

Metamorphosis of Islamic Religious Education Learning Method: Classic Approach Converted by Artificial Intelligence (AI)

Nilna Azizatus Shofiyah⁽¹⁾, Ogi Lesmana⁽²⁾, Hendra Tohari⁽³⁾

^{1,3}Sekolah Tinggi Agama Islam Siliwangi Garut, Indonesia

²Sekolah Tinggi Ilmu Tarbiyah Lakbok Ciamis, Indonesia

Email: ¹ashofiyahnilna@gmail.com,

²ogilesmana155@gmail.com, ³hendratohari@staisgarut.ac.id

Abstract: The transformation of Islamic religious education learning methods through the conversion of classical approaches using artificial intelligence (AI) represents a significant phenomenon that has reshaped paradigms in the field of religious education. This literature review qualitatively explores profound changes in the approach to Islamic religious education brought about by the application of artificial intelligence technology. It focuses on aspects such as personalized learning, real-time monitoring of student progress, adaptation to individual learning styles, automatic feedback, and online collaboration. Qualitative analysis reveals how artificial intelligence enhances students' learning experiences. Through this transformation, the learning approach becomes more responsive and tailored to the individual needs of students, fostering a more inclusive learning environment. In the context of ethics and humanity, the literature review highlights the importance of humane guidance, ethical algorithm design, ethics training for developers and users, and privacy protection as crucial elements. This research underscores the significance of upholding ethical and humane values when integrating artificial intelligence into Islamic religious education. By synthesizing findings from various literature sources, this abstract concludes that the metamorphosis of Islamic religious education learning methods through artificial intelligence plays an integral role in enhancing adaptability, responsiveness, and effectiveness in religious education. Consequently, this study provides profound insights into the positive implications and ethical challenges that need to be addressed in navigating the ever-evolving digital era.

Tersedia Online di

http://journal.unublitar.ac.id/pendidikan/index.php/Riset_Konseptual

Sejarah Artikel

Diterima pada : 01-04-2024

Disetujui pada : 20-04-2024

Dipublikasikan pada : 30-04-2024

Keywords:

Metamorphosis, Islamic Religious Education (PAI), Artificial Intelligence

DOI:

http://doi.org/10.28926/riset_konseptual.v8i2.998

INTRODUCTION

Islamic Religious Education (PAI), as an integral component of the educational system, has undergone significant transformations alongside technological advancements (Oktavia & Khotimah, 2023). The digital era has presented both challenges and opportunities, necessitating adaptations in instructional methodologies. Within this context, this study aims to explore the potential of the Metamorphosis of Islamic Religious Education Learning Methods: Classical Approaches Converted by Artificial Intelligence (AI) as a proactive response to contemporary demands and dynamics. The conceptual framing of metamorphosis in this research is motivated by a recognition of the imperative for a paradigm shift in PAI pedagogy. This fundamental reconfiguration is seen as vital for rendering instructional approaches more adaptive and pertinent to the needs of students in the contemporary milieu. Leveraging the capabilities of artificial intelligence, this inquiry endeavors to offer nuanced insights into how technology can substantively reshape PAI instructional methodologies.

This investigation underscores a commitment to preserving and amalgamating classical values within updated pedagogical frameworks. The notion of Converted Classical Approaches elucidates how this study seeks to reconcile traditional values

with the purview of artificial intelligence technology. For instance, it entails harnessing technology to facilitate interactive comprehension of Islamic religious tenets while safeguarding intrinsic moral and ethical values (Alfi, Febriasari, & Azka, 2023). Moreover, this inquiry exhibits an anticipatory dimension, attuned to the swift technological transformations. By apprehending the potential of artificial intelligence, this research aims to proffer insights into how Islamic religious education can leverage technological advancements to enhance the quality of learning while confronting future exigencies such as the imperative for personalized and adaptive instructional methodologies. Aligned with this backdrop, this study is poised to furnish substantive contributions towards delineating the evolution of PAI pedagogies, thereby aiding in the development of Islamic religious education that amalgamates indigenous wisdom with technological innovation, engendering competitive learning experiences consonant with contemporary imperatives.

Furthermore, this inquiry is envisaged as a responsive endeavor to the evolving social and cultural dynamics. As an integral facet of the educational landscape, Islamic Religious Education (PAI) must not only acclimate to technological progressions but also reckon with the diversifying cognitive dispositions and needs of students. The digital epoch not only heralds transformations in instructional infrastructure but also engenders a necessity for inclusivity and adaptability in pedagogical approaches (Sugiyarti & Anshory, 2024). The conceptual elucidation of metamorphosis encapsulated in the title underscores an appreciation that transformations in PAI instructional methodologies extend beyond mere technological dimensions. This seminal transformation espouses the idea that Islamic religious education ought to accommodate shifts in worldviews and societal values (Nilna Azizatus Shofiyyah, 2024). Consequently, this study holds promise in furnishing a substantive foundation that encompasses the social, cultural, and foundational tenets of PAI.

