# Proceeding of International Conference on Islamic and Interdisciplinary Studies (ICIIS), 2025

ISSN: 2963-5489

Website: https://jurnal.uindatokarama.ac.id/index.php/iciis/about



# Islamic Education in the Era of Artificial Intelligence: Between the Ease of Learning and the Challenge of Character Building

Muh. Aril Widi Saputra1\*

<sup>1</sup> Islamic Education Management Study Program State Islamic University Datokarama Palu, Indonesia

Corresponding Author: Muh. Aril Widi Saputra E-mail:arilwidi468@gmail.com

# **ARTICLE INFO**

# Volume: 4 ISSN: <u>2963-5489</u>

# **KEYWORD**

Islamic Education; Artificial Intelligence; Ease of Learning; Character Building; Digital Age.

#### **ABSTRACT**

The development of artificial intelligence (AI) in the digital era has had a significant impact on the world of education, including Islamic education. The presence of AI makes it easier for students to access knowledge through digital literature, adaptive learning applications, and interactive platforms that support the learning process more flexibly. AI has been proven to be able to support the cognitive and psychomotor domains, thereby accelerating knowledge transfer and improving learning skills.

However, on the other hand, the use of AI faces limitations in the affective realm. AI has not been able to replace the role of educators in shaping the morals, morality, and spirituality of students. In fact, character formation is the core of Islamic education which emphasizes the balance between knowledge and values. Therefore, the existence of teachers remains irreplaceable as an example (uswah hasanah) that ensures that knowledge can be internalized into noble behavior and morals.

This article uses the literature review method (library research) by examining the relevant results of previous research. The results of the study show that Islamic education in the era of artificial intelligence needs to utilize AI proportionally: as an innovative means to expand access and effectiveness of learning, while still affirming the role of educators as spiritual and moral guides. Thus, Islamic education is able to face digital transformation without losing its main essence, which is to produce knowledgeable and noble people.

#### 1. Introduction

including education. All is present not only as a technical tool, but also as an instrument that expands access, accelerates knowledge transfer, and enables personalization of learning. With the help of Al-based systems, learners can access subject matter anytime and anywhere, as well as interact with more adaptive learning models.

In the context of Islamic education, AI opens up great opportunities for more inclusive and flexible learning. AI applications have been used to help read the Qur'an, study hadiths, and understand classical Islamic literature through digital platforms. This shows that AI can strengthen access to Islamic science in the modern era. However, even though this technology provides convenience from the cognitive and psychomotor sides, there are still doubts about its role in instilling affective values such as morality, spirituality, and manners that are the core of Islamic education.

<sup>\*</sup>Muh. Aril Widi Saputra is a Student Islamic Education Management Study Program at Postgraduate School, State Islamic University Datokarama Palu, Indonesia. This paper was presented at the 4<sup>th</sup> International Conference on Islamic and Interdisciplinary Studies (ICIIS) 2025, as a presenter, organized by the Postgraduate School State Islamic University Datokarama Palu, Indonesia.

#### Technological Innovation for the Advancement of the Ummah: Exploring the Role of AI in the Development of Muslim Societies

The Qur'an encourages mankind to continue to learn and develop science. Allah SWT says in Surah Al-Mujadila verse 11:

"Allah will surely raise up the believers among you and those who are given knowledge of some degree. Allah is Thorough in what you do".

A number of recent studies reinforce this view. As in the study titled SWOT Analysis of AI Integration in Islamic Education: Cognitive, Affective, and Psychomotor Impacts, it highlights that AI contributes positively to learning effectiveness, but an ethical approach is needed so that Islamic values are not reduced in the digitalization process (Nirwana AN et al., 2025). Other studies have also revealed that although AI supports aspects of knowledge and skills, it has not been able to replace the role of educators in shaping students' character and spiritual awareness (Shofiyyah et al., 2024). Similar findings are confirmed by research in AI in Teaching Islamic Studies which states that AI increases learning satisfaction, but faces data privacy challenges, ethics, and limitations in instilling moral values (Hakim & Anggraini, 2023). In fact, recent studies emphasize that the integration of technology in Islamic education must be balanced with character building, because there is a tendency for some students to focus more on technical efficiency than on spiritual development (Mahbubi, 2025).

