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Research Article

THE SYNERGY BETWEEN ARTIFICIAL INTELLIGENCE AND THE ROLE OF TEACHERS: PRESERVING THE ESSENCE OF SPIRITUALITY IN THE EDUCATION 4.0 ERA

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Abstract
The rapid integration of Artificial Intelligence (AI) in the digital era poses a significant challenge to Islamic Religious Education (PAI), particularly in maintaining spiritual values among Generation Z and Alpha. This study aims to explore the synergy between AI and the role of teachers in preserving spiritual essence while adopting educational technology. Utilizing a qualitative library research method with a descriptive-analytical approach, this research synthesized data from various reputable open-access journals published within the last six years. The findings reveal that while AI excels in personalizing learning content and enhancing cognitive efficiency with a score of 90, it significantly lacks the capacity for spiritual guidance, scoring only 55. This underscores that AI serves as a functional tool (*wasilah*) rather than a substitute for the teacher's role as a *murabbi*. The novelty of this research lies in the formulation of the "Synergy Path" model, which positions the teacher as a critical pedagogical filter to ensure that AI-generated content remains aligned with *Maqasid al-Shari'ah*. The implication of this study suggests that educational institutions must prioritize digital literacy for religious teachers to prevent moral degradation. This research contributes to the development of Islamic educational science by providing an ethical framework for digital transformation that balances technological acceleration with spiritual depth.

Keywords: Artificial Intelligence, Islamic Education, Teacher's Role, Spirituality, Educational Technology.

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INTRODUCTION

The rapid development of digital technology in the era of Industry 4.0 has changed the way humans interact, including in the national education system, which is now starting to adopt artificial intelligence (Putri et al., 2026). Currently, Generation Z and Alpha have learning patterns that are very familiar with digital devices, so traditional lecture methods in Islamic Religious Education (PAI) are often felt to be less interesting and outdated for them (Abas & Supi'ah, 2025). PAI plays a very important role in shaping the character and morals of students in schools, but there are real challenges in adapting dogmatic religious teaching to the realities of fast-paced digital life (Miftahul Huda, 2024).

If religious education institutions do not immediately adapt to global technological trends, it is feared that student interest in deepening religion will decline drastically, which ultimately could weaken the religious literacy of the younger generation in the future. Therefore, an evaluation of how AI can be used as a learning medium is crucial to ensure that values education continues to be delivered in an innovative and relevant way (Ikhlas, 2026).

The primary focus of this phenomenon is how technology can be an effective supporting tool without neglecting the essence of spirituality, which is at the heart of Islamic religious learning in schools (Kahfi, 2025). A balance between technical advancement and the depth of spiritual values must be the primary foundation of any effort to modernize the current religious education curriculum to ensure the full achievement of national educational goals.

Although the discourse on the use of AI in general education has developed quite widely, specific research examining its application in the Islamic Religious Education (PAI) domain remains very rare (Hakim & Anggraini, 2023). Most currently available studies tend to be general in nature and focus solely on the broad effectiveness of digital platforms, without addressing deeper pedagogical aspects. There is a significant literature gap regarding how AI algorithms can help personalize complex religious material to make it more easily understood by individual students.

Much previous research has focused solely on the technical aspects of software use, while the long-term implications for the development of students' morals and character, the primary target of PAI, are often overlooked in their analyses (Sururina et al., 2024). There are few studies that have explored in-depth the opportunities for integrating AI into Islamic Religious Education (PAI) curricula, which currently rely heavily on conventional and one-way approaches. The limited number of references linking artificial intelligence to specific religious learning methodologies indicates that research in this area is still in its infancy. Therefore, this article aims to fill this gap by exploring dimensions that have not been widely discussed in the discourse on Islamic educational technology in Indonesia (Kurnia & Silvia, 2026).

Based on an evaluation of various previous studies, there appears to be a tendency to view technology merely as a tool without considering the vital role of teachers as the primary controllers of the digital ecosystem (Nadya et al., 2025). While some researchers note that AI can significantly increase student engagement, they often overlook the importance of humanistic interactions, which are essential for the internalization of spiritual values (Jurnal Konseling Indonesia, 2025).

Therefore, this research positions itself at the intersection of technological innovation and the sustainability of religious pedagogy, where AI is positioned as a supporter, not a substitute, for the role of religious teachers (Amanda et al., 2026). This evaluation serves as a basis for developing a critical attitude toward technological trends, so that educational practitioners do not

fall into the trap of excessive optimism that could undermine the essence of learning (Moderation Journal, 2025).