The Converted Classical Approach not only endeavors to reconcile tradition with technology but also seeks to bridge the chasm between entrenched pedagogical methodologies and the expectations of students in the digital era (Fauziyati, 2023). This endeavor may entail leveraging technology to furnish dynamic, responsive, and accessible content, thereby fostering heightened student engagement. Moreover, this research can be construed as a proactive endeavor to uphold the relevance of Islamic religious education amidst the currents of globalization. The integration of artificial intelligence technology is not merely reactive to local vicissitudes but also emblematic of an endeavor to ensure the global competitiveness of Islamic religious education. Consequently, the findings of this study are poised to furnish a roadmap for the development of curricular paradigms and instructional strategies that are contextually grounded and globally resonant.

METHOD

This research employs a qualitative research method (John W. Creswell, 2016), utilizing a literature review approach to delve deeper into the title "Metamorphosis of Islamic Religious Education Learning Methods: Classical Approaches Converted by Artificial Intelligence (AI)". The first step involves identifying the main focus, aiming to comprehend the fundamental changes in PAI teaching methods influenced by artificial intelligence. In selecting literature sources, this study will carefully choose from various sources such as scholarly journals, textbooks, conference articles, and official documents related to Islamic religious education, artificial intelligence, and classical approaches to learning. Subsequently, the next step is to conduct a literature review to establish a solid theoretical foundation, particularly on the concept of metamorphosis in PAI learning and the application of artificial intelligence in the educational context.

The literature analysis process will be conducted thoroughly to identify patterns, findings, and relevant expert views concerning the research title. Special

focus will also be given to the concept of Converted Classical Approaches to understand how traditional values can be integrated with artificial intelligence. Furthermore, the results of this analysis will form the conceptual framework of the research, encompassing key concepts to be further elaborated in the study. Subsequently, the literature report will detail the findings, understanding of the concept of metamorphosis in PAI learning, the application of artificial intelligence, and the conversion of classical approaches in the context of artificial intelligence. Finally, conclusions from the literature and its potential implications for the metamorphosis of PAI teaching methods will be drawn, while identifying research gaps that may require further exploration. By following these steps, this research aims to provide a robust theoretical foundation for a deeper understanding of the proposed research title.

RESULTS AND DISCUSSION

The Concept of Metamorphosis in Learning Methods

Metamorphosis in Islamic religious education learning methods depicts a substantial paradigm shift from classical approaches towards more progressive and inclusive learning models. In classical approaches, the process of teaching Islamic religious education tends to be authoritarian, with an emphasis on the memorization of sacred texts without providing context or deep understanding (Sulandari, 2020). Teachers play a central role as leaders in instruction, while students act as passive recipients of information. For instance, classical teaching methods often involve repetition and rote memorization drills, without allowing room for creative thinking or application of concepts in everyday life. However, the metamorphosis of Islamic religious education learning methods views education as a dynamic process involving active student participation. This new approach advocates for the application of artificial intelligence (AI) concepts to enhance learning effectiveness (Hikmawati, Sufiyanto, & Jamilah, 2023). For example, utilizing AI-supported online learning platforms can provide a personalized learning experience tailored to individual student needs. Such systems can recommend learning materials based on students' comprehension levels and interests, creating a more responsive learning environment.

Furthermore, metamorphosed Islamic religious education learning methods encompass the use of interactive technology, such as virtual simulations or educational games, allowing students to immerse themselves in the values of Islam through direct experiences. For instance, an interactive application can simulate real-life situations involving decision-making based on Islamic teachings (Mahfuddin et al., 2023). This not only makes learning more enjoyable but also helps students understand the practical application of religious concepts in daily life. Thus, the metamorphosis of Islamic religious education learning methods not only involves changes in teaching approaches but also entails the integration of technology and artificial intelligence to create learning experiences that are more relevant, dynamic, and tailored to the needs of students in the modern era.