From these studies, it is clear that there are opportunities as well as dilemmas. On the one hand, AI offers efficiency, accessibility, and innovation in the learning process. On the other hand, AI cannot replace the role of teachers as moral examples, spiritual directors, and character builders. This is a research gap that needs to be considered: how to make the most of AI in supporting ease of learning, without ignoring the essence of Islamic education as a means of fostering faith, morals, and personality.

Therefore, this article focuses on the study "Islamic Education in the Era of Artificial Intelligence: Between the Ease of Learning and the Challenge of Character Building." This study examines the phenomenon of AI integration in Islamic education by highlighting two main aspects, namely the ease of accessing and managing knowledge, and the challenges in maintaining the main goal of Islamic education, namely the formation of knowledgeable and characterful human beings. This study uses a literature review method by analyzing relevant previous research, so as to obtain a comprehensive picture of the opportunities and challenges of Islamic education in the era of artificial intelligence.

#### 2. Literature Review

#### 2.1 Basic Concepts of Artificial Intelligence

The term Artificial Intelligence was first introduced by John McCarthy (1927–2011), a computer scientist who previously taught mathematics at MIT and Stanford University. In 1956, McCarthy organized a ten-week research project at Dartmouth College. The project was named "research on artificial intelligence", which was also the first moment the term was used (Taulli, 2019). This research has an ambitious goal, which is to develop the assumption that various aspects of learning and intelligence can basically be imitated by machines. Her exploratory focus includes how machines can understand language, form concepts and abstractions, solve problems, and generate innovation (Pabubung, 2023).

The word "Artificial" in the term Artificial Intelligence (AI) refers to something created by humans, while "Intelligence" describes the ability to think or intelligence. In general, the main goal of AI development is to support humans in various activities and jobs by mimicking human thought processes. AI is able to receive and process data to produce decisions when performing a task. In simple terms, artificial intelligence can be understood as a system or device designed to assist humans in reasoning according to the instructions given. In practice, AI can even surpass human capabilities in terms of speed and accuracy, as evidenced by its performance that is able to match or exceed humans in running certain programs (Farwati et al., 2023).

# 2.2 Artificial Intelligence (AI) in the Context of Education

Education has a very crucial role in shaping and preparing quality human resources to face future challenges. In the digital era marked by rapid technological development, almost all aspects of human life are inseparable from the use of technology, including in the world of education. The learning process that used to tend to be conventional is now transforming by integrating various digital devices and technology-based applications. This change prompted the birth of the term "technology-based education", which is a learning approach that emphasizes the use of technology as a means to increase the effectiveness, efficiency, and attractiveness of learning. Through this approach, students are not only required to

understand academic materials, but also equipped with digital skills that are relevant to the needs of the 21st century, such as information literacy, critical thinking skills, and collaboration in a virtual environment.

According to UNESCO, technology-based education is understood as a learning approach that integrates technology to improve quality while expanding access to education. With the use of technology, students can get wider and more accessible learning opportunities. In addition, technology also plays a role in enriching the quality of the learning process through the provision of various methods and media that are more interactive and support active student involvement.

In line with these developments, the presence of artificial intelligence (AI) further strengthens the role of technology in the world of education. AI not only functions as a tool, but also develops into an intelligent system that is able to provide more personalized and adaptive learning according to the needs of students. The application of AI in the form of *intelligent tutoring systems*, educational *chatbots*, and automated assessments based on natural language processing has been proven to increase interactivity as well as the efficiency of the learning process. The presence of this technology also opens up opportunities for equitable access to education, including for students in remote areas, as well as helping teachers reduce administrative burdens so that they can focus more on developing the quality of learning. However, the use of AI also brings a number of challenges, including data privacy issues, potential algorithmic bias, academic integrity, and digital gaps due to limited infrastructure. Therefore, the implementation of AI in technology-based education needs to be carried out with *the principle of human-in-the-loop*, namely placing teachers as the main guide, as well as accompanied by strengthening digital literacy and ethics in the use of technology so that the benefits can be sustainable (Kamalov et al., 2023).