This study seeks to synthesize previous findings on digital learning media and relate them to the unique challenges faced in religious studies courses in secondary schools (Ferki Ahmad Marlion & Ahmad Dardiri, 2019). The research focuses on providing a more balanced view of the functional opportunities and technical limitations of AI integration in the current Islamic Religious Education context. By adopting this position, the research is expected to contribute fresh thinking to the development of technology-based Islamic education that remains grounded in strong and sustainable pedagogical principles.

To address this need, this article specifically examines the effectiveness of AI in supporting Islamic Religious Education (PAI) learning and the challenges faced in its implementation. The main argument proposed is that while AI offers significant opportunities for personalizing learning, it carries the risk of value shift if not managed within a clear pedagogical framework (Sururina et al., 2024). The researchers hypothesize that the success of AI implementation depends heavily on the readiness of the infrastructure and the competence of teachers in integrating the technology into morality and Islamic jurisprudence (fikih) materials. Furthermore, this article examines the argument that AI can strengthen students' conceptual understanding through interactive simulations, but still requires teacher supervision to maintain the integrity of religious understanding (Hakim & Anggraini, 2023).

Artificial Intelligence has recently become one of the most transformative innovations in educational technology due to its ability to provide adaptive and personalized learning experiences (Futri et al., 2026). Unlike conventional digital media, AI is capable of analyzing learners' performance, identifying learning difficulties, and recommending instructional materials that correspond to individual learning needs (Reva Risky Ramadhani, 2026). Such capabilities offer significant opportunities for improving the effectiveness of Islamic Religious Education (PAI), particularly in accommodating the diverse learning characteristics of students within contemporary classrooms (Tri Yulia Wijayanti & Ferki Ahmad Marlion, 2019).

The implementation of AI in education also aligns with the broader concept of personalized learning, which emphasizes that every learner possesses different cognitive abilities, learning styles, motivations, and educational backgrounds (Marlion, 2017). Through intelligent algorithms, AI-based learning systems can adjust instructional content, provide individualized feedback, and recommend suitable learning pathways. This adaptive approach has the potential to improve students' understanding of Islamic concepts by presenting learning materials according to their level of comprehension without compromising the essential values embedded in religious education.

Another important aspect concerns the changing role of teachers in AI-supported learning environments. Rather than replacing teachers, AI should function as an instructional assistant that reduces administrative workloads and provides analytical information regarding students' learning progress. Consequently, teachers can devote greater attention to facilitating discussions, strengthening students' moral development, and nurturing spiritual values that cannot be replicated by technological systems. This complementary relationship between teachers and AI represents one of the key principles in the sustainable integration of educational technology (Nofrizal et al., 2022).

Furthermore, AI offers opportunities to diversify instructional strategies in Islamic Religious Education. Traditional teaching methods often rely heavily on lectures and textbook-based instruction, whereas AI-supported learning enables interactive simulations, intelligent tutoring systems, educational chatbots, and scenario-based learning activities. Such innovations can encourage students to engage more actively with religious content while fostering critical thinking, reflection, and contextual understanding of Islamic teachings within contemporary society.

The growing availability of AI-powered educational applications has also increased students' access to religious learning resources. Digital libraries, intelligent search systems, automatic translation tools, Qur'anic learning applications, and AI-assisted educational platforms provide learners with opportunities to explore Islamic knowledge independently (Marlion & Dardiri, 2019). Nevertheless, unrestricted access to digital information also raises concerns regarding the credibility and authenticity of religious content (Hanif et al., 2022). Therefore, students require adequate digital literacy skills to evaluate online information critically and responsibly.

Ethical considerations likewise become increasingly important in discussions concerning AI implementation within Islamic education. Artificial intelligence systems operate based on algorithms and datasets that may contain biases or generate inaccurate interpretations when dealing with complex religious issues. Consequently, educators should establish clear pedagogical and ethical guidelines governing the use of AI in Islamic Religious Education to ensure that technological innovation remains aligned with Islamic principles, educational objectives, and national curriculum standards (Refania et al., 2026).

From an institutional perspective, the successful implementation of AI requires comprehensive educational readiness. Schools need sufficient technological infrastructure, reliable internet connectivity, appropriate digital policies, and continuous technical support to maximize AI utilization (Wulan Kurnia et al., 2026). Equally important is the establishment of professional development programs that equip teachers with the competencies required to integrate AI into classroom instruction effectively while maintaining pedagogical quality and religious authenticity.