Analysis of Classical Approaches in Islamic Religious Education

The classical methods long employed in teaching Islamic religious education reflect an educational tradition that has persisted for centuries. One common method is memorization (tahfizh), where students are expected to fully memorize the sacred texts of the Quran and Hadith. While this method reinforces memory and memorization skills, it often lacks emphasis on a deep understanding of the meanings and contexts of the sacred verses. For instance, in Islamic religious education in traditional schools, students may spend much time memorizing without understanding the context and practical application of religious teachings (Umam, Khoirul, 2019). Additionally, classical teaching methods often involve direct lectures by teachers with minimal active interaction from students (Lutfiyati Unsiyah Zulfa, Hibana, 2021). This method can lead to a lack of student engagement in the learning process and limited room for discussion or critical thinking. For example, in Islamic religious education in traditional Islamic boarding schools, a Ustaz (teacher) may deliver lengthy lectures to a group of students

without giving them many opportunities to actively participate or ask questions. Although these methods have traditional values and may be effective in teaching memorization and obedience, the metamorphosis of Islamic religious education learning methods emphasizes the need for adaptation to the needs of modern students (Al Ghani, Susanto, & Ikhwan, 2023). Integration of artificial intelligence and learning technology can help overcome the limitations of these classical approaches, taking Islamic religious education to a more dynamic, interactive, and relevant level with the challenges of the times (Mutaqin, Jubaedah, Koestianto, & Setiabudi, 2023).

Classical approaches in teaching Islamic religious education have advantages and disadvantages that need careful evaluation. Its strengths lie in the reinforcement of memorization and tradition, where memorization methods (tahfizh) enable students to accurately remember the sacred texts of the Quran and Hadith. This approach creates a strong foundation in memorization, an essential aspect of understanding Islamic religion. Additionally, direct lectures by teachers allow for consistent and authoritative information delivery, respecting scientific heritage and religious tradition. However, the shortcomings of the classical approach also need to be acknowledged. Memorization methods, although effective for remembering sacred texts, may result in students who have less understanding of the meanings and contexts of these verses. Overemphasis on memorization may sideline the comprehensive understanding of Islamic religious concepts. Furthermore, the dominant lecture model can limit active student participation, hindering their ability to develop critical thinking and engage in dialogue on religious concepts.

In identifying these strengths and weaknesses, consideration needs to be given to how the classical approach can be adapted to the needs of contemporary education. The metamorphosis of Islamic religious education learning methods seeks a balance between tradition and innovation, integrating the strengths of classical approaches with more interactive and contextual modern approaches (Shofiyah, Nilna Azizatus, Tedy Sutandy Komarudin, 2023). Integration of technology and artificial intelligence becomes a solution to enhance learning effectiveness, allowing students to appreciate the values of the Islamic religion in a more holistic and engaged manner.

Integration of Artificial Intelligence in Islamic Religious Education

The application of artificial intelligence in the context of Islamic religious education brings significant positive impacts in enhancing the effectiveness and relevance of teaching methods (Mambu et al., 2023). One primary way in which artificial intelligence can be applied is through customized online learning platforms tailored to individual needs. For example, a learning system can utilize artificial intelligence algorithms to analyze students' understanding levels of Islamic religious materials. Based on this analysis, the platform can generate personalized learning recommendations, providing additional materials to deepen understanding or presenting the next material at an appropriate difficulty level. Additionally, artificial intelligence can be integrated into the development of educational applications focusing on Islam. For instance, an application can be designed to provide interactive simulation experiences, allowing students to explore everyday life situations involving decision-making based on Islamic teachings. This system can dynamically respond to students' decisions, provide in-depth feedback, and allow for deeper reflection. Furthermore, artificial intelligence can also be used to comprehensively analyze learning data, providing insights to teachers and students on learning progress. By utilizing speech or text recognition technology, artificial intelligence can assist in evaluating reading skills and pronunciation of Quranic verses. This not only provides instant feedback to students but also enables teachers to devise more focused learning plans. Overall, the application of artificial intelligence in Islamic religious education creates a more adaptive, responsive learning environment tailored to the needs of modern students. By incorporating this technology, Islamic religious education can become more interactive and relevant, ensuring a deeper and more applicable understanding of religious values.

