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Artificial intelligence: A review of the philosophy of Islamic educational science

Ade Hastuty¹, Maswati Maswati², Munawir Saharuddin², Abdul Muqtadir Sukri², Abdul Halik¹

¹Institut Agama Islam Negeri Parepare, Indonesia

²Universitas Muhammadiyah Parepare, Indonesia

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Abstract: The development of artificial intelligence (AI) has significantly impacted various aspects of life, including education. This study aims to explore the integration of AI within the context of Islamic education, focusing on the challenges and opportunities encountered. Utilizing a library research method, this research analyzes a range of literature discussing the relationship between AI and Islamic education, as well as the philosophical and ethical implications arising from this technological integration. The findings indicate that AI can enhance the learning experience through personalized learning, AI-based interactivity, and automated data analysis. However, challenges such as the digital divide and the potential dissemination of inaccurate content must also be addressed. This study recommends strategies to overcome these challenges, including technology literacy training for educators and the development of an integrated curriculum. With the right approach, AI has the potential to transform Islamic education, reinforcing spiritual and moral values while creating an educational system that is relevant to contemporary developments.

Keywords: Artificial intelligence, ethics, personalized learning, technology integration

Abstrak: Perkembangan kecerdasan buatan (ai) telah membawa dampak yang signifikan dalam berbagai aspek kehidupan, termasuk pendidikan. Penelitian ini bertujuan untuk mengeksplorasi integrasi AI dalam konteks pendidikan Islam, dengan fokus pada tantangan dan peluang yang dihadapi. Dengan menggunakan metode library research, penelitian ini menganalisis berbagai literatur yang membahas hubungan antara AI dan pendidikan Islam, serta implikasi filosofis dan etis yang muncul dari integrasi teknologi ini. Hasil penelitian menunjukkan bahwa AI dapat meningkatkan pengalaman belajar melalui pembelajaran yang dipersonalisasi, interaktivitas berbasis AI, dan analisis data otomatis. Namun, tantangan seperti kesenjangan akses teknologi dan potensi penyebaran konten yang tidak akurat juga perlu diatasi. Penelitian ini merekomendasikan strategi untuk mengatasi tantangan tersebut, termasuk pelatihan literasi teknologi bagi pendidik dan pengembangan kurikulum yang terintegrasi. Dengan pendekatan yang tepat, AI memiliki potensi untuk mentransformasi pendidikan Islam, memperkuat nilai-nilai spiritual dan moral, serta menciptakan sistem pendidikan yang relevan dengan perkembangan zaman.

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Kata kunci: Kecerdasan buatan, etika, pembelajaran yang dipersonalisasi, integrasi teknologi

*Corresponding author: <u>munawirs13@guru.smp.belajar.id</u>

INTRODUCTION

The advancement of artificial intelligence (AI) technology has entered a groundbreaking phase, marking one of the pivotal moments in the history of mankind (Brynjolfsson & McAfee, 2017). This transformation not only affects the way we interact with machines and information, but also raises complex philosophical and epistemological questions. This change challenges various paradigms of thinking that have been widely accepted in society (Ngapipi, 2014). In the digital era, AI is no longer just a tool or technical device to solve daily tasks; AI has evolved into an entity that triggers deep reflection on the limits of human intelligence, the nature of consciousness, as well as the fundamental

meaning of human existence (Harari, 2018). The swift progress of AI has profoundly influenced numerous sectors, particularly education (Zahara et al., 2023). In the world of education, AI is a key topic because it changes the way knowledge is given and received. Educators can now use AI-based tools to gain better information about student work, make data-driven decisions, improve management, and adjust teaching methods. AI technology also allows for personalized learning, so students get a more relevant and effective learning experience (Anwar, 2024).

