

The Role Of Artificial Intelligence In Improving The Learning Of Islamic Education In The Digital Era At MTs Al-Khairat Buluri

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ARTICLE INFO	ABSTRACT
Volume: 4 ISSN: 2963-5489	This study aims to analyze the role of artificial intelligence (AI) in improving the learning of Islamic education in the digital era with a focus on MTs Al-Khairat Buluri. This research uses <i>library research approach</i> through the study of various literature such as books, journals, and relevant scientific articles. The results showed that AI has significant potential in supporting the learning process, among others, through personalization of learning, enrichment of teaching methods, as well as increased motivation and involvement of students. Technologies such as <i>chatbots</i> , <i>machine learning</i> , <i>augmented reality</i> , and <i>virtual reality</i> can be used to create learning experiences that are interactive, adaptive, and tailored to the needs of learners.
KEYWORD	
Artificial Intelligence, Islamic education, Digital age, MTs Al-Khairat Buluri, Learning	On the otherhand, the application of AI in Islamic Education also faces quite complex challenges. Obstacles that arise include the limitations of digital literacy of teachers, the availability of technology infrastructure that has not been evenly distributed in educational institutions, and the risk of marginalization of spiritual values if the use of technology is not directed wisely. Therefore, the integration of AI in Islamic education learning requires mentoring strategies, teacher training, and educational policies that are able to bridge modern technology with religious values. Overall, this study confirms that the use of AI can make a real contribution to improving the quality of Islamic education learning in MTs, provided it is balanced with the readiness of human resources, policy support, and commitment to maintaining a balance between technological advances and strengthening the spiritual character of learners

1. Introduction

In today's modern era, technological developments are present to facilitate human activities while meeting various needs of life. This development is also very pronounced in the world of Education (Tjahyanti, Saputra, & Gitakarma, 2022). One of the advances that has had a big impact is artificial intelligence (AI), which has brought significant changes in learning systems (Sarinda, Martina, Noviani, & Hilmin, 2023).

The presence of this technology opens up new opportunities in learning practices, both in the classroom and outside the classroom, and encourages the improvement of the quality of Education. AI is also able to deliver a more personalized

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learning experience, according to the needs, interests, and abilities of each learner. With the help of this technology, educators can provide more targeted and adaptive learning directions to gayastudent learning styles (Fauziyati, 2023).

In the context of Islamic Religious Education, Technology plays an important role in instilling religious values and shaping the character of learners in the middle of the digital era. Its utilization is accessible to all circles, although in practice it still depends on how individuals perceive technology—whether it is utilized for positive purposes or just the opposite, potentially causing negative impacts (Fauziyati, 2023).

Therefore, this paper aims to review in more depth the role of artificial intelligence in improving the learning of Islamic education in the digital era, with a focus on MTs Al-Khairat Buluri. This study focuses on the potential application of AI, the obstacles faced, as well as its impact on the learning process and the development of students ' religious competencies. Hopefully, this research can be a reference as well as inspiration for educators, policy makers, and other stakeholders in optimizing the use of AI to improve the quality of Islamic education learning in educational institutions.