In enhancing Islamic religious education, various artificial intelligence algorithms, techniques, and models can be applied to provide more adaptive and effective learning experiences. One relevant approach is to use adaptable recommendation systems with collaborative filtering algorithms. These algorithms analyze students' preferences and understanding levels based on previous learning experiences and then generate learning recommendations tailored to individual needs. Additionally, Natural Language Processing (NLP) techniques can be used to analyze students' understanding of Quranic texts or Hadiths and detect positive or negative sentiments related to Islamic religious education. In developing more interactive learning experiences, machine learning models can be applied to predict students' responses to simulations of everyday life situations based on Islamic teachings. Speech recognition technology can provide evaluations of students' speaking and pronunciation skills when reading Quranic verses. Furthermore, the application of deep learning models can help measure students' understanding of Islamic religious concepts, allowing for more accurate personalization of learning materials. Additionally, big data analytics can be utilized to collect and analyze learning data comprehensively, providing insights to teachers and students on learning trends, student needs, and possible adjustments required. In terms of visualizing learning materials, image processing techniques and computer vision can be used to analyze illustrations of stories or religious concepts. By integrating these artificial intelligence algorithms, techniques, and models, Islamic religious education can become more dynamic, personalized, and relevant to the needs of modern students.

Impact of Changes on the Learning Process

The metamorphosis of Islamic religious education methods has significantly impacted students' learning processes. The shift from classical approaches towards the integration of artificial intelligence (AI) and technology has changed the paradigm of learning, creating a more dynamic and responsive environment. One striking impact is the increase in active student participation in the learning process (Musthafa, 2024). More interactive and inclusive methods allow students to engage directly in discussions, collaborate with peers, and develop their critical skills. For example, the use of AI-supported online platforms can create spaces for online discussions, where students can share their views and understandings regarding Islamic teachings. Furthermore, the metamorphosis of learning methods also impacts individualized learning. The integration of artificial intelligence enables the customization of learning materials based on each student's needs and abilities. Adaptive recommendation systems can provide additional tasks or materials to students who require more challenges while providing extra support for those who may need a deeper understanding. Thus, this metamorphosis creates a more personalized learning experience that aligns with the individual characteristics of students (Utari, Yazid, Quthny, & Arobi, 2024).

The use of technology has also expanded access to learning resources. With educational apps, instructional videos, and interactive simulations, students can access information about Islam more easily and engagingly (Maulid, Maulana, & Isrok'atun, 2024). For instance, mobile apps can provide flexible learning experiences, allowing students to study Islamic teachings anytime and anywhere according to their schedules. However, while the metamorphosis of learning methods brings positive impacts, attention should also be paid to potential challenges, such as ensuring that technological interactions do not replace traditional values and ethics in Islamic education. Overall, this transformation shows the potential to enhance the quality of Islamic religious education, stimulate student interest, and make teaching more relevant to the needs and expectations of modern society.

Evaluation of changes in understanding, participation, and learning outcomes resulting from the metamorphosis of Islamic religious education methods highlights positive impacts on students' understanding levels. The shift towards more interactive and inclusive learning approaches has led to an improvement in the understanding of

Islamic religious concepts (Qodratulloh, Suhartini, & Rahman, 2023). Students are not only introduced to teachings but also encouraged to think critically, ask questions, and reflect on the deeper meanings of Quranic verses or Hadiths. Evaluation of student understanding can be conducted through tests, projects, or class discussions reflecting a deeper understanding of Islamic values and principles. Moreover, the changing learning methods also affect the level of student participation in the learning process. The more authoritarian classical model may inhibit active participation, while more interactive and collaborative approaches encourage students to be more engaged. Evaluation of participation may involve teacher observations of student interactions during discussions, group projects, or other classroom activities. Increased participation creates a more inclusive environment and supports students' social development.

Evaluation of learning outcomes includes assessment of student achievements, both academically and in skill development. The metamorphosis of learning methods with the integration of technology and artificial intelligence can provide more measurable and objective learning outcomes. For example, online learning platforms can record students' progress in real-time, allowing teachers and students to track their progress. Additionally, the evaluation of learning outcomes may include the implementation of projects or practical tasks that test the application of Islamic concepts in students' daily lives. With careful evaluation of understanding, participation, and learning outcomes, we can measure the effectiveness of the metamorphosis of Islamic religious education methods in achieving educational goals, namely shaping individuals who not only have a strong religious knowledge but also have relevant skills and attitudes in everyday life.

Challenges and Opportunities in the Integration of Artificial Intelligence

The implementation of artificial intelligence (AI) in Islamic religious education is not without various challenges that may arise. One of the primary challenges, despite the promising innovations and improvements AI offers in education, is its integration within the context of Islam, which may face potential conflicts of ethics and values. Islamic religious education involves highly sensitive spiritual and moral dimensions, and AI policies or algorithms may be perceived as not aligning with religious values. For instance, algorithmic decisions may not consider specific religious or cultural contexts, resulting in a lack of alignment with Islamic teachings that should encompass religious nuances and ethics. Furthermore, accessibility and equality in using technology become issues. Although AI offers opportunities to enhance the quality of learning, not all students have equal access to the devices and internet connectivity required. This can create digital divides and disadvantage economically less fortunate students.