Smart technology shows great potential in supporting learning. Teachers can identify patterns in student work and design more effective teaching strategies. AI's capability to streamline administrative tasks, like grading exams and managing schedules, helps reduce teachers' workload, thus allowing more time for direct interaction with students (Manongga et al., 2022). Additionally, AI is able to assess student performance on an ongoing basis and provide feedback to help them overcome barriers to learning (Firdaus et al., 2024). Nevertheless, incorporating AI into education comes with its own set of challenges. The technology access gap and the potential for the spread of inaccurate content are major concerns. Therefore, efforts are needed to improve technological literacy for educators, develop an integrated curriculum, and commit to using AI ethically in education.

Within the framework of Islamic education, the urgency of philosophical review is becoming increasingly relevant. Islamic philosophy has an important role in dealing with ideologies that are contrary to Islamic values, such as secularism and relativism. By understanding Islamic philosophy in depth, the ummah can maintain the purity of Islamic teachings and ensure that religious interpretations remain in accordance with fundamental values (Yusuf, 2016). In addition, the mastery of philosophical issues allows individuals to contribute to creating a better order of life, both intellectually and socially (Fakhruddin & Sutarto, 2021). In the context of integrating artificial intelligence into Islamic education, it is essential to examine it through the lens of Islamic educational philosophy, as this philosophy offers a robust moral and ethical foundation for shaping curricula and teaching methodologies.

The philosophy of Islamic education, which is rooted in the teachings of the Qur'an and Sunnah, emphasizes that education is not only a transfer of knowledge, but also a process of forming the character and morals of students. Thus, the application of AI in education must consider Islamic values so that technology is not only used for efficiency, but also to strengthen the higher educational goals, which are to create individuals who are knowledgeable, have noble character, and are able to contribute positively to society. It is important to ensure that Islamic education remains relevant and responsive to the times, without sacrificing the basic principles that are the foundation of Islamic education itself. This article aims to explore the development of AI, a global perspective on the AI paradigm, AI classification and typology, and the relevance and challenges of its integration in Islamic education. Through an analysis of existing research, this article aims to offer a thorough understanding of the current state of AI integration in Islamic education, emphasizing the potential advantages and the challenges that must be tackled. This analysis is the basis for a more in-depth exploration of specific applications of AI and future directions in this field.

METHOD

This study employs the library research method, selected for its ability to enable researchers to gather and analyze information from various written sources relevant to the topic under investigation: the relationship between artificial intelligence (AI) and the philosophy of science within the context of Islamic education. Literature research is an effective approach to explore theories, concepts, and previous studies related to the research theme (Zed, 2014). The research process starts with identifying relevant sources, including articles, journals, and books that explore AI, the philosophy of science, and Islamic education. Researchers utilized keywords such as "artificial intelligence in Islamic education," "philosophy of science," and "integration of technology in education" during the literature search. These keywords were chosen for their alignment with the research theme and the objective of understanding how AI can be integrated into Islamic education, as well as its influence on students' character and moral development. Considerations in obtaining a library also include the quality and credibility of the source, as well as its contribution to a deeper understanding of the topic being researched (Zed, 2014).

Once the relevant sources are identified, the researcher gathers data by reading and recording key information from each source. This process involves critically analyzing the content, considering both the positive and negative impacts of AI in educational contexts, as well as any ethical concerns that might arise. For example, Saili underscored the importance of ethics in the development of AI to ensure the responsible use of this technology in education (Nugroho, 2017). Moreover, other studies suggest that the integration of technology in Islamic education can enhance students' creativity and comprehension. (Isti'ana, 2024). Once the data is collected, the researcher analyzes the gathered information. This analysis involves identifying key themes, comparing different perspectives, and synthesizing the information to develop a more comprehensive understanding of the relationship between AI and Islamic education. In this process, it is essential to apply critical analysis standards, which include evaluating the arguments, methodologies, and outcomes of each source used (Arif et al., 2024). Therefore, this research goes beyond information gathering, aiming for a deeper understanding of the implications of AI usage in Islamic education.