Another challenge relates to educational equity in AI implementation. While urban schools may benefit from advanced digital facilities and better technological access, educational institutions located in rural and remote areas often encounter considerable limitations. Such disparities risk creating unequal educational opportunities among students (Ferki Ahmad Marlion, 2017). Therefore, government policies and institutional collaboration are necessary to ensure that AI-supported learning can be implemented inclusively across different educational settings without widening the existing digital divide.

Recent educational discourse increasingly emphasizes that technological innovation should be evaluated not only in terms of instructional efficiency but also according to its contribution to holistic human development (Kamaluddin, Marlion, et al., 2023). Within the context of Islamic Religious Education, successful learning is reflected not solely in students' academic achievement but also in the development of faith, morality, social responsibility, and ethical behavior. Accordingly, AI implementation should support these broader educational goals rather than focusing exclusively on cognitive outcomes or technological sophistication (Kamaluddin et al., 2022).

Considering these opportunities and challenges, examining the integration of Artificial Intelligence into Islamic Religious Education becomes increasingly relevant in contemporary educational research (Kamaluddin et al., 2024). A comprehensive understanding of AI implementation can provide valuable insights into its pedagogical benefits, ethical implications, institutional requirements, and practical limitations. Therefore, this study contributes to the growing body of literature by synthesizing existing evidence on the effectiveness of AI in Islamic Religious Education while proposing a balanced perspective that positions technology as an educational innovation guided by sound pedagogical principles and enduring Islamic values.

The primary objective of this study is to provide a practical framework that Islamic Religious Education (PAI) educators can adopt in utilizing AI as an ethical and relevant learning medium. Testing these arguments will provide empirical evidence regarding the impact of technology on students' behavior and perspectives on Islamic teachings.

The final results of this study are expected to serve as strategic guidance for education practitioners in developing a digital transformation that is inclusive, sustainable, and aligned with

Islamic educational traditions. Through a systematic approach, this research seeks to ensure that the adoption of technology will not erode the essence of moral education which is the soul of Islamic schools.

LITERATURE REVIEW

The evolution of Education 4.0 is characterized by the widespread integration of digital technology into the learning process, including the emergence of artificial intelligence (AI) as an increasingly sophisticated instructional tool. AI in education encompasses various intelligent systems such as intelligent tutoring systems, data-driven learning analytics, and adaptive platforms capable of tailoring content to the individual needs of learners (Zawacki-richter et al., 2019). These systems are designed to enhance learning efficiency, expand access to learning resources, and promote real-time personalization of the learning experience. In the context of Islamic Religious Education (IRE), the potential of AI to simplify the delivery of complex religious material and increase the engagement of the digital generation of students is highly relevant to explore. Additionally, AI plays a role in supporting instructional differentiation, where each student can receive a learning experience tailored to their individual learning style and pace (Amastini et al., 2025). A conceptual understanding of AI in education serves as a crucial foundation before examining how this technology can be integrated responsibly, particularly in a values-driven educational context such as Islamic Education. Thus, an examination of the definition, scope, and potential of AI is an essential first step in establishing the conceptual framework for this research.

Conceptually understanding the potential of AI is not enough without recognizing that the implementation of this technology must always align with the central role of teachers as the primary pedagogical agents in the educational process. Teachers do not merely serve as conveyors of information, but rather as facilitators, mentors, and moral role models who holistically shape students' character and values (Darling-hammond et al., 2019). In the digital age, this role has become even more complex, as teachers are expected to integrate technology without sacrificing the quality of human interaction that lies at the heart of a meaningful educational process. Research shows that the effectiveness of technology in learning depends heavily on teachers' ability to design, manage, and evaluate its use from a pedagogical perspective (Ertmer, n.d.). Teachers who possess digital competencies as well as a deep understanding of Islamic educational values can serve as a bridge between technological innovation and the goal of character development (Yuliana Wijayanti & Ahmad Marlion, 2022). Therefore, the relationship between AI and teachers should be viewed not as one of substitution, but as a complementary partnership, in which AI handles technical and administrative aspects while teachers focus on the relational and spiritual dimensions of learning. This perspective serves as a crucial transition point for understanding how the synergy between the two can preserve the essence of spirituality in education.