2. Literature Review

Title	Writer / Year	Main Content / Contribution	Advantages & Disadvantages
<i>The Role of Artificial Intelligence in Islamic Education for Inclusive Children</i>	Fadhia Anandal, Dartim, Yusutria (2024)	Mengkaji bagaimana AI bisa menjadi terobosan dalam menciptakan lingkungan belajar <i>inclusive</i> untuk anak berkebutuhan dalam pembelajaran Pendidikan Agama Islam. Including how AI can help teachers deliver materials, make learning more interactive and motivate students.	+ Focusing on inclusiveness, which is sometimes under-discussed in the context of Islamic schools; - this study is literature in nature, there is no direct empirical data on MTs or similar institutions in a specific context such as in Buluri.
<i>The use of Artificial Intelligence in learning Islamic Religious Education</i>	Jauhar Fuad & Fathiyah Mohd Fakhruddin (2023-2024)	reviewed AI applications that have been used in PAI such as the AI-Quran index web application, AI-Quran translation question and answer application, ChatGPT, etc. Also discuss the need for policy support, infrastructure, human resources, and funding for more optimal use of AI	+ get a real picture of applications and supporting factors;-less depth on the impact on the religious competence of students specifically; also not specific to the level of MTs Buluri.
<i>The Implementation of Artificial Intelligence in Islamic Education Learning at Elementary School</i>	Najla Kamilia Marwa, Saepul Anwar, Mokh. Iman Firmansyah (2024-2025)	empirical study in elementary school: looking at how Pai teachers are already using AI in the planning and implementation stages of Learning (media, modules, quizzes, etc.), supported by training from the Department of Education.	+ Provides real evidence from the field; - the focus is in elementary school, so the context and complexity of MTs students may differ.
<i>The Impact of AI Use on Improving Islamic Education Teacher Competence in Digital-Based Learning</i>	Novita Indana Zulfa & Endang Sulistyowati (2024) E-Jurnal STAI Muttaqien	Examines how the use of AI affects the pedagogical and professional competence of PAI teachers. The results show that the use of AI has a significant effect on teacher competence, but many teachers have not been optimal because of the limitations of digital literacy and lack of training. E- Journal STAI Muttaqien	+ focus on teachers, very relevant for implications in institutions such as MTs; – the focus is quantitative, perhaps less profound than the value side of religion / spirituality of students.
<i>Muslim students' acceptance of artificial intelligence in Islamic religious education: an extended TAM approach</i>	(Penulis di berbagai universitas, 2025)	Using an extended Technology Acceptance Model (TAM) to analyze the attitude and acceptance of Muslim students towards AI in Islamic religious education learning. Data from several universities.	+ Provide insight into adoption factors (ease, benefits, learning style, trust); – the Target subject is students, not MTs students, so the age / school level factor can be different.

<i>Exploring The Implementation of Artificial Intelligence in Islamic Education: A Systematic Literature Review</i>	Amilusholihah & Narendra Jumadil Haikal Ramadhan (2024-2025)	A systematic Review of AI applications in Islamic education: the potential for personalized learning, educational access, and challenges such as ethics, digital literacy, and the balance between technology and religious values.	+ Suitable as a theoretical foundation because it is broad and systematic; – perhaps less specific to the local context of MTs Al-Khairat Buluri.
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In the literature review, the most relevant literature should be presented first, especially research that highlights the application of artificial intelligence (AI) at the secondary school level, then associated with the context of MTs. The description of the literature is carried out systematically by including the focus of research, the methods used, the type of AI or technology applied, and how teachers and students are involved in the learning process. It aims to provide a comprehensive overview of various AI approaches and implementations that have been applied previously, as well as to emphasize the relevance of previous research findings to the educational context at MTs Al-Khairat Buluri.

In addition, a critical evaluation of the literature under review by taking into account several important aspects, including the context of the instruments used, the level of education that is the subject of research, geographical location, and characteristics of learners. The evaluation also highlighted research gaps that still exist, such as the lack of specific studies on MTs in eastern Indonesia, the lack of research assessing the impact of AI on the development of students' religious and spiritual competencies, and the lack of empirical data supporting practice in the field.

Some of the limitations of the previous study were also noted, including the low digital literacy of teachers, lack of policy support from educational institutions, limited infrastructure and technological resources, and problems related to the authenticity of the religious education content used. By understanding the advantages and disadvantages of previous studies, researchers can design more appropriate strategies to implement AI effectively.

All the literature reviewed was then linked to the title of this study, namely *the role of Artificial Intelligence in improving the learning of Islamic education in the Digital Era at MTs Al-Khairat Buluri*. This relationship helps build strong arguments about the potential of AI in improving the quality of learning, identifying specific challenges faced, and formulating strategies for optimizing the application of such technology to fit the local context, the capabilities of teachers and students, and the values of Islamic Religious Education that underlie the learning process at the institution. Thus, the literature review is not only a theoretical foundation, but also serves as a practical guide in designing and implementing AI effectively in MTs Al-Khairat Buluri.