RESULTS AND DISCUSSION

Current use of AI

AI has the potential to significantly enhance the education sector by providing personalized and adaptive learning experiences. By analyzing learning data, AI can customize teaching materials to suit each student's unique needs, which can lead to more effective and efficient learning outcomes. This ability to tailor education to individual strengths and weaknesses is particularly valuable in fostering an engaging and supportive learning environment (Susilo & Aritonang, 2023; Zawacki-Richter et al., 2019; Zhu et al., 2024). For example, AI-based education systems can optimize the education management process by collecting and analyzing data to support more effective decision-making. Studies indicate that AI not only aids in personalizing learning but also enhances the efficiency and productivity of education management processes, such as curriculum design and evaluation (Cayir, 2023; Siminto et al., 2023). However, the implementation of AI in education also presents ethical challenges that must be addressed. Discussions regarding transparency

and protection of student data are very important, especially in the context of algorithms used in AI-based education systems (Douali et al., 2022). Furthermore, the role of teachers in the age of machine-based learning is a subject of debate, due to the changes AI brings to teaching methods and student interactions (Aldosari, 2020). Thus, involving various stakeholders in the development and implementation of AI technology in education is crucial to ensure its ethical and responsible use (Klimova et al., 2023). While AI presents numerous opportunities to enhance the learning experience, it is essential to consider the ethical implications and the evolving role of teachers in this transformation. Further research is necessary to fully understand AI's impact on education and to determine how these technologies can be effectively integrated to promote improved learning outcomes (Begum, 2024; Erbaşı, 2023; Zheng & Badarch, 2022).

Additionally, the use of platforms like ChatGPT among college students shows how AI can help in the learning process, despite challenges related to ethics and reliance on this technology (Yahya et al., 2024). Studies reveal that the use of AI in education not only enhances learning outcomes but also promotes academic integrity by offering tools that facilitate collaboration and foster critical thinking among students (Manongga et al., 2022). In the media sector, AI has become an important tool in improving efficiency and creativity. In the media industry, the use of artificial intelligence (AI) has gained significant importance, particularly in automating content production and distribution processes, as well as analyzing audience preferences (Wilczek et al., 2024). Research by Wilczek Research indicates that the use of AI in content production can enhance efficiency and effectiveness in delivering news to audiences. Additionally, Lyu emphasized how AI can improve the user experience in news broadcasts by fostering more engaging interactions between virtual news readers and viewers (Lyu, et al., 2024). The study suggests that the presence of AI news readers can influence the audience's perception of news appeal, which in turn can increase audience engagement with the content presented. This shows that AI not only functions as a production tool, but also as an interactive element that can capture the audience's attention (Lyu, et al., 2024).

AI can be leveraged to analyze large datasets and assist in making better decisions regarding infrastructure planning and resource management. However, challenges related to policy and public acceptance of this technology must be addressed to fully optimize the benefits of AI (Heriyansyah & Purwanto, 2024). Overall, the current use of AI shows vast potential to improve various aspects of human life. However, it is crucial to consider the ethical and social challenges that may emerge with the adoption of these technologies. Therefore, additional research is necessary to examine the long-term impacts of AI across various sectors and to create policies that promote the responsible and sustainable implementation of AI.

The integration of AI in Islamic education

The integration of artificial intelligence (AI) in Islamic education has gained increasing relevance alongside the rapid advancement of technology. AI presents numerous opportunities to enhance teaching methods and deepen religious understanding, but it also brings challenges that need to be carefully addressed. This section will explore how AI is being utilized in Islamic education, along with the impacts and challenges it faces.