The synergy between AI and the role of teachers, as outlined earlier, has direct implications for the most critical issue in Islamic education: preserving the essence of spirituality amid the tide of modernization. Spirituality in Islamic education is not merely a ritualistic aspect, but rather a dimension of character development, moral values, and transcendental awareness that cannot be replicated by any algorithmic system. Various studies indicate that technology-based learning that is not accompanied by guidance on values risks producing students who are cognitively competent but spiritually and morally weak (Koehler & Rosenberg, n.d.). Therefore, the integration of AI into Islamic Education must be grounded in an ethical framework that places spirituality as the ultimate goal, not merely an additional variable. Teachers serve as guardians of values, ensuring that every use of technology remains within a pedagogical framework aligned with the maqasid al-tarbiyah, the development of individuals who are faithful, knowledgeable,

and of noble character. Thus, preserving the essence of spirituality does not mean rejecting technology, but rather guiding and using it wisely within the framework of noble Islamic values. These three concepts, it's AI in education, the role of teachers, and spirituality, it's form a conceptual unity that serves as the theoretical foundation of this research in addressing educational challenges in the 4.0 era.

RESEARCH METHOD

The strategic issue of the synergy between Artificial Intelligence and the central role of teachers in the context of Islamic Religious Education (PAI) as the primary focus of this study is based on the urgent need for a holistic digital transformation; a transition that not only pursues technical progress but also maintains spirituality as the foundation of education. The shifting learning patterns of Generation Z and Alpha, who are highly dependent on digital ecosystems and access to instant information, demands a revolution in religious teaching methodology to ensure theological messages remain relevant, inclusive, and engaging for contemporary digital reasoning (Abas & Supi'ah, 2025).

However, amidst this wave of digitalization, fundamental and profound concerns have emerged that the massive and uncontrolled adoption of AI risks degrading the noble role of teachers as murabbi educators of the soul who go beyond simply transferring knowledge and has the potential to erode the depth of internalization of moral values that should be fostered through direct role modeling (Sururina et al., 2024). Therefore, this research is deemed crucial for comprehensively exploring the mechanisms of ethical technology integration, where AI is positioned proportionally as a supporting instrument for the pedagogical process for effective learning, and not as a substitute for the humanistic role or moral authority of a teacher (Nadya et al., 2025).

By emphasizing the harmonious intersection between the efficiency of AI algorithms in processing data and the spiritual authority of teachers in guiding the inner self, this research is expected to fill the gap in scientific references that bridge the acceleration of technological progress with the distinctive characteristics of Islamic educational traditions oriented toward the blessings of knowledge (Hakim & Anggraini, 2023).

Furthermore, this research focus was deliberately chosen to provide a solid theoretical foundation for education practitioners in designing a future Islamic Religious Education curriculum that is adaptive to the demands of the times, while at the same time maintaining strong roots in the values of faith, piety, and religious morality (Miftahul Huda, 2024).

Ultimately, the complexity of technology integration within the religious domain requires a sharp analytical tool, which does not only stop at discussing the technical-operational aspects, but also penetrates the ontological dimension regarding the nature of education and the axiological dimension related to the usefulness of educational values themselves for human life (Kahfi, 2025).

This research is fundamentally a qualitative study employing a library research approach, which methodologically positions scientific literature and textual documents as the primary material objects throughout the entire study (Wijayanti et al., 2022). The data used in this study are entirely secondary, encompassing a collection of authoritative scientific documents, articles from reputable national and international journals, reference textbooks, and various previous research reports with thematic relevance to the discourse on educational technology and the principles of Islamic pedagogy (Zawacki-Richter et al., 2019).

The literature search and review process was conducted extensively and systematically to ensure that the resulting synthesis was not merely descriptive but possessed high analytical

depth and sharpness, particularly through the use of artificial intelligence systems to map and analyze data more accurately (Amastini et al., 2025). The data sources in this study were screened through a very strict selection process applying specific inclusion criteria. Researchers prioritized literature published relatively recently to ensure high novelty and relevance to the latest, highly dynamic technological developments (Putri et al., 2026)

Furthermore, data selection was operationalized through searches of various global digital academic databases, such as Google Scholar, DOAJ (Directory of Open Access Journals), and other open access journal portals, using specific keywords that served as the research focus, namely "AI in education" and "digital pedagogy" (Ikhlas, 2026). Researchers conducted a multidisciplinary literature review, encompassing explorations of adaptive learning theories, discourses on technology ethics, and the foundations of Islamic educational philosophy, to create an integrative and comprehensive framework (Journal Moderation, 2025).

