

Utilization of Artificial Intelligence (AI) in Islamic Religious Education Learning Models in the Digital Era

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ARTICLE INFO	ABSTRAK
Volume: 4 ISSN: 2963-5489 KEYWORDS Artificial Intelligence (AI) Learning Models Islamic Religion Education	This study discusses the learning models of Islamic Religious Education (IRE) in the era of Artificial Intelligence (AI). The advancement of AI technology has had a significant impact on the field of education, including the development and implementation of Islamic Religious Education. AI technology has the potential to enhance the quality of learning by providing personalized and adaptive content tailored to the needs of students. This article describes the role of artificial intelligence as a supporting tool in achieving learning objectives, including access to AI technologies and how they influence and facilitate learning as well as the development of religious learning competencies. The method used in this research is library research, collecting data from various relevant sources. The results show that AI can enrich the Islamic Religious Education learning process, although it still faces challenges such as technological dependency and privacy concerns. With wise and proportional implementation, AI can serve as an effective tool to support the transformation and improvement of Islamic Religious Education quality in line with the development of the times.

1. Introduction

Technological developments are being utilized to simplify work and meet human needs. Furthermore, technological advances are also being utilized in education (Tjahyanti, Saputra, & Gitakarma, 2022). Artificial Intelligence (AI), in particular, has had a significant impact on the world of education (Sarinda, Martina, Noviani, & Hilmin, 2023). The use of artificial intelligence (AI) today has been widely used to support the success and convenience of learning, including in Islamic religious education.

Islamic religious education plays a crucial role in shaping character and religious values in an increasingly digitally connected society. The use of technology in Islamic religious education is accessible and enjoyable for everyone. However, in its use, each individual has the freedom to view technology as something that provides positive benefits or, conversely, has negative impacts (Fauziyati, 2023).

This paper will examine in more depth the phenomenon of AI utilization in Islamic religious education learning models in the digital era, starting from its potential application, advantages, as well as its implications and impact on the learning process and the development of students' religious competencies. It is hoped that this discussion can provide insight and inspiration

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for educators, policy makers, and other stakeholders to optimize the use of AI technology in an effort to improve the quality of Islamic Religious Education learning.

2. Literature Review

2.1 Artificial Intelligence (AI)

AI is a general term to describe automated devices that can carry out human intelligence processes such as learning and reasoning, capable of analyzing data and situations automatically (Utami et al., 2024).

2.2 Learning Models

The learning model is related to the selection of strategies and the creation of structures for methods, skills and student activities that have stages in learning (Sani, 2013: 89).

2.3 Islamic Religion Education

Islamic religious education means efforts to educate the Islamic religion or Islamic teachings and its values so that they become a person's outlook and attitude in life. (Muhaimin. 2007:6)

3. Methodology

This research is a type of library research, which is a study of books, journals that have something to do with this discussion. This later from the literary results are described as they are then analyzed. The literature method or literature method is one of the educational research methods that uses literature review. The literature method is also called the theoretical research method. (Jasaungguh Muliawan, 2007).

4. Results and Discussion

Learning models represent a concrete step in teachers' creativity in designing and developing a teaching environment for students that transcends a single strategy. This can at least help students acquire information, ideas, skills, values, ways of thinking, and goals, allowing them to express themselves. As a result, students will become individuals ready to face future educational challenges (Rusli, 2017). The following are several types of learning models that can utilize artificial intelligence to assist teachers in the digital age in teaching Islamic religious education:

1. Problem-Based Learning

The problem-based learning model is a learning model that focuses on authentic problems, enabling students to construct their own knowledge, develop higher-level skills and inquiry, foster independence, and enhance self-confidence (Hardika, 2021). AI can be applied in the problem-based learning model by providing contextual religious case studies, personalizing materials to suit students' abilities, supporting virtual discussions, and providing direct feedback on student solutions.

2. Cooperative Learning

Cooperative learning is a group teaching strategy that involves students working together collaboratively to achieve a common goal. AI in cooperative learning can help by facilitating virtual communication and collaboration between students, providing real-time feedback, and adapting roles and tasks to the abilities of each group member (Darmawan, 2022).