AI can significantly improve the learning experience of students by utilizing advanced data analysis tools. These tools can assist in the interpretation and comprehension of religious texts, such as the Qur'an and hadith, by identifying patterns, providing contextual understanding, and offering personalized learning pathways for students. Additionally, AI-powered platforms can offer interactive ways to engage with Islamic teachings, helping to foster a deeper connection to the material. However, the implementation of AI in this context must be thoughtfully managed to ensure it aligns with Islamic values and ethical considerations (Hakim et al., 2024). The judge noted that AI technology can facilitate critical thinking by providing in-depth analysis of the texts. As a result, students can gain a deeper understanding of the context and meaning of Islamic teachings, ultimately enhancing the quality of religious education. This personalized and context-driven approach can help students engage more effectively with Islamic texts and foster a stronger connection to their faith.

Moreover, AI can be utilized to develop more innovative and engaging learning methods, making the educational experience more interactive and appealing to students. By incorporating elements such as gamification, virtual reality, or personalized learning pathways, AI can help create a dynamic and stimulating environment that enhances students' understanding and interest in Islamic education. Research by shows that by utilizing AI technology, Islamic religious education can become more relevant for the younger generation (Hakim et al., 2024). For instance, AI-based apps in teaching can enable students to learn in a more interactive and enjoyable manner, which can increase their engagement in the learning process. While there are numerous opportunities, the use of AI in Islamic education also presents certain challenges. One of the primary concerns is the potential over-reliance on technology, which could lead to a diminished emphasis on critical thinking, personal reflection, and the guidance of educators in imparting religious knowledge. This balance between technology and traditional learning methods is crucial for maintaining the integrity of the educational process (Hakim et al., 2024). It has been warned that excessive reliance on AI could hinder students' creativity and critical thinking abilities. Therefore, it is essential to ensure that AI is used as a supportive tool, rather than replacing the more in-depth and reflective learning process that is vital for fostering independent thought and deeper understanding.

Furthermore, there are challenges related to Islamic ethics and values. It has been emphasized that while AI can expedite the dissemination of information and support da'wah activities, it is crucial to ensure that the use of this technology aligns with Islamic principles. This includes ensuring that AI applications respect the moral and ethical standards of Islam, particularly in terms of content, interactions, and the overall impact on students' values and behavior (Nissa et al., 2024). Therefore, the development of an Islamic education curriculum that incorporates AI technology must carefully consider ethical aspects and religious values, ensuring that the integration of technology enhances the educational experience without compromising the moral and spiritual foundation of the teachings (Hernawati et al., 2024). Overall, the use of AI in Islamic education presents numerous opportunities to enhance teaching methods and deepen understanding of religion. However, the challenges related to over-reliance on technology and the integration of Islamic values must be addressed to ensure AI is used effectively and responsibly. With a

thoughtful and balanced approach, AI can serve as a valuable tool in enriching Islamic education and equipping the younger generation to tackle future challenges.

AI reviewed in philosophy of science and Islamic education

The application of artificial intelligence (AI) within the framework of Islamic philosophy of science and education provides a fascinating perspective on how technology can influence our understanding of knowledge, ethics, and pedagogy. By aligning AI with Islamic principles, we can explore how technology can enhance learning while maintaining respect for moral values and intellectual traditions. In this section, we will discuss how AI is reviewed in both of these areas, as well as the implications that may arise. Philosophy of science focuses on fundamental questions about the nature of knowledge, the scientific method, and the relationship between theory and practice. AI, as a technology that is changing the way we collect and analyze data, sparks philosophical discussions about epistemology and ontology. Asari, notes that AI is often seen as an attempt to reduce the human mind to an information process, which raises questions about how we understand knowledge and reality. In this context, AI can be seen as a tool that broadens the scope of human knowledge, yet it also challenges traditional conceptions of what it means to "know" something. In education, AI can aid in the development of more effective teaching methods by analyzing student learning data and offering more timely and relevant feedback. This aligns with the belief that technology can enhance our understanding and approach to teaching science. However, it is crucial to consider how the use of AI in education might impact the way students perceive the knowledge and values being imparted, ensuring that the integration of technology does not undermine the depth of learning or the ethical foundation of the teachings (Asari et al., 2024).