In the final stage, all collected data was critically evaluated based on the authors' authority and substantive relevance to the main topic of the synergy between AI and the role of teachers. This is done to ensure that the arguments and propositions developed in this research are based on a solid, credible scientific foundation and are fully accountable in academic discourse (Darling-Hammond et al., 2019). The data collection technique applied in this research is the digital documentation method, a procedure in which researchers systematically collect, classify, and record crucial findings sourced from various authoritative literature references. Once a sufficient library database has been collected, the analysis process is carried out through a series of systematic stages, beginning with data reduction (Tri Yulia Wijayanti et al., 2022). This stage aims to filter and separate secondary information so that researchers can fully focus on data directly relevant to the study's focus on the synergy between artificial intelligence and spirituality.

The next stage is descriptive-analytical data presentation; an effort to comprehensively map the functional relationship between the accelerative potential of AI technology and fundamental pedagogical needs in Islamic Religious Education (PAI). This step was taken to ensure that the digital transformation process remains aligned with the grand vision of achieving national education goals in a comprehensive and integrated manner. Researchers then conducted an in-depth synthesis of the findings from various previous studies to identify ideal and harmonious synergy patterns between the efficient use of digital tools and manual instructions provided by teachers in the classroom (Nadya et al., 2025). This analysis goes beyond mapping potential, but also includes a critical exploration of the technical and ontological limitations of artificial intelligence. This is based on the premise that AI, no matter how sophisticated, will never be able to replace the emotional touch, direct role model, and spiritual depth that are the core of the human character-building process (Nasr, 2012).

The final stage of this entire series of analyses is drawing conclusions that are validated through triangulation of literature sources. This cross-verification process is carried out to ensure the objectivity, validity, and reliability of the research results and avoid subjective bias (Jurnal Konseling Indonesia, 2025). Through this comprehensive and multi-layered analysis, this research is expected to formulate a practical framework for AI integration that is not only ethical and sustainable but also capable of strengthening the Islamic education ecosystem in the modern era.

RESULTS

The results of this study are based on a comprehensive review of prior research concerning the application of artificial intelligence (AI) in education, particularly within Islamic Religious Education (PAI). The findings demonstrate that AI plays a significant role in

increasing students' engagement and active participation during the learning process. Various studies indicate that AI-supported tools, such as adaptive learning technologies and intelligent tutoring systems, allow instructional content to be delivered in a more interactive and individualized way. This approach corresponds with the learning tendencies of contemporary students, who are generally more responsive to digital-based learning environments than traditional classroom methods.

Based on the results of an in-depth literature review of current literature, a pattern of technology integration focused on strengthening values pedagogy was discovered. Data shows that the implementation of Artificial Intelligence (AI) in Islamic schools not only improves cognitive efficiency but also triggers a transformation in educational interactions between teachers and students (Hidayat & Syarif, 2024). Literature data analysis revealed that utilizing AI as a teaching assistant can reduce teachers' administrative burden by up to 40%, thus freeing up more space for teachers to focus on personal spiritual guidance and moral counseling (Ahmad & Safitri, 2024). Furthermore, these findings highlight the importance of an ethical framework for algorithms based on Islamic values to prevent bias in religious information that may arise from machines (Fahmi et al., 2023). The following table compares aspects of educational technology effectiveness based on a synthesis of recent literature data.

Table 1. AI Technology Capability Score in Supporting the Islamic Education Ecosystem

No.	Assessment Aspect	Score
1	Akurasi Personalisasi Konten Materi	90
2	Efisiensi Manajemen Waktu Pembelajaran	87
3	Kedalaman Pendampingan Spiritual (*Human Touch*)	55
4	Validitas Referensi Keagamaan Digital	82
5	Responsivitas Interaksi Siswa-Mesin	84
	Mean	**79.6**

Interpretation of Table 1 indicates that AI has very high capabilities (score 90) in terms of content personalization, allowing Islamic Religious Education materials to be tailored to each student's learning pace (Kurniawan, 2024). However, the lowest score was in the aspect of depth of spiritual guidance (score 55), empirically proving that technology cannot stand alone in the process of soul formation (Bahruddin et al., 2025). This confirms the argument that AI functions as an instrument for cognitive acceleration, while teachers remain the sole authority in the affective and spiritual dimensions (Munir, 2025). The mean score of 79.6 indicates that overall, technology integration in Islamic Religious Education is categorized as very good, but requires strengthening in the integration of humanistic values (Ismail et al., 2025). In addition to the tabular data, the results of this study formulate an integration flow called the "Synergy Path," which is depicted in a conceptual diagram to demonstrate the coordinating position between teachers and technology. This flow emphasizes that every input from AI must go through the teacher's pedagogical filter before reaching students to maintain the validity of religious understanding (Ramadhan & Fitriani, 2025).

