interpretation (Nasr, 2010; Rahman, 1982).

Ethical Implications and the Role of Islamic Digital Ethics

The ethical challenges identified in the findings such as data privacy, algorithmic bias, and digital dependency resonate with broader debates in AI ethics (Floridi et al., 2018). In PAI learning, these challenges acquire additional significance due to the moral and spiritual dimensions of religious education. The discussion highlights the potential of PAI to contribute to the development of Islamic digital ethics by integrating ethical reflection on AI use into the curriculum. This approach aligns with virtue ethics frameworks, which emphasize moral character and ethical responsibility over rule-based compliance. By engaging students in ethical discussions about AI from an Islamic perspective, PAI can foster digitally literate individuals who are capable of navigating technological advancements responsibly. This represents a theoretical extension of existing AI ethics

discourse by incorporating religious and value-based perspectives that are often underrepresented in mainstream educational technology research.

Teacher Competence and the TPACK Framework in PAI

The findings regarding teacher readiness underscore the relevance of the Technological Pedagogical Content Knowledge (TPACK) framework in the context of AI integration in PAI. TPACK emphasizes that effective technology integration requires the intersection of technological knowledge, pedagogical knowledge, and content knowledge (Mishra & Koehler, 2006). In PAI learning, this intersection must also include ethical and theological considerations. The discussion suggests that professional development programs for PAI teachers should move beyond basic technological training to include pedagogical design principles and ethical reflection related to AI use. This expanded interpretation of TPACK represents a novel contribution by situating AI competence within a value-oriented educational framework. It highlights the need for teacher education models that integrate technology, pedagogy, content, and ethics holistically.

Novelty and Contribution

The novelty of this study lies in its integrative and interdisciplinary approach to examining AI in Islamic Religious Education. While existing Scopus-indexed research on AI in education predominantly focuses on cognitive skill development in STEM or language learning, this study extends the discourse to religious and moral education. By synthesizing AI, pedagogical theory, and Islamic educational philosophy, this research addresses a significant gap in the literature. Furthermore, the study contributes conceptually by reframing AI as a transformative pedagogical agent rather than a mere technological tool. This reframing challenges technocentric narratives and emphasizes the importance of ethical and pedagogical intentionality in AI integration. In doing so, the study aligns with emerging calls for human-centered and value-driven AI in education (OECD, 2021).

Implications for Theory and Future Research

The discussion highlights several implications for theory and future research. Theoretically, the findings support the extension of constructivist and transformative learning theories into religious education contexts mediated by AI. They also suggest the need for a conceptual framework that integrates AI, pedagogy, and Islamic ethics explicitly. Future research should focus on empirical investigations of AI-based PAI learning interventions across diverse educational contexts. Longitudinal studies examining the impact of AI on students' moral development, religious understanding, and digital ethics are particularly needed. Additionally, comparative studies between AI-supported and traditional PAI learning models would provide valuable evidence to inform pedagogical decision-making.

CONCLUSION

This study concludes that the integration of Artificial Intelligence (AI) into Islamic Education (PAI) learning strategies in the digital era offers substantial potential to enhance the effectiveness, personalization, and adaptability of the learning process. Based on the Systematic Literature Review conducted using the PRISMA 2020 framework, the findings demonstrate that AI technologies such as intelligent tutoring systems, learning analytics, and adaptive learning platforms can support differentiated instruction, improve students' engagement, and provide data-driven feedback for educators. These technological affordances align with contemporary pedagogical demands for learner-centered and outcome-oriented education. However, the study also highlights that the successful implementation of AI in PAI learning is highly dependent on pedagogical readiness and ethical awareness. Without a strong integration of pedagogical frameworks, particularly Technological Pedagogical Content Knowledge (TPACK), AI risks being utilized merely as a technical tool rather than as a meaningful educational instrument. Moreover, from the perspective of Islamic educational philosophy, AI must be positioned as a supportive medium that reinforces moral values, spiritual development, and character education, rather than replacing the humanistic role of teachers as moral exemplars. In conclusion, this research emphasizes that AI-driven PAI learning should be grounded in a value-based and ethical framework to ensure a balanced integration between technological innovation and spiritual-humanistic education. Such an approach not only enhances learning quality but also ensures the sustainability and relevance of Islamic education in responding to the challenges of the digital age.

REFERENCES

- Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, 8, 75264–75278. <https://doi.org/10.1109/ACCESS.2020.2988510>
- Fisher, D., Goddu, M., & Keil, F. C. (2015). Searching for explanations: How the Internet shapes learning. *Trends in Cognitive Sciences*, 19(8), 455–461.
- Floridi, L., Cowls, J., Beltrametti, M., et al. (2018). AI4People—An ethical framework for a good AI society. *Minds and Machines*, 28(4), 689–707.
- Huda, M., Jasmi, K. A., Mustari, M. I., Basiron, B., Sabani, N., & Shahrill, M. (2017). Innovative teaching in Islamic education. *Educational Research Reviews*, 12(19), 899–912.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 74, 5–12.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.

- Nasr, S. H. (2010). *Islamic philosophy from its origin to the present*. SUNY Press.
- OECD. (2021). *Artificial intelligence, big data and education*. OECD Publishing.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *372*, n71. <https://doi.org/10.1136/bmj.n71>
- Piaget, J. (1972). *The psychology of the child*. Basic Books.
- Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, *12*(1), 1–13.
- Rahman, F. (1982). *Islam and modernity: Transformation of an intellectual tradition*. University of Chicago Press.
- Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.
- Spector, J. M. (2014). Conceptualizing the emerging field of smart learning environments. *Smart Learning Environments*, *1*(1), 1–10.
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners*. ASCD.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI in education. *Learning, Media and Technology*, *45*(3), 223–235.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, *16*(1), 1–27.