In Islamic education, AI presents opportunities to enhance teaching methods and deepen understanding of religious teachings. Huda and Suwahyu emphasize that AI can strengthen communication strategies in da'wah, enabling a broader and more effective dissemination of Islamic teachings. By utilizing AI technology, educators can create more interactive and engaging learning experiences for students, which can, in turn, improve their comprehension of Islamic principles. However, there are challenges in integrating AI into Islamic education, with one of the primary concerns being ensuring that the use of this technology aligns with Islamic ethical principles (Huda & Suwahyu, 2024). Khoirunisa highlighted the importance of considering both the positive and negative impacts of AI, as well as how this technology can be leveraged to support Islamic values. Therefore, the development of an Islamic education curriculum that incorporates AI technology must carefully address ethical aspects and religious principles. Overall, AI in the philosophy of science and Islamic education presents numerous opportunities to enhance understanding and teaching. However, challenges related to ethics, values, and the broader impact of technology must be addressed to ensure AI is used effectively and responsibly. With the right approach, AI can serve as a valuable tool in enriching Islamic education and fostering a deeper comprehension of both science and religious teachings (Nissa et al., 2024).

The ethics of science and technology in Islam

The ethics of science and technology in Islam play a crucial role in ensuring that the development and application of these fields do not conflict with moral and spiritual values.

In this context, ethics serves as a guiding framework for decision-making, helping to ensure that scientific and technological advancements align with Islamic principles. This includes using knowledge responsibly, promoting the welfare of humanity, and safeguarding the dignity, rights, and well-being of individuals and society. By adhering to Islamic ethical guidelines, the potential benefits of science and technology can be maximized while minimizing harm and upholding the moral integrity of human actions (Syahraeni, 2024).

Research shows that in Islam, every scientific action must consider its impact on society and the environment. Therefore, the development of technology must be carried out taking into account the principles of justice, sustainability, and social responsibility (Rustyawati & Siswoyo, 2023). Furthermore, the ethics of science in Islam emphasizes the responsibility of scientists to use knowledge for the good of humanity, which is in line with Islamic teachings regarding good intentions in every action (Suherman & Indra, 2023). In this context, the use of information technology in Islamic education must be guided by the insights of scholars and aligned with religious principles, ensuring that technology serves as a tool for achieving higher spiritual and educational goals.

This includes fostering a closer connection to God (taqwa) and enhancing the quality of life (akhlaq and welfare) in accordance with Islamic values. When integrated thoughtfully, technology can support the development of both intellectual and moral character, providing students with opportunities to deepen their knowledge while remaining committed to the ethical principles set forth in Islam (Wardani & Ridlwan, 2022). Research shows that the application of Islamic work ethics can significantly encourage employee engagement within an organization. By aligning work practices with Islamic principles, such as honesty, responsibility, and fairness, employees are more likely to feel a sense of purpose and commitment in their roles. This enhanced engagement leads to improved performance, greater dedication to their tasks, and a more positive work environment, ultimately benefiting the organization as a whole (Musoli & Yamini, 2020). Therefore, it is important for scientists and professionals to integrate ethical values in every aspect of their work, including in the use of technology and business interactions, in order to create a harmonious and productive environment (Warsino & Ardi, 2020).

Islamic education and technology

The concept of Islamic education

Islamic education is a structured and purposeful effort to guide students in understanding, appreciating, and practicing Islamic teachings in a comprehensive manner. The primary goal of Islamic education is to cultivate individuals who possess noble character (akhlaq), a broad range of knowledge ('ilm), and the ability to make meaningful contributions to society. This education system not only focuses on imparting religious knowledge but also emphasizes the development of personal virtues, intellectual skills, and social responsibility, preparing students to lead fulfilling and impactful lives in alignment with Islamic principles. This is in line with Azyumardi Azra's view which emphasizes the importance of modernizing Islamic educational goals, curriculum, and institutions to achieve a balance between happiness in the world and the hereafter as well as improving capabilities in the field of science and technology (Barus, 2017). This study aims to explore how the integration of artificial intelligence (AI) can be applied within Islamic education and how the appropriate paradigm reconstruction can lead to an Islamic education system