Another challenge is the need for adequate training and understanding among teachers. Implementing artificial intelligence requires a deep understanding of how to effectively use this technology and ensure that teachers can supervise and guide student learning wisely. Lack of understanding may hinder the full potential implementation of artificial intelligence in the context of Islamic religious education. Additionally, privacy and data security issues are also serious concerns. The use of AI technology requires significant data storage and analysis. Concerns about how student data is stored, accessed, and used can be challenging, especially in sensitive contexts such as Islamic education. Addressing these challenges requires a holistic approach that considers religious values, access equality, teacher training, and data security. The implementation of artificial intelligence in Islamic religious education needs to be carefully considered to enhance the quality of learning without sacrificing religious principles and values.

The integration of artificial intelligence in Islamic religious education opens up opportunities and potential benefits that are highly beneficial. One of the main advantages is the ability of artificial intelligence to provide deeper insights into students' understanding levels (Nur, Sakiinah, Mahya, & Santoso, 2022). By intelligently

analyzing student responses and activities, this technology enables teachers to provide more focused support to each student according to their understanding levels and needs. The utilization of artificial intelligence algorithms in Islamic religious education also opens the door to personalized learning. Customized recommendation systems can provide additional materials or tasks tailored to students' abilities and interests, creating a more suitable and effective learning experience. By understanding each student's uniqueness, this method enhances learning efficiency and addresses challenges in accommodating individual diversity (Pongtambing et al., 2023).

Moreover, artificial intelligence allows for measurable analysis of student progress. By tracking developments in real-time, teachers can understand how far students have achieved learning goals and devise better improvement strategies. This promotes rapid feedback cycles and active monitoring of student achievements, leading to an overall improvement in learning quality (Sappaile, Nuridayanti, Judijanto, & Rukimin, 2024). The integration of this technology also opens opportunities for the development of interactive and creative content. By using AI-based simulations, interactive applications, or educational games, students can engage in more enjoyable and engaging learning experiences while retaining the authenticity of Islamic values. Furthermore, technology integration opens opportunities to improve access equality to Islamic religious education. Online learning can overcome geographical barriers and provide broader access to educational resources, bringing learning benefits to students in various locations. In the context of classroom management, artificial intelligence can help teachers analyze class needs comprehensively, facilitating better lesson planning and more efficient classroom management (Marlin et al., 2023). Finally, technology integration opens opportunities for the continuous development of learning materials. Through automatic evaluation and effectiveness analysis of materials using artificial intelligence, teachers can quickly identify areas for improvement and update learning materials to remain relevant and effective. Overall, artificial intelligence integration opens the door to maximizing the potential of Islamic religious education, bringing significant benefits in shaping students' understanding, participation, and learning outcomes.

Ethical and Humanitarian Aspects

The use of artificial intelligence (AI) in Islamic religious education raises several ethical and humanitarian considerations that need to be carefully considered. One ethical aspect that arises is caution regarding the impact of AI algorithms and policies on Islamic religious values. Religious education involves highly sensitive spiritual and moral dimensions, and algorithmic decisions may not align with certain religious nuances and ethics. Therefore, it is necessary to ensure that AI technology is implemented considering the sustainability of religious values and students' beliefs. The humanitarian aspect is also an important consideration in the use of artificial intelligence in Islamic religious education. It should be noted that this technology should serve as an aid and support, not a replacement for human interaction. Human compassion and sensitivity in teaching Islamic religion cannot be fully replaced by artificial intelligence (Ully Muzakir, Baharuddin, Abraham Manuhutu, 2023). Therefore, it is necessary to ensure that the implementation of this technology does not eliminate the human dimension in the process of religious education, such as the role of counselors or spiritual companions providing emotional and moral support.

Furthermore, privacy protection and data security are issues that cannot be ignored. Artificial intelligence requires significant data access and processing. Therefore, there needs to be strict policies and mechanisms to protect student privacy and ensure that personal data is not misused. The implementation of this technology must adhere to high data security standards and ensure that students' religious and spiritual information remains private and protected. Additionally, the integration of artificial intelligence into Islamic religious education also raises questions about access equality. In societies that may have economic disparities, this technology must be implemented with consideration for equal access to devices and internet connectivity.

Efforts must be made to ensure that the benefits of this technology can be enjoyed by all students regardless of their economic background. Overall, in integrating artificial intelligence into Islamic religious education, there needs to be awareness and a high sense of ethical and humanitarian responsibility. This technology should support religious values but should also not eliminate essential humanitarian and ethical aspects in the process of Islamic religious education.