3. Methodology

This study uses the approach of library research. Literature research is research conducted by collecting data and information from various sources of literature, such as books, journals, articles, and other documents relevant to the topic under study.

4. Results and Discussion

This literature study produces major findings on the role of artificial intelligence (AI) in improving the learning of Islamic education in the digital era, especially in MTs Al-Khairat Buluri. The literature review shows that AI has great potential in supporting personalized learning, improving teacher competence, and the effectiveness of the teaching and learning process.

First, in terms of the potential application of AI, technologies such as *chatbots*, *machine learning*, *virtual reality* (VR), and *augmented reality* (AR) can help students obtain a more interactive learning experience and according to individual needs. AI allows teachers to tailor the material to the level of ability and interest of students (Fauziyati, 2023). In the context of MTs Al-Khairat Buluri, this has the potential to increase student involvement in Islamic Education Learning which is often considered monotonous if it is only based on lecture methods.

Second, the literature also confirms the challenges of AI implementation. The Zulfa & Sulistyowati (2024) study shows that the limitation of teachers' digital literacy is a significant obstacle. Many Islamic religious education educators have not been optimal in utilizing technology due to lack of training and supporting facilities. This is very relevant to the conditions in madrasas located in the area, including MTs Al-Khairat Buluri, where the limitations of digital infrastructure are still a fundamental problem.

Third, related to the implications for students' religious competence, the use of AI in Islamic education learning can strengthen mastery of Al-Qur'an, Hadith, and fiqh material through interactive digital applications (Fuad & Fakhruddin, 2023). However, as criticized by Amilusholihah & Ramadhan (2025), there needs to be a balance between technology and religious values so that the use of AI not only emphasizes cognitive aspects, but also instills spiritual and moral values.

Fourth, from the perspective of student and teacher acceptance, research with the Tam (Technology Acceptance Model) model shows that factors of ease of use, perceived benefits, and trust in technology affect the adoption of AI (SpringerLink, 2025). This gives an idea that to improve the effectiveness of learning at MTs, there is a need for Teacher Mentoring strategies and strengthening student digital literacy.

Thus, this discussion confirms that the role of AI in learning Islamic education not only opens up new opportunities to improve the quality of learning, but also presents challenges in terms of Human Resource readiness, infrastructure, and strengthening spiritual values. For the context of MTs Al-Khairat Buluri, optimizing the use of AI requires collaboration between teachers, schools, and policy makers to ensure the integration of technology remains in line with the goals of Islamic education.

5. Conclusion

This study concludes that artificial intelligence (AI) has a significant role in improving the learning of Islamic education in the digital era, especially in MTs Al-Khairat Buluri. AI has the potential to support the personalization of learning, enrich teaching methods, and assist teachers in delivering materials that are more interactive and appropriate to the needs of students. In addition, the use of AI can strengthen the mastery of religious materials through various innovative digital applications.

However, the implementation of AI also faces a number of challenges, such as limited teachers' digital literacy, uneven technological infrastructure, and the potential for spiritual aspects to be neglected if the use of AI is not properly directed. Therefore, the use of AI must be accompanied by the right strategy so that technology can go hand in hand with the values of Islamic education.

Overall, this study confirms that the integration of AI in Islamic education learning can be an important step to improve the quality of education in madrasas. Its relevance lies in the effort to provide more effective, modern and contextual learning, without neglecting the essence of religious values that are the basis of Islamic education.

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Conflicts of Interest:

The authors state that there is no conflict of interest in this study. The funder has no role in the design of the research; in the collection, analysis, or interpretation of the data; in the writing of the manuscript; nor in the decision to publish the results of the research.

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