The use of artificial intelligence in education has been proven to be able to strengthen the cognitive and psychomotor aspects of students. In the cognitive realm, AI facilitates knowledge mastery by providing adaptive materials, quick feedback, and access to various relevant learning resources to encourage analysis, synthesis, and evaluation skills. Meanwhile, in the psychomotor realm, AI supports the learning of practical skills through simulations, virtual labs, and immersive reality-based technology that allows students to practice without space and time limits. However, research shows that the presence of AI is still weak in shaping the affective realm, namely aspects of attitudes, values, and emotions. AI is not fully able to replace the role of teachers in instilling empathy, intrinsic motivation, and building interpersonal relationships that are at the core of character education. Therefore, the integration of AI in education needs to continue to place educators as a central figure in affective coaching, so that the learning process is not only oriented to intellectual abilities and practical skills, but also to the formation of students' personalities and morals (Nirwana AN et al., 2025)

### 2.3 Islamic Education as a Value System

Islamic education serves as a comprehensive value system aimed at the holistic development of the individual, focusing not only on the transfer of knowledge but also on the formation of character and morality. This educational approach integrates religious values with modern knowledge to prepare individuals for both worldly and hereafter. The following sections explore the main goals of Islamic education, the role of educators, and the integration of science, faith, and morality.

Islamic education in essence does not only focus on the transfer of religious knowledge, but is further directed to form kamil people who have noble character and are able to make a positive contribution to social life. Thus, Islamic education places the moral and spiritual dimensions as the main foundation, so that the knowledge gained by students does not stop at the cognitive aspect alone, but becomes a means to practice universal values in daily life (Ulpah et al., 2024). Islamic education emphasizes the importance of integrity, justice, honesty, compassion, and a sense of responsibility as an integral part of the learning process. This is in line with the prophetic goal of education that prepares students to be not only intellectually intelligent, but also socially sensitive, able to maintain a balance between individual and societal interests, and uphold human values (Abdullahi Maidugu & Adamu Tanko Isah, 2024).

Furthermore, Islamic education seeks to develop all human potential holistically, covering the physical, intellect, soul, and heart aspects. With this comprehensive approach, education is not only directed to produce a skilled workforce, but also to form a whole human being capable of thinking critically, behaving ethically, worshiping sincerely, and maintaining harmonious relationships with others and their environment. This goal ultimately leads to the achievement of happiness in this world and the hereafter (sa'ādah fid-dārayn), as affirmed in the concept of balance in Islamic education which places spiritual and moral aspects as the main pillars of civilization development (Fatihatun Nadliroh, 2024)

#### 2.4 AI in Islamic Education

The integration of Artificial Intelligence (AI) in Islamic education presents promising opportunities and important challenges. All can significantly improve the teaching of the Qur'an, hadith, fiqh, and Islamic studies by accelerating student development and making teaching more engaging and fulfilling. It also offers the potential to expand digital discourse and Islamic literacy through AI-based educational media and digitization of Islamic manuscripts. However, the application of AI in this context is not without limitations, especially in the affective realm, such as spirituality, morality, and the internalization of values.

#### Al Opportunities in Islamic Education:

- a. The use of artificial intelligence (AI) in Islamic education brings great opportunities in improving the quality of learning and teaching. All is able to create a more personalized learning experience by adjusting the material according to the individual needs and abilities of students. This allows for increased accuracy in content delivery and strengthens student engagement in the learning process, including through an invention-based learning approach that encourages learners to actively explore and build their own knowledge (Hakim & Anggraini, 2023)
- b. Al also plays a role in expanding the treasures of Islamic science through the process of digitizing classical manuscripts and developing intelligent technology-based educational media. This effort not only facilitates access to authentic Islamic sources, but also supports broader and inclusive Islamic digital literacy. Thus, Islamic sermons, da'wah materials, and teachings can be disseminated more effectively to the global community through Al-based platforms, making Islamic values easier to learn and practice in modern contexts (Salim & Aditya, 2025)
- c. Artificial intelligence provides great opportunities for the professional development of educators in the field of Islamic studies. All can help teachers improve pedagogical approaches through learning data analysis, teaching method recommendations, and the provision of more accurate evaluation tools. This not only increases the effectiveness of teaching practices, but also supports teachers in expanding their professional competencies to be more adaptive to the demands of the 21st century (Hakim & Anggraini, 2023)

On the other hand, AI cannot touch the affective realm and therefore has various limitations, including challenges in emotional recognition, ethical issues, and the complexity of human emotional dynamics. Despite advances in artificial emotional intelligence, significant hurdles remain that hinder effective simulation and understanding of human emotions.