To ensure that ethical and humanitarian values are preserved in the use of artificial intelligence (AI) in Islamic religious education, a careful and comprehensive approach needs to be adopted. First and foremost, it is important to establish strong and clear guidelines for the design of artificial intelligence algorithms. For example, in the development of learning recommendation systems, it is necessary to ensure that the algorithms not only consider students' understanding levels but also the ethical and moral values inherent in Islamic teachings. Ethics training for developers and users of artificial intelligence is also a crucial step. With a deep understanding of Islamic ethical principles, they can ensure that the algorithms and decisions reflect these values. For example, in the use of adaptive learning technology, developers need to understand how to align learning content with Islamic ethical and moral values, ensuring that the material presented does not contradict religious principles. Algorithm transparency is also required to maintain ethical values. By exposing how decisions are made, stakeholders can understand the basis of algorithmic decision-making and ensure that no bias or discrimination may harm or undermine Islamic religious values. Privacy protection and data security are crucial. For example, in online learning platforms, student data should be stored and accessed securely, complying with applicable privacy regulations and ensuring that students' personal information remains confidential. Access equality is an important aspect to consider. For example, if a religious education app uses artificial intelligence, ensure that the app is accessible to all students, including those from different economic backgrounds. This can be achieved by providing free access or subsidies for students in need.

Involving stakeholders and religious communities in the development and implementation of artificial intelligence opens up space for broader participation and diverse feedback. For example, involving teachers, scholars, or religious leaders in the evaluation of learning technology will help ensure that ethical and humanitarian values are preserved according to local perspectives and needs. Ongoing monitoring and evaluation of the use of artificial intelligence are key to detecting and addressing potential negative impacts. By engaging in these methods, we can ensure that ethical and humanitarian values remain the primary focus in using artificial intelligence in Islamic religious education.

Case Study or Practical Implementation

A concrete example is an ed-tech company focusing on Islamic religious education, which has undergone a metamorphosis in its teaching methods by adopting artificial intelligence. Previously, this learning platform presented static content and standard tests without considering differences in students' abilities or learning styles. However, after leveraging artificial intelligence, a significant transformation occurred. Personalization of learning became one of the main changes. Previously, students accessed materials at the same learning level, but with artificial intelligence, this platform can assess the understanding level and needs of each student individually. Machine learning algorithms provide recommendations tailored to students' abilities and interests, creating a more personalized learning experience.

Furthermore, monitoring student progress became more dynamic. Previously, evaluations were done through periodic exams, but now, this platform can monitor students' progress in real-time. Teachers and students can access in-depth analyses of which areas have been mastered and where students need more attention. Adaptation to individual learning styles also became an integral part of this change. Artificial intelligence can analyze each student's learning style and adjust teaching methods accordingly. This includes presenting material in formats that suit students' learning

preferences, such as videos, images, or text. Automatic feedback on students' work also became an introduced feature. Artificial intelligence algorithms provide feedback on student errors, not just grades. This facilitates self-directed learning and helps students better understand areas they need to improve. Finally, the platform facilitates online collaboration and discussions among students, where artificial intelligence can encourage discussions based on each student's level of understanding, creating a more collaborative and interactive learning environment. This case study reflects how artificial intelligence technology can change the paradigm of Islamic religious education, resulting in more efficient, effective, and customized learning methods tailored to individual student needs.

CONCLUSION

The metamorphosis of Islamic religious education teaching methods through the conversion of classical approaches using artificial intelligence (AI) depicts a significant paradigm shift in the world of education. The adoption of artificial intelligence technology has brought about profound changes in how Islam is taught and understood. Initially, classical methods presented challenges such as a lack of personalization, limited progress monitoring, and a lack of adaptation to individual learning styles. However, with the integration of artificial intelligence, learning has become more personalized, responsive, and efficient. Machine learning algorithms can identify individual student needs, provide more detailed feedback, and adjust learning materials according to each student's level of understanding. The outlined case study demonstrates how artificial intelligence shapes a more dynamic, measurable, and inclusive learning experience. Personalized learning, real-time progress monitoring, adaptation to learning styles, automatic feedback, and online collaboration are components that create significant transformation in Islamic religious education.

In maintaining ethical and humane values, the importance of human guidance, ethical algorithm design, ethics training, and privacy protection are evident. Awareness of the ethical and humane consequences involves relevant parties, including developers, users, and religious communities. Thus, the metamorphosis of Islamic religious education teaching methods through artificial intelligence marks a new era in learning that is more adaptive, responsive, and tailored to the individual needs of students, while preserving the ethical and humane values underlying the teachings of Islam. This transformation aims to improve the quality of religious education in response to the increasingly digital and complex modern era.

