

The Impact of Artificial Intelligence (AI) Technology on the Quality of Islamic Religious Education in the Digital Era

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ABSTRACT

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In the ever-evolving digital era, the integration of information technology and artificial intelligence (AI) has become a major focus in improving the quality and accessibility of education, including Islamic education. In the context of Islamic Religious Education, AI technology presents both opportunities and challenges in improving the quality of learning. This article presents a review of the impact of Artificial Intelligence (AI) technology on Islamic Religious Education learning. The use of Artificial Intelligence (AI) in Islamic Religious Education can improve student understanding through adaptive learning, provide access to learning, and support more objective learning evaluation. However, there are challenges such as the potential for dehumanization of the educational process and dependence on technology. Therefore, the integration of the impact of Artificial Intelligence (AI) technology in Islamic Religious Education must be carried out wisely and in a balanced manner, while maintaining Islamic spiritual and ethical values.

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1.Introduction

The development of information and communication technology (ICT) has brought significant changes to various aspects of life, including education. One innovation currently developing rapidly is Artificial Intelligence (AI). AI refers to the ability of computer systems to mimic human intelligence, such as learning, thinking, and problem-solving. In education, AI is beginning to be utilized to improve the quality of the learning process, including teaching, evaluation, and personalized learning.

Islamic Religious Education (PAI), a vital component of the national education system, has also been impacted by technological developments. In the digital era, there is a growing need to adapt PAI learning methods and media to remain relevant and effective, particularly in reaching a digitally savvy generation. This article will comprehensively discuss the positive and negative impacts of AI technology on the quality of PAI learning and provide strategic recommendations for its balanced and ethical implementation.

2.Literature review

Artificial Intelligence Technology

Artificial intelligence (AI) as it relates to implementation in education refers to systems designed to support the educational and learning process (Holmes, Bialik, & Fadel, 2019). In education, AI is used to personalize each student's learning. These AI systems help create learning profiles for each student, allowing learning materials to be tailored to each student's abilities, learning style, and experience.

Thanks to AI and machine learning, personalized digital learning content is also emerging. Artificial intelligence technology plays a role in the learning process, leading to more active learning. This is because the learning process is entirely centered on the student. Students engage in learning activities according to their intentions and needs. Besides being active, the presence of artificial intelligence systems makes learning more engaging (Chassignol, Khoroshavin, Klimova, and Bilyatdinova, 2018). This is due to the diverse experiences students have when using the products they are currently learning in their learning process. Where teachers used to teach using traditional methods, they now use artificial teachers to navigate the learning process in new ways.

One increasingly popular AI application is the use of Chat GPT (Generative Pre-trained Transformer) in human-computer interaction. Chat Generative Pre-Trained Transformer (ChatGPT) is a currently popular AI chatbot developed by OpenAI, a California-based artificial intelligence research and implementation company. This latest AI model is based on a transformer neural network, with its core capability of generating human-like text by understanding contextual clues in conversations (Zhang et al., 2023). In the academic and educational context, the use of Chat GPT can contribute to increasing learning effectiveness by providing access to broader and more easily understood information and materials (Arifdarma, 2023).

The use of GPT Chat in academia and education offers significant potential benefits, such as increasing learning efficiency, providing individualized support for students, and assisting teachers in delivering more personalized learning. However, behind these benefits, various questions also arise regarding data privacy, bias in the results produced, and the responsibility of users in using this technology wisely. The millennial generation is an "internet generation" who interact more dynamically and have a limitless scope of connectivity (Rahman, 2019). They live and grow up in the digital world every day, very familiar with modern technologies such as tablets, gadgets, portable computers, and the Android and iOS operating systems, which serve as an ocean of information that can be accessed anytime and anywhere.