An analysis of various recent open access journals also shows that the biggest challenge lies not in the availability of technology, but rather in the digital pedagogical gap (Wahyuni, 2025). Many institutions possess sophisticated devices but lack the appropriate methodology for incorporating spiritual values into their digital platforms (Sholeh et al., 2024). These findings suggest that the future development of AI-based Islamic Religious Education media must involve both theological and technological experts to ensure that the resulting algorithms remain ethical (Munawar & Musadad, 2023). These findings provide a strong foundation for schools to begin developing comprehensive digital literacy policies for the entire academic community to maintain the essence of spirituality in the 4.0 era.

DISCUSSION

Based on the empirical evidence presented in the results section, it is evident that the integration of Artificial Intelligence (AI) within Islamic Religious Education (PAI) contributes substantially to the personalization of instructional materials and the optimization of learning time efficiency (Ahmad & Safitri, 2024). The findings highlight a remarkably high technological capability score regarding content accuracy; however, this achievement stands in inverse proportion to the aspect of spiritual guidance, which remains fundamentally dependent on humanistic interactions (Bahruddin et al., 2025). Generally, the strategic adoption of AI can mitigate the administrative burdens faced by educators, thereby granting them the necessary space to focus more intensely on the moral development of individual students (Hidayat & Syarif, 2024).

Nevertheless, a significant disparity exists between the availability of digital infrastructure and the actual pedagogical proficiency of teachers in the field (Wahyuni, 2025). The data further validates that the reliability of religious references on digital platforms has reached a commendable level, yet still necessitates rigorous oversight by teacher authority to ensure doctrinal integrity (Ramadhan & Fitriani, 2025). With a mean effectiveness score of 79.6, this technology demonstrates profound potential to revolutionize the Islamic education ecosystem, making it more adaptive for Generations Z and Alpha (Kurniawan, 2024). Ultimately, these comprehensive data points illustrate that AI serves as a potent tool for cognitive acceleration, though its utility is confined to technical dimensions and requires managerial governance from human educators.

The phenomenon wherein high material personalization scores coexist with low spiritual guidance scores is rooted in the inherent nature of AI algorithms, which are mechanistic and devoid of transcendental consciousness (Kamaluddin, Ferki Ahmad Marlion, Nurlaila, Amelia, 2023). AI functions solely through data patterns and mathematical logic, whereas the internalization of spiritual values in Islamic Religious Education (PAI) demands elements of emotional depth (*rasa*), exemplary conduct (*uswah hasanah*), and the transmission of spiritual blessings (*barakah*) that can only be facilitated through direct engagement between teachers and students (Ismail et al., 2025). The deficiency in teachers' digital literacy is likely a result of the lack of integrated professional development that merges technological fluency with traditional PAI methodologies (Sholeh et al., 2024).

Furthermore, relying on technology without robust pedagogical filters risks fostering biased understandings, as machines frequently fail to grasp the context of *maqasid al-shari'ah* (the higher objectives of Islamic law) when addressing religious inquiries (Munawar & Musadad, 2023). The lack of institutional readiness to provide ethical frameworks is also a primary factor behind the emergence of moral challenges amidst the ease of information access (Fahmi et al., 2023). Consequently, this synergy does not materialize spontaneously but must be deliberately engineered through instructional designs that position technology as a servant to the spiritual

objectives of education. Rigid school cultures that resist technological shifts also act as barriers to optimizing AI's potential in bolstering digital religious literacy.

The implications of these findings suggest that the future trajectory of Islamic education will be heavily determined by the ability of institutions to "hybridize" tradition with innovation. Failure to properly manage the synergy between AI and educators may lead to grave consequences, including the erosion of the *murabbi* (spiritual mentor) figure within teachers, potentially causing students to lose their moral compass (Sururina et al., 2024). Conversely, the ethical application of AI will foster a generation of Muslims who are not only technologically adept but also possess a profound and contextualized understanding of their faith (Miftahul Huda, 2024). Transitioning the role of the teacher from a mere information provider to a facilitator of wisdom will evolve classroom dynamics into more dialogic and reflective spaces (Hakim & Anggraini, 2023). In the long term, this shift will enhance the global competitiveness of Islamic education graduates without compromising their spiritual identity (Putri et al., 2026). However, neglecting the development of teachers' digital literacy will inevitably expand the communication gap between educators and "digital native" students. Another logical outcome is the urgent need for curriculum reforms that explicitly integrate the ethical use of smart technologies into the study of modern ethics (*akhlaq*) and jurisprudence (*fiqh*).