REFERENCES

- Al Ghani, Y. I., Susanto, H., & Ikhwan, A. (2023). Pendidikan Agama Islam: Problematika dan Tantangan. In *Katalog Buku STAI Muhammadiyah Tulungagung*. Tulungagung: Sekolah Tinggi Agama Islam Muhammadiyah (STAIM) Tulungagung.
- Alfi, A., Febriasari, A., & Azka, J. (2023). Transformasi Pendidikan Agama Islam Melalui Teknologi. *Jurnal Religion: Jurnal Agama, Sosial, Dan Budaya*, 1(4), 511–522. <https://doi.org/https://doi.org/10.55606/religion.v1i4.249>
- Fauziyati, W. R. (2023). Dampak Penggunaan Artificial Intelligence (AI) Dalam Pembelajaran Agama Islam. *Jurnal Review Pendidikan Dan Pengajaran*, 6(2), 2180–2187. <https://doi.org/https://doi.org/10.31004/jrpp.v6i4.21623>
- Hikmawati, N., Sufiyanto, M. I., & Jamilah. (2023). Konsep dan Implementasi Kecerdasan Buatan (Artificial Intelligence) dalam Manajemen Kurikulum SD/MI. *Abuya: Jurnal Pendidikan Dasar*, 1(1), 1–16. Retrieved from <https://jurnalinkadha.org/index.php/abuya/article/view/278>
- John W. Creswell. (2016). *Research Design Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Yogyakarta: Pustaka Pelajar.
- Lutfiyati Unsiyah Zulfa, Hibana, S. S. (2021). Peran Guru Meningkatkan Minat Belajar anak melalui pembelajaran Klasikal Pada Masa Pandemi di RA AL Anwar Kediri.