3. Contextual Teaching

Contextual learning is a learning model that connects subject matter to real-world situations. This will motivate students to make connections between knowledge and its application to their lives as family members and members of society. The use of AI in contextual learning models can include providing materials and assignments tailored to students' real-life situations, assisting with contextual analysis to present relevant problems, and supporting increasingly interactive discussions and collaboration through AI technology (Emi, 2018).

4. Discovery Learning

Model Discovery Learning merupakan model pembelajaran yang menitikberatkan pada aktifitas siswa dalam belajar. Rangkaian kegiatan pembelajaran yang melibatkan secara maksimal seluruh kemampuan peserta didik untuk mencari dan menyelidiki secara sistematis, kritis, dan logis sehingga mereka dapat menemukan sendiri pengetahuan, sikap, dan keterampilan sebagai wujud adanya perubahan perilaku. AI dalam Discovery Learning membantu siswa menemukan konsep dengan menyediakan data, simulasi interaktif, dan panduan personal sesuai langkah eksplorasi mereka.(Sulawesi selatan,2022).

5. Distance Learning Model

Distance learning is a set of teaching models in which teaching activities are conducted separately from learning activities. This separation can be physical distance, for example, because the student being taught lives far from the educational location. It can also be non-physical distance, such as circumstances that force someone who lives close to the educational location to be unable to participate in learning activities. Several AI applications such as Coursera, Duolingo, Khan Academy, and Google Classroom support distance learning with personalized materials, virtual tutors, and real-time collaboration and feedback to improve learning effectiveness. (Nurhafidah, 2019).

The use of Artificial Intelligence (AI) in Islamic Religious Education learning is increasingly important in this digital era, as it facilitates instant access to materials. AI has several benefits as an aid in the learning process. Below, we outline the benefits of AI in learning:

1. AI contributes significantly to the customization of learning experiences by collecting and analyzing information about each student's needs, preferences, and progress. Based on this analysis, Artificial Intelligence (AI) can offer educational experiences tailored to each individual's needs. AI is capable of evaluating students' understanding and interests in Islamic Religious Education subjects, allowing the curriculum and materials to be tailored to specific needs, helping each student learn more efficiently. (Maufidhoh & Maghfirah, 2023).

2. AI is widely utilized for automated assessment and evaluation purposes through digital platforms. This feature simplifies the work of teachers and instructors in designing and administering quizzes and exams in a more efficient and practical manner. Instructors no longer need to manually create questions and correct answers because the AI system can operate according to predetermined instructions and learn from student habits. Therefore, AI can be used to automate the grading of assignments and exams in Islamic Religious Education. (Mufid et al., 2022).

3. This system utilizes machine learning technology, which enables the system to recognize teaching patterns and methods through interactions with students. AI-based tutoring systems can automatically provide feedback and recommendations, as well as offer supplementary materials and exercises to help students better understand a topic. AI technology can function as a virtual tutor, ready to assist students in understanding Islamic Religious Education concepts, answering questions, and providing guidance on religious practices. (Afrita, 2023)

4. Voice Assistants are also a well-known AI technology and are widely used in various sectors, including education. Common examples of Voice Assistants include Google Assistant (Google), Siri (Apple), and others. Voice Assistants enable students to search for materials, reference questions, articles, and books on Islamic Religious Education simply by speaking or saying keywords. (Tjahyanti et al., 2022).

5. Conclusion

The use of artificial intelligence offers significant opportunities to improve the capabilities and effectiveness of teaching Islamic Religious Education. Some ways AI can be applied in learning models include: AI as a tool to tailor learning to each individual's needs, AI as an automated assessment system for teachers in teaching activities, AI as an online tutor ready to support students in understanding Islamic Religious Education concepts, providing answers to student questions, and providing guidance in carrying out religious practices. AI acting as intelligent content enables the distribution and search of

pre-programmed digital materials and books more easily and quickly. AI functioning as a voice assistant allows students to search for information, reference questions, articles, and even books on Islamic Religious Education simply by speaking or saying keywords. In the long term, AI can be a highly useful tool to support Islamic religious education, if used wisely and effectively integrated into the learning system. The use of AI can help improve effectiveness, adapt learning, provide constructive feedback, and enhance teaching effectiveness, while also preparing students for an increasingly technologically driven world.

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