Islamic Religious Education (PAI) Learning

Islamic Religious Education (ISE) is an integral part of the education system in many Muslim-majority countries. Conceptually, Islamic Religious Education (ISE) focuses not only on understanding religious doctrine and rituals but also expands its scope to develop moral character, ethics, and profound spiritual values. In this context, ISE aims to shape individuals who not only understand religious teachings but are also able to apply these values in their daily lives in a positive and productive manner.

In today's digital era, technology has completely transformed the learning paradigm, including in the context of religious education. The use of technology in Islamic Religious Education (IS) aims not only to increase accessibility and efficiency, but also to enhance the quality of learning and facilitate a more interactive and engaging learning experience.

Furthermore, technology also enables the use of various multimedia tools in Islamic Religious Education (IS) teaching. Learning videos, animations, simulations, and other multimedia content can be used to visually and in-depthly illustrate Islamic religious concepts. This not only helps students better understand the material but also enriches their learning experience and increases their engagement with the material.

However, the use of technology in Islamic Religious Education (PAI) learning also faces certain challenges. One of these is the need to ensure that the use of technology does not diminish the essence of the religious values being taught. Technology integration must be carried out wisely and in accordance with Islamic moral and ethical values, so that it still supports the primary goals of religious education.

Thus, the use of technology in Islamic Religious Education learning is not merely the adoption of technology for its own sake, but is a strategy to enrich students' learning experiences, increase access to Islamic religious knowledge, and prepare the younger generation of Muslims to face the challenges of the modern world with solid religious wisdom and integrity.

3.Methodology

This research uses a literature study approach. Literature study is a research method that collects, analyzes, and synthesizes various literature sources relevant to the research topic. The goal is to gain an in-depth understanding of the impact of Artificial Intelligence (AI) technology on Islamic Religious Education learning. The research began by identifying various relevant literature sources. These sources included scientific journals, books, conference articles, research reports, and other reliable sources.

Literature searches were conducted through academic databases such as Google Scholar. To ensure the quality and relevance of the selected literature, criteria were established, including publications within the last five years to obtain the most recent information, articles discussing technology, artificial intelligence, and Islamic religious education.

4.Results and Discussion

The role of AI is to enhance human intelligence and support them in carrying out learning activities effectively and efficiently. There are various ways to apply AI in learning activities. As time goes by, all fields, including education, are required to adapt and collaborate in solving problems (Rubini & Herwinsyah, 2023). In this context, AI can support Muslims in deepening their religious understanding, accessing sources of law and knowledge (such as the Quran and Hadith), carrying out religious commands (ibadah), studying Islam (tarbiyah), interacting with fellow Muslims (muamalah), and inviting others to do good (dakwah) (Sarinda, Martina, Noviani, & Hilmin, 2023).

Artificial intelligence (AI)-powered learning offers significant advancements in improving learning effectiveness for students with diverse learning styles in higher education settings. This system utilizes AI technology to adapt learning content, teaching methods, and material difficulty levels in real time to suit each student's individual needs and preferences. One of the key advantages of this approach is its ability to provide a more personalized and focused learning experience, enabling students to learn in the way that is most effective for them (Fatmawati, Sari, Setianti, Saleh, & Pitra, 2024).

Artificial intelligence is a tool that can strengthen religious education. Therefore, it can be concluded that artificial intelligence has a positive impact on creating innovative and effective learning. While artificial intelligence offers many benefits, it is also important to consider the challenges and ethical implications it may pose, such as data privacy, technological unemployment, and general social impacts. Therefore, the application of artificial intelligence must be carried out with careful consideration

and proper oversight to ensure its benefits are widely felt without compromising human values and interests (Fikri, Muttaqien, & Noor, 2024).