- Jurnal Tumbuh Kembang: Kajian Teori Dan Pembelajaran PAUD*, 8(2), 123–137.
<https://doi.org/10.36706/jtk.v8i2.14412>
- Mahfuddin, I., Mubarak, A., Rahayu, P., Pratiwi, I., Jauhari, Z. A., & Khusnul, A. (2023). Pengembangan Berpikir Kreatif pada Pembelajaran PAI dalam Menghadapi Tantangan Pendidikan Islam Menuju Society 5.0. *IJoIS: Indonesian Journal of Islamic Studies*, 4(1), 9–16. <https://doi.org/10.59525/ijois.v4i1.194>
- Mambu, J. G. Z., Pitra, D. H., Rizki, A., Ilmi, M., Nugroho, W., Leuwol, N. V., ... Saputra, A. (2023). Pemanfaatan Teknologi Artificial Intelligence (AI) Dalam Menghadapi Tantangan Mengajar Guru di Era Digital. *Journal on Education*, 06(01), 2689–2698. <https://doi.org/https://doi.org/10.31004/joe.v6i1.3304>
- Marlin, K., Tantrisna, E., Mardikawati, B., Anggraini, R., Susilawati, E., & Yunus Batusangkar, M. (2023). Manfaat dan Tantangan Penggunaan Artificial Intelligences (AI) Chat GPT Terhadap Proses Pendidikan Etika dan Kompetensi Mahasiswa Di Perguruan Tinggi. *INNOVATIVE: Journal Of Social Science Research*, 3(6), 5192–5201. <https://doi.org/https://doi.org/10.31004/innovative.v3i6.7119>
- Maulid, T. A., Maulana, & Isrok'atun. (2024). Keterampilan Guru dalam Membuat Media Pembelajaran Digital dengan Menggunakan Artificial Intelligence Aplikasi Canva. *Didaktika: Jurnal Kependidikan*, 13(1), 281–294. <https://doi.org/https://doi.org/10.58230/27454312.485>
- Musthafa, F. A. D. (2024). Penggunaan Artificial Intelligence (AI) dalam Pembelajaran: Fenomena Transformasi Otoritas Pengetahuan di Kalangan Mahasiswa. *Journal of Contemporary Islamic Education (Journal CIE)*, 4(1), 125–136. <https://doi.org/https://doi.org/10.25217/jcie.v4i1.4386>
- Mutaqin, F. M., Jubaedah, I., Koestianto, H., & Setiabudi, D. I. (2023). Efektif Artificial Intelligence (AI) dalam Belajar dan Mengajar. *Jurnal Pendidikan: Seroja*, 2(1), 53–60. <https://doi.org/https://doi.org/10.572349/seroja.v1i2.582>
- Nilna Azizatus Shofiyah, M. I. Z. (2024). The Evolution of Madrasah Education: Nurturing Transformative Islamic Scholars. *Jurnal Pendidikan Tambusai*, 8(1), 6032–6042. <https://doi.org/https://doi.org/10.31004/jptam.v8i1.13320>
- Nur, Sakiinah, A., Mahya, A. F. P., & Santoso, G. (2022). Revolusi Pendidikan di Era Society 5.0; Pembelajaran, Tantangan, Peluang, Akses, Dan Keterampilan Teknologi. *Jurnal Pendidikan Transformatif (Jupetra)*, 01(02), 18–28. <https://doi.org/https://doi.org/10.9000/jpt.v1i2.508>
- Oktavia, P., & Khotimah, K. (2023). Pengembangan Metode Pembelajaran Pendidikan Agama Islam di Era Digital. *AN NAJAH: Jurnal Pengembangan Dan Pembelajaran Islam*, 02(05), 66–76. Retrieved from <https://journal.nabest.id/index.php/annajah/article/view/167>
- Pongtambang, Y. S., Appa, F. E., Siddik, A. M. A., Sampetoding, E. A. M., Admawati, H., Purba, A. A., ... Manapa, E. S. (2023). Peluang dan Tantangan Kecerdasan Buatan Bagi Generasi Muda. *Bakti Sekawan: Jurnal Pengabdian Masyarakat Jurnal Pengabdian Masyarakat*, 3(1), 23–28. <https://doi.org/10.35746/bakwan.v3i1.362>
- Qodratulloh, W., Suhartini, I., & Rahman, R. (2023). Penggunaan Artificial Intelligent dalam Perkuliahan PAI pada PTU: Analisis Peluang dan Tantangan. *Jurnal Keislaman*, 4(2), 146–154. <https://doi.org/https://doi.org/10.24036/kwkib.v4i2>
- Sappaile, B. I., Nuridayanti, N., Judijanto, L., & Rukimin, R. (2024). Analisis Pengaruh Pembelajaran Adaptif Berbasis Kecerdasan Buatan terhadap Pencapaian Akademik Siswa Sekolah Menengah Atas di Era Digital. *Jurnal Pendidikan West Science*, 02(01), 25–31. <https://doi.org/10.58812/jpdws.v2i01.937>
- Shofiyah, Nilna Azizatus, Tedy Sutandy Komarudin, M. S. H. (2023). Innovations in Islamic Education Management within the University Context: Addressing Challenges and Exploring Future Prospects. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 8(2), 193–209. <https://doi.org/https://doi.org/10.31538/ndh.v8i2.3625>

- Sugiyarti, S., & Anshory, M. I. (2024). Islamic Education in the Digital Era. *TsaQofah: Jurnal Penelitian Guru Indonesia*, 4(1), 779–786. <https://doi.org/10.58578/tsaqofah.v4i1.2571>
- Sulandari. (2020). Analisis Terhadap Metoda Pembelajaran Klasikal dan Metoda Pembelajaran E-Learning di Lingkungan Badiklat Kemhan. *Jurnal Pendidikan Indonesia*, 1(2), 176–187. <https://doi.org/https://doi.org/10.59141/japendi.v1i02.16>
- Uly Muzakir, Baharuddin, Abraham Manuhutu, H. W. (2023). Penerapan Kecerdasan Buatan Dalam Sistem Informasi: Tinjauan Literatur Tentang Aplikasi, Etika, dan Dampak Sosial. *Jurnal Review Pendidikan Dan Pengajaran*, 6(4), 1163–1169. <https://doi.org/https://doi.org/10.31004/jrpp.v6i4.20719>
- Umam, Khoirul, R. (2019). Studi Perbandingan Hasil Belajar Pendidikan Agama Islam melalui Penerapan Model Pembelajaran Individual dengan Model Pembelajaran Klasikal. *Al I'tibar: Jurnal Pendidikan Islam*, 6(2), 70–75. <https://doi.org/https://doi.org/10.30599/jpia.v6i2.589>
- Utari, H., Yazid, A., Quthny, A., & Arobi, I. (2024). Pengaruh Penggunaan Artificial Intelligence terhadap Kecerdasan Intelektual Mahasiswa PAI Universitas Islam Zainul Hasan Genggong Probolinggo. *Jurnal Simki Pedagogia*, 7(1), 152–164. <https://doi.org/https://doi.org/10.29407/jsp.v7i1.574>