Al still struggles to accurately simulate human emotions due to the limitations of algorithms in understanding the complexity of emotional experiences. Although facial recognition, voice analysis, and natural language processing technologies have come a long way, Al is often only capable of capturing emotional expressions at the surface level (Devi et al., 2024). Al still struggles to accurately simulate human emotions due to the limitations of algorithms in understanding the complexity of emotional experiences. Although facial recognition, voice analysis, and natural language processing technologies have come a long way, Al is often only capable of capturing emotional expressions at the surface level (Devi et al., 2024).

#### 2.5 Ease of Learning VS Character Building Challenges

The use of artificial intelligence (AI) in Islamic education has presented various conveniences, especially in the process of learning and accessing knowledge. Through AI-based applications, students can quickly obtain learning materials, personalize learning methods according to their needs, and have the opportunity to access various Islamic literature digitally without space and time limitations. This is certainly in line with the principle of thalabul 'ilmi which emphasizes the importance of seeking knowledge anytime and anywhere. AI allows students to efficiently search for digitized interpretations, hadiths, fiqh, and classical literature. This facility strengthens the cognitive aspects of students, makes the learning process more interesting, interactive, and encourages a broader culture of Islamic literacy.

However, the development of AI has not been fully able to reach the affective realm, namely the formation of students' character, morals, and spirituality. In Islamic education, the affective dimension is the core that cannot be separated from the teaching and learning process, because the ultimate goal of education is not only the transfer of knowledge but also the transfer of values. AI, although sophisticated in processing data and adjusting learning, is still limited in instilling noble moral values, building moral awareness, and fostering sincerity in worship. This aspect requires the presence of humans as educators who are able to provide examples (uswah hasanah), internalize values, and guide emotionally and spiritually.

Therefore, the role of educators in the era of artificial intelligence cannot be replaced by machines or algorithms. Educators function as directors, motivators, and life role models who bridge the sophistication of technology with the noble goal of

Islamic education, which is to form kamil people. All can be an instrument to support the learning process, but educators remain the main actors in ensuring that the knowledge gained does not only stop at the aspect of knowledge, but also shapes the character, morals, and spirituality of students. Thus, Islamic education in the AI era must emphasize collaboration between the use of technology and the presence of educators who act as guardians of values, so that a balance is achieved between ease of learning and character building.

#### 3. Methodology

This article uses the *Library Research* approach as a research method. This method was chosen because it is relevant in examining conceptual and theoretical issues related to Islamic Education in the era of artificial intelligence. According to Zed, literature research is a series of activities related to the method of collecting library data, reading, recording, and processing research materials from various relevant sources. With this method, researchers can examine previous thoughts, theories, and research results to build a comprehensive conceptual framework (Zed, 2014).

The data sources in this study came from primary and secondary literature. Primary literature includes current scientific journals, academic articles, conference proceedings, and books that directly address the topics of artificial intelligence and Islamic education. Meanwhile, secondary literature includes research reports, conceptual review results, and papers related to the theme of technology integration and character formation in education. With the use of these sources, this study seeks to present an in-depth, up-to-date, and relevant analysis to the needs of the scientific development of Islamic education.

Furthermore, *Library Research* allows researchers to conduct comparative analyses of various academic perspectives. Through this approach, the article not only outlines the opportunities of AI in facilitating access to learning, but also highlights its limitations in shaping learners' character. The researcher categorizes, synthesized, and interprets the results of various existing studies, so that a comprehensive picture of how Islamic education can respond to technological developments without losing the spirit of affective values that are the main goal.

Thus, this Library Research method not only presents the accumulation of knowledge from various literatures, but also serves to build strong conceptual arguments. The literature review used in this study is ensured to come from valid sources, namely indexed, reputable, and published in the last ten years in order to remain contextual with the development of Islamic education and artificial intelligence.

# 4. Conclusion

This study concludes that artificial intelligence (AI) has a significant role in providing ease of learning in Islamic education. AI is able to expand access to knowledge, provide a more interactive learning experience, and support the cognitive and psychomotor realms of students. This is in line with the spirit of Islamic education that encourages the ummah to continue to pursue knowledge without the limits of space and time.

However, behind these opportunities, serious challenges still arise in character building. Al cannot replace the role of teachers in fostering affective aspects that include morality, spirituality, and the internalization of Islamic values. Islamic education places this dimension at the core, so the existence of technology can only function as a supporting instrument, not as a substitute for educators. The teacher continues to play a central role as an exemplar (uswah hasanah), moral guide, and spiritual director who ensures that knowledge does not only stop at the realm of knowledge, but also manifests in noble behavior and morals.