Islamic religious education plays a crucial role in addressing rapid technological advancements, continually adapting to society. Artificial intelligence has significant potential for application in Islamic religious education. Here are some ways in which artificial intelligence can be used in this context:

1. **Adaptive Learning:** Artificial intelligence systems can help adapt curriculum and learning materials based on students' levels of understanding and individual needs. For example, AI can tailor Islamic religious learning content to each student's abilities and learning preferences.
2. **Chatbots and Virtual Assistants:** Artificial intelligence-based chatbots can be used as virtual assistants to answer common questions about Islamic teachings, such as worship, Islamic laws, and Islamic history. They can provide instant and accurate responses, helping students get the information they need at any time.
3. **Data Analysis:** Artificial intelligence can analyze data from various sources, including tests and exams, to provide insights into areas where students may need additional help or special attention. This can help teachers design more effective teaching strategies.
4. **Simulations and Educational Games:** Artificial intelligence can be used to develop simulations that allow students to experience situations related to Islamic teachings, such as a simulation of the Hajj or an interactive introduction to the history of the Prophet Muhammad (peace be upon him). Educational games can also be designed to enhance students' understanding of Islamic religious concepts.
5. **Monitoring Student Progress:** Using artificial intelligence, students' progress in understanding Islamic religious material can be tracked in greater detail and accurately. Lecturers can use this data to provide more specific feedback and support the learning process.
6. **Text Translation and Analysis:** Artificial intelligence can help translate Arabic or other language texts relevant to Islamic studies into students' local languages. This facilitates access to literature and other essential learning resources.

The application of artificial intelligence in Islamic religious education can improve learning efficiency, expand access to important materials, and provide a more personalized and interactive learning experience for students. However, it is crucial to integrate this technology wisely and in alignment with the values and goals of Islamic religious education itself (Tanjung & Suteki, 2024).

Here are some of the main impacts of AI technology on Islamic religious education. The positive impacts include:

1. **Easy access;** Allows easier and faster access to various sources of information about Islam, such as sacred texts, commentaries, hadiths, and other important literature. This facilitates more in-depth and inclusive learning.
2. **Personalized Learning:** Providing learning tailored to the individual needs of students, based on their abilities and learning preferences. This helps increase learning effectiveness and accelerates the understanding of religious concepts.
3. **Interaction with students;** Chatbots and virtual assistants can provide instant responses to student questions about Islamic teachings, providing guidance at any time.
4. **Data Analysis:** Analyze data from test results and student learning activities to provide deeper insights into the development of their understanding. Teachers or lecturers can use this information to develop more effective teaching strategies.

5. Learning Efficiency: Learning time and costs can be reduced and materials can be accessed anytime and anywhere.
6. Educational Personnel; Students receive learning methods according to their abilities and speed.
7. Global collaboration; Islamic education is able to reach the global community through online conferences, cross-country discussions, and international networks.

Negative impacts, namely:

1. Dependence on Technology; the younger generation is at risk of losing traditional skills such as memorizing manuals or mastery of classical Arabic.
2. Conformity with Islamic Values; Must adhere to the values and ethics contained in Islamic teachings. For example, it is important to ensure that the information provided is accurate and in accordance with religious teachings.
3. technology access gap; not all regions have adequate technology infrastructure, creating a gap in religious education.
4. Risk of misinformation; there is a lot of religious content on the internet whose truth has not been verified.

5. Conclusion

Based on the discussion outlined above, three main conclusions can be drawn, namely:

The use of Artificial Intelligence (AI) technology in Islamic Religious Education (PAI) in the digital era has had a significant impact on improving the quality of learning. AI can provide more interactive learning methods, personalize materials to meet student needs, and accelerate access to credible Islamic knowledge sources. Furthermore, AI supports more objective and efficient learning evaluation.

However, the integration of AI into religious education also presents challenges, such as the potential degradation of spiritual values if technology is not balanced with a humanistic approach and Islamic values. Therefore, synergy is needed between the use of technology and character development and strengthening the understanding of religious values so that technology becomes not only a tool but also a means for developing individuals with faith and noble character.

With proper management, AI technology can be an innovative solution to improve the effectiveness and quality of Islamic Education (PAI) learning, as well as being relevant to the needs of today's digital generation.

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