that is relevant to contemporary technological advancements. In the context of Islamic education, the AI integration model should bridge the gap between traditional Islamic sciences and modern technological innovations. By doing so, it can enhance the learning experience while preserving the core values of Islamic teachings, fostering a balance between religious knowledge and modern technological skills that meet the needs of the current era.

The proposed new paradigm prioritizes the concept of Islam that is dynamic and open to the development of science. This is in accordance with the view of the Qur'an which encourages Muslims to master various sciences, including technology. Therefore, this paradigm aims to create holistic learning by paying attention to religious values, as well as relevance to the challenges of the times. This integration model consists of three main pillars: first, personalized learning using AI, allowing learners to learn according to their abilities and needs through an adaptive digital platform. Second, AI-based interactive learning, such as the use of Islamic chatbots or Islamic law simulations, to improve students' understanding. Third, automatic data evaluation and analysis that allows real-time measurement of student achievements (Noorhayati et. al., 2024).

Integration of technology in Islamic education

The integration of technology in Islamic education also presents significant challenges. One of the primary obstacles is the disparity in access to technology, particularly in rural areas and underdeveloped regions, where the technological infrastructure may be insufficient. This digital divide can hinder the effective implementation of technology in education, limiting opportunities for students in these areas to benefit from technological advancements that could enhance their learning experience. Overcoming this gap requires targeted efforts to improve access to technology, ensuring that all students have equal opportunities to benefit from the advantages of technology in education. In addition, the dissemination of content that is inaccurate or not in accordance with Islamic teachings through digital platforms can mislead students (Tempur & Chalim, 2024).

The modernization of Islamic education faces the challenge of balancing the preservation of traditional values with the adoption of technological advancements. While embracing new technologies can enhance learning and teaching methods, it is crucial that Islamic education adapts to the changing times without compromising the core principles of religious teachings. This requires a thoughtful approach to integrating modern tools in a way that enriches the educational experience while staying true to the ethical, spiritual, and moral foundations of Islam. Ensuring that technology serves as a tool to reinforce Islamic values, rather than replace or undermine them, is key to successfully navigating this transition. This requires a wise approach in integrating science and technology into the Islamic education system, as well as the Qur'anic view that encourages the mastery of knowledge in various fields and fields (Adhiguna & Bramastia, 2021).

Challenges of modernization of Islamic education

The study also identified several challenges in AI integration, such as the technology gap in rural areas, as well as social resistance to the changes brought about by technology. In addition, the dissemination of content that is inaccurate or contrary to Islamic teachings through digital platforms is also a problem that needs to be addressed (Arif et al., 2024).

The integration of artificial intelligence in Islamic education faces several significant challenges, with one of the primary issues being the stark technology gap between urban and rural areas. This divide creates disparities in access to advanced technologies, hindering the effective use of AI in educational settings, particularly in rural regions where resources such as high-speed internet and modern devices may be limited. Addressing this gap is crucial for ensuring that all students, regardless of their geographical location, have equal opportunities to benefit from the advancements brought by AI in education. In rural areas, access to technology and the internet is often limited, which hinders the application of more advanced educational technologies, including AI (Sinambela et al., 2024).

This is exacerbated by social resistance to the changes brought about by technology, where people may feel threatened by rapid change and do not understand the benefits of such technology. In addition, Islamic education must be equipped to address the challenges posed by globalization, which often introduces values and cultural influences that may be in conflict with Islamic teachings. As global trends shape various aspects of society, it is essential for Islamic education to maintain its commitment to religious principles while also preparing students to navigate a rapidly changing world. This requires a balanced approach that embraces beneficial aspects of globalization while safeguarding the integrity of Islamic values and ethics. In this regard, the Indonesian Islamic tradition can serve as a source of wisdom that helps society to resist external pressures and strengthen local forces (Iryana & Jamaluddin, 2023).