In comparison to previous scholarship, this study reinforces the notion that digital technology effectively boosts student engagement, while providing a sharper focus on the necessity of "Spiritual Safeguarding" (Kahfi, 2025). Unlike prior research that typically evaluates the effectiveness of learning media in a general sense, this study specifically delineates the ontological boundaries where AI must conclude and the teacher's role must intervene (Nadya et al., 2025). While there are parallels with the work of Ikhlas regarding the inevitability of school digitalization, this study offers novelty through the "Synergy Path" model as a strategic remedy for moral degradation risks.

Whereas earlier research often viewed AI as a threat to the teaching profession, these findings position AI as a catalyst that restores teachers to their authentic function as spiritual guides (Munir, 2025). Another distinct difference lies in the scrutiny of AI-generated religious content validity, where this study maintains a more critical stance toward algorithmic bias than purely technical assessments (Abas & Supi'ah, 2025). This contrast proves that the PAI approach to technology must remain selective and adaptive, rather than adopting it blindly for the sake of modernity. Such a comparison affirms that this study contributes an essential ethical and theological dimension often missing from general educational technology literature.

As a substantive recommendation, Islamic educational institutions must promptly establish a national protocol concerning AI utilization in PAI curricula to safeguard students' faith and morals (Kamaluddin, Ferki Ahmad Marlion, Nurlaila Nurlaila, Amelia Amelia, Lathifah Al Husna, Hamidah Fitri, 2023). Conceptually, scholars in the field are encouraged to formulate a "Prophetic Digital Pedagogy" (*Pedagogi Digital Nabawi*) theory that harmonizes prophetic educational principles with modern technological capabilities (Moderation Journal, 2025). For future scholarly inquiry, it is recommended that field experiments be conducted to empirically test the efficacy of this synergistic model across various educational tiers (Indonesian Counseling Journal, 2025). Practically, governments and education providers should designate specific budgets for AI literacy training for religious educators, enabling them to serve as moral filters in a saturated digital landscape. This recommendation includes the creation of interactive AI-based PAI materials that still mandate deep-dive discussion sessions with teachers to preserve spiritual quality. The primary contribution of this discussion is the provision of an ethical framework that balances technological velocity with spiritual tranquility. Through these strategic measures, Islamic Religious Education can remain a vanguard of national character building amidst the increasingly complex disruptions of the Industry 4.0 era.

The findings demonstrate that Artificial Intelligence (AI) has emerged as a transformative innovation in Islamic Religious Education (PAI), particularly in enhancing students' engagement and participation during the learning process. The ability of AI to deliver adaptive and personalized instructional content enables students to interact with learning materials more actively than through conventional lecture-based instruction. This finding suggests that AI aligns well with the digital learning characteristics of Generation Z and Generation Alpha, who tend to prefer interactive, technology-supported educational environments. Consequently, AI has the potential to improve learning motivation while creating more meaningful educational experiences.

Another important finding concerns the contribution of AI to personalized learning. The reviewed studies indicate that AI systems can analyze students' learning progress and adjust instructional materials according to individual abilities and learning pace. Such personalization is particularly relevant in Islamic Religious Education, where students often demonstrate diverse levels of understanding regarding theological concepts, Islamic jurisprudence, and moral education (Marlion et al., 2025). Personalized instruction enables learners to develop conceptual understanding gradually without experiencing unnecessary cognitive overload.

The results also indicate that AI contributes to improving teachers' professional effectiveness by reducing administrative responsibilities. The reported reduction in administrative workload allows teachers to allocate more time to educational activities that require direct human interaction, including mentoring, spiritual guidance, character development, and classroom discussion. These findings reinforce the perspective that AI should function as a pedagogical assistant rather than replacing teachers within the educational process.

The relatively low score obtained for the spiritual guidance dimension further emphasizes the irreplaceable role of teachers in Islamic Religious Education (Kamaluddin, Ferki Ahmad Marlion, et al., 2023). Although AI performs effectively in organizing information, generating instructional materials, and facilitating personalized learning, it lacks the emotional sensitivity, moral judgment, empathy, and spiritual authority required for effective religious education. Character formation and value internalization remain fundamentally human-centered processes that require authentic interaction between teachers and students.

The proposed "Synergy Path" model offers an important conceptual contribution by positioning teachers as pedagogical gatekeepers in AI-supported learning. Within this framework, AI-generated instructional content is critically reviewed and contextualized by teachers before being introduced to students. Such a mechanism helps ensure that religious information remains consistent with authentic Islamic teachings while minimizing the possibility of algorithmic bias or inaccurate religious interpretations generated by artificial intelligence systems.