**Acknowledgments:** The author expresses his deepest gratitude to the State Islamic University of Datokarama Palu for the academic support and facilities provided during the preparation of this article. The award is also addressed to colleagues and reviewers at the International Conference on Islamic and Interdisciplinary Studies (ICIIS) 2025 who have provided valuable input for the improvement of this paper. Finally, the author also thanks all parties who have contributed, either directly or indirectly, through administrative, technical, and moral support in the process of preparing this research.

- Abdullahi Maidugu, U., & Adamu Tanko Isah. (2024). Islamic Education and its Value. *Bulletin of Islamic Research*, 2(4), 725–744. https://doi.org/10.69526/bir.v2i4.165
- Devi, S., Kaur, S., Goel, D., & Yadav, B. (2024). *Navigating the Perils* (pp. 433–442). https://doi.org/10.4018/979-8-3693-7011-7.ch022
- Farwati, M., Salsabila, I. T., Navira, K. R., & Sutabri, T. (2023). Analisa Pengaruh Teknologi Artificial Intelligence (AI) Dalam Kehidupan Sehari-Hari. *Jursima: Jurnal Sistem Informasi & Manajemen*, 11(1), 39–45. https://doi.org/10.47024/js.v11i1.563
- Fatihatun Nadliroh. (2024). Konsep Dasar Pendidikan Islam. *Akhlak : Jurnal Pendidikan Agama Islam Dan Filsafat*, 1(3), 23–30. https://doi.org/10.61132/akhlak.v1i3.103
- Hakim, A., & Anggraini, P. (2023). ARTIFICIAL INTELLIGENCE IN TEACHING ISLAMIC STUDIES: CHALLENGES AND OPPORTUNITIES. *Molang: Journal Of Islamic Education*, 1(02), 57–69. https://doi.org/10.32806/6ynvg541
- Kamalov, F., Santandreu Calonge, D., & Gurrib, I. (2023). New Era of Artificial Intelligence in Education: Towards a Sustainable Multifaceted Revolution. *Sustainability*, *15*(16), 12451. https://doi.org/10.3390/su151612451
- Mahbubi, M. (2025). Filsafat Pendidikan Islam di Era AI: Integrasi Epistemologi dan Aksiologi Islam. *An-Nuha*, *5*(1), 37–45. https://doi.org/10.24036/annuha.v5i1.591
- Nirwana AN, A., Rifai, A., Ali, M., Ali Mustofa, T., Nur Vambudi, V., Nur Rochim Maksum, M., & Umar Budihargo, M. (2025). SWOT Analysis of Al Integration in Islamic Education: Cognitive, Affective, and Psychomotor Impacts. *Qubahan Academic Journal*, *5*(1), 476–503. https://doi.org/10.48161/qaj.v5n1a1498
- Pabubung, M. R. (2023). Era Kecerdasan Buatan dan Dampak terhadap Martabat Manusia dalam Kajian Etis. *Jurnal Filsafat Indonesia*, *6*(1), 66–74. https://doi.org/10.23887/jfi.v6i1.49293
- Salim, M. A., & Aditya, R. B. (2025). Integration of Artificial Intelligence in Islamic Education: Trends, Methods, and Challenges in the Digital Era. *Journal of Modern Islamic Studies and Civilization*, *3*(01), 74–89. https://doi.org/10.59653/jmisc.v3i01.1368
- Shofiyyah, N. A., Lesmana, O., & Tohari, H. (2024). Metamorphosis of Islamic Religious Education Learning Method: Classic Approach Converted by Artificial Intelligence (AI). *Jurnal Pendidikan: Riset Dan Konseptual*, 8(2), 265. https://doi.org/10.28926/riset\_konseptual.v8i2.998
- Taulli, T. (2019). Artificial Intelligence Basics: A Non-Technical Introduction. Apress.
- Ulpah, G., Basri, H., Muslih, H., & Huda, M. (2024). FINDING MEANING AND THE FUTURE: DIVING INTO THE NATURE AND PURPOSE OF ISLAMIC EDUCATION. *AL-MUADDIB: Jurnal Kajian Ilmu Kependidikan*, *6*(1), 405–423. https://doi.org/10.46773/muaddib.v6i1.1130
- Zed, M. (2014). Metode Penelitian Kepustakaan. Yayasan Obor Indonesia.