By integrating local values into education, Islamic educational institutions can build resilience to negative influences from outside, while promoting a deeper understanding of Islamic identity that is relevant to the modern context (Iryana & Jamaluddin, 2023). Another challenge faced is the difference in curriculum approaches between traditional and modern Islamic educational institutions. For example, a comparison between Imam Hatip schools in Turkey and Al-Azhar in Yogyakarta shows significant differences in the objectives, curriculum, and teaching methods used (Setiaji, 2024). This creates a need to develop a curriculum that is inclusive and relevant to the needs of today's society, incorporating social, cultural, and technological aspects.

Islamic education must evolve to meet the challenges of modern times while ensuring that the core values of Islam remain at its foundation. By integrating contemporary issues with traditional teachings, Islamic education can better equip students to navigate the complexities of the modern world while staying grounded in their faith and ethical principles. This transformation will help maintain the relevance of Islamic education and support the development of well-rounded individuals who contribute positively to society (Khaira et al., 2023). Furthermore, Islamic education must also consider the wider social impact of such education. Islamic education has a profound influence on the development of modern society, including in social, cultural, economic, and political aspects.

Therefore, it is crucial for Islamic educational institutions to focus not only on the academic aspect but also on the development of students' character and morals. By nurturing students' ethical and spiritual growth, these institutions can ensure that graduates are not only knowledgeable but also capable of contributing positively to society. This holistic approach helps students integrate academic learning with Islamic values, enabling them to become responsible individuals who uphold the principles of Islam in their personal and professional lives (Nurhayati et al., 2024). Finally, the challenges of

modernizing Islamic education also include the need to update teaching methods and teacher training. Research indicates that regular updates in teaching methods and the incorporation of modern technology are crucial to enhancing the quality of Islamic education.

Therefore, Islamic educational institutions must invest in the professional development of teachers and curriculum updates to ensure that the education provided is relevant to the needs of the times and capable of producing graduates who are competitive at the global level (Beisenbayev & Almukhametov, 2024). In conclusion, the challenges of modernizing Islamic education are indeed complex and require a holistic approach. Islamic educational institutions must strike a balance between adapting to social and cultural changes, preserving traditional values, and incorporating modern educational practices to meet the needs of society. By doing so, Islamic education can become a powerful agent of positive change, equipping students to navigate the challenges of globalization and modernity while remaining firmly rooted in Islamic principles. This balance will ensure that Islamic education continues to foster well-rounded individuals who contribute meaningfully to the progress of society.

CONCLUSION

The conclusion of this article, which discusses the integration of Artificial Intelligence (AI) in the context of Islamic education, highlights that while AI presents significant opportunities to enhance the learning experience, the challenges it brings must not be overlooked. This research emphasizes the critical role of ethics in technology application, where every scientific endeavor should be evaluated based on its societal and environmental impact, aligning with the principles of justice, sustainability, and social responsibility in Islam. Moreover, the article stresses that the ethics of science and technology in Islam not only govern the behavior of scientists but also ensure that these tools are used for noble purposes—such as drawing closer to God and improving the quality of human life.

In the context of education, AI has the potential to enhance the learning experience by offering personalized learning, AI-driven interactivity, and automated data analysis. However, challenges such as the digital divide and the risk of spreading inaccurate content must be addressed to ensure effective implementation. Recommendations include providing technological literacy training for educators and developing an integrated curriculum that aligns with both modern advancements and Islamic values. With the right approach, AI can become an essential tool in creating an education system that not only keeps pace with contemporary developments but also upholds the purity of Islamic teachings, fostering both intellectual growth and moral integrity in students.

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