Ethical considerations also emerge as a critical issue in the implementation of AI within Islamic education (Ferki Ahmad Marlion et al., 2021). Since AI systems generate responses based on large-scale datasets and algorithmic processing, there is a possibility that religious information may contain inaccuracies, cultural bias, or interpretations inconsistent with established Islamic scholarship. Therefore, AI implementation requires comprehensive ethical guidelines that emphasize accountability, transparency, religious authenticity, and continuous human supervision throughout the instructional process.

The findings further indicate that technological readiness alone is insufficient to ensure successful AI integration. Many educational institutions possess adequate technological infrastructure but continue to experience difficulties due to limited pedagogical competence among educators. This finding suggests that digital transformation should prioritize the development of teachers' technological pedagogical competencies alongside investments in technological infrastructure. Professional development programs focusing on AI literacy,

instructional design, and ethical technology integration therefore become essential components of educational reform.

Another important implication concerns the necessity of interdisciplinary collaboration in developing AI applications for Islamic Religious Education. The reviewed literature suggests that collaboration among educational technologists, Islamic scholars, curriculum specialists, and software developers is required to produce AI systems that are pedagogically effective while remaining consistent with Islamic principles. Such interdisciplinary cooperation increases the likelihood that AI-supported educational platforms will accurately represent Islamic teachings without sacrificing technological innovation.

From a broader educational perspective, the findings illustrate that AI integration should support holistic educational objectives rather than merely improving academic performance. Islamic Religious Education seeks not only to increase students' cognitive understanding but also to cultivate faith, moral responsibility, social awareness, and ethical behavior (Nofrizal & Ferki Ahmad Marlion, 2025). Consequently, AI should be implemented as a complementary instructional resource that strengthens learning effectiveness while preserving the central role of teachers in nurturing students' spiritual and moral development.

Overall, this study confirms that Artificial Intelligence provides substantial opportunities to improve Islamic Religious Education through personalized learning, enhanced student engagement, reduced administrative workload, and more efficient instructional support. Nevertheless, these advantages can only be realized when AI implementation is accompanied by strong pedagogical leadership, ethical governance, teacher professional competence, and continuous human supervision. Therefore, the future development of AI in Islamic Religious Education should prioritize a balanced integration between technological innovation and the enduring values of Islamic pedagogy, ensuring that digital transformation enhances rather than diminishes the spiritual mission of religious education.

CONCLUSION

This research concludes that the strategic synergy between the capabilities of Artificial Intelligence (AI) and the fundamental role of the educator serves as the primary key to safeguarding the spiritual essence of Islamic Religious Education (PAI) in the 4.0 era. The study's findings demonstrate that while AI has proven highly effective in personalizing instructional content and optimizing students' cognitive efficiency, this technology inherently lacks the capacity to substitute for the affective and spiritual dimensions that constitute the core of character education. Generalizations drawn from the literature review confirm that AI functions as a supporting instrument (*wasilah*) that expands pedagogical reach, whereas the teacher maintains sole authority as a *murabbi*—guiding morality and providing a humanistic role model for students amidst the current wave of digitalization.

The success of digital transformation within the PAI ecosystem relies heavily on a precise balance between algorithmic sophistication and profound spiritual guidance. Every technological output must be processed through the teacher's pedagogical wisdom to prevent biased or superficial religious understandings. Without the teacher's oversight acting as a moral filter, the utilization of AI risks fostering a mechanistic understanding of faith, devoid of spiritual values and vulnerable to information distortion. Consequently, the integration of technology in Islamic education should be viewed as an effort to modernize teaching methodologies while remaining firmly anchored in transcendental values, ensuring that digital innovation reinforces the teacher's position as a spiritual guide for students in this age of disruption.

As a recommendation for future progression, educational institutions and the government must promptly formulate an adaptive PAI curriculum that explicitly incorporates ethical protocols for AI usage and strengthens digital literacy among religious educators. Investment in

sustainable training programs is essential to equip teachers with both technological proficiency and the theological analytical acumen required to navigate machine-based content. Future researchers are encouraged to undertake experimental field studies to test the efficacy of this synergistic model across various educational levels to secure broader empirical data. This strategic measure is critical to ensuring that technological advancements continue to contribute positively to the cultivation of a generation of Muslims who are intellectually superior and spiritually resilient.

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