Ahlussunnah: Journal of Islamic Education
https://ejournal.stitahlussunnah.ac.id/index.php/JIE

Enhancing Islamic Religious and Character Education through a Deep Learning Approach

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Article Information:
Received February 10, 2026
Revised March 18, 2026
Accepted April 10, 2026

Keywords: *Islamic Education, Deep Learning approach, character education, spiritual development*

Abstract

Islamic Religious Education and Character learning in the era of the Industrial Revolution 4.0 and Society 5.0 faces complex challenges in balancing the transmission of authentic Islamic teachings with the need for creativity, collaboration, critical thinking, and digital literacy. Conventional approaches that emphasize memorization are often insufficient in fostering strong spiritual character. This study aims to explore the implementation of the Deep Learning approach in Islamic Religious Education and Character learning, focusing on how its principles mindful, meaningful, and joyful learning enhance students' spiritual understanding and character development. This study employs a qualitative approach using a case study design. Data were collected through in-depth interviews, classroom observations, and documentation to obtain comprehensive insights into the application of Deep Learning principles. The data were analyzed through thematic interpretation to identify patterns of implementation and their impact on learning processes. The findings indicate that constructivist-based lesson planning encourages students to develop a deeper and more contextual understanding of Islamic teachings. The implementation of Deep Learning principles through reflective discussions and experiential practices enhances students' spiritual awareness, value internalization, and real-life application. However, challenges such as limited instructional time and the need for pedagogical adaptation were also identified. The study implies that the Deep Learning approach has significant potential to transform Islamic Religious Education into a more meaningful, student-centered learning process. It contributes to strengthening character education and supports the development of students who are both religiously grounded and adaptable to contemporary challenges.

INTRODUCTION

Islamic Education and Character Education play a crucial role in shaping students' moral integrity and religious awareness, not only through the transmission of doctrinal knowledge but also through the internalization of values in everyday life (Fajarwati et al., 2025). In contemporary contexts, Islamic education is

How to cite: Nilpendra, N. N., Faslah, R., Triana, N., Nursuadila, N., Ramadhani, M. (2026). Enhancing Islamic Religious and Character Education through a Deep Learning Approach. *Ahlussunnah: Journal of Islamic Education*, *5*(1), 76-82.

E-ISSN: 2827-9573
Published by: The Institute for Research and Community Service

expected to develop learners who are not only intellectually competent but also spiritually grounded and socially responsible in responding to ongoing moral and leadership challenges (Hakim & Masumah, 2025).

However, in practice, Islamic Religious Education remains largely dominated by conventional approaches that emphasize memorization and content delivery, limiting students' capacity to develop deep understanding and meaningful engagement with religious values. This limitation becomes more critical in the context of twenty-first century education, which requires the integration of higher-order thinking skills, creativity, collaboration, and contextual learning experiences (Haq et al., 2026).

In response to these challenges, the Deep Learning approach offers a promising pedagogical framework. It emphasizes mindful, meaningful, and joyful learning processes that enable students to construct knowledge actively and apply it in real-life contexts (Yustiana et al., 2025). This approach is also aligned with the principles of the Merdeka Curriculum, which promotes flexible and student-centered learning environments that accommodate learners' diverse needs and potentials (Tunas & Pangkey, 2024).

Despite its theoretical relevance, the implementation of the Deep Learning approach in Islamic Religious Education and Character Education remains underexplored, particularly at the level of junior secondary education. Existing studies have highlighted its potential in enhancing student motivation and engagement (Septiana et al., 2025). however, empirical investigations focusing on how this approach facilitates the internalization of religious values are still limited. This gap indicates the need for more context-specific and in-depth analysis of its pedagogical application.

Therefore, this study aims to explore the implementation of the Deep Learning approach in Islamic Religious Education and Character Education and to analyze its contribution to enhancing students' understanding and internalization of religious values. This study contributes to the development of innovative pedagogical practices in Islamic education by providing empirical insights into how meaningful and student-centered learning approaches can be effectively applied in value-based education contexts.

METHODS

This study employs a qualitative approach using a case study design to explore the implementation of the Deep Learning approach in Islamic Religious Education and Character Education. This approach allows for an in-depth understanding of how Deep Learning principles are applied within a specific educational context. Data were collected through in-depth interviews, classroom observations, and documentation (Allsop et al., 2022; Busral et al., 2025; Dodgson, 2017; Engkizar et al., 2023; Purssell & McCrae, 2020; Roberts, 2020). Interviews were conducted with teachers to obtain detailed insights into the implementation process, while observations were carried out to capture actual classroom practices. Supporting documents, such as lesson plans and instructional materials, were also analyzed to strengthen the data (Engkizar et al., 2025; Mortelmans, 2019; Neale, 2021; Peterson, 2019).

The data were analyzed using thematic analysis, which involved coding, categorizing, and interpreting key themes related to the principles of mindful, meaningful, and joyful learning. This process aimed to identify patterns and generate a comprehensive understanding of how the Deep Learning approach contributes to students' learning experiences and value internalization (Baroud et al., 2025; Htay et al., 2025; Jaafar et al., 2025).

RESULT AND DISCUSSION

Islamic Religious Education and Character Education in the era of the industrial revolution 4.0 and Society 5.0 face increasingly complex challenges. On the one hand, teachers are required to transmit Islamic teachings authentically; on the other hand, they must respond to contemporary demands that emphasize creativity, collaboration, critical thinking, and digital literacy (Kassymova et al., 2025; Mutiaramses et al., 2025). In practice, learning processes in Islamic Education and Character Education are still largely dominated by conventional approaches that emphasize memorization of texts, repetition of material, and superficial cognitive mastery (Annisah & Alfany, 2025). This condition reduces the essential role of Islamic Religious Education and Character Education as a humanizing process that fosters strong spiritual character.

As explained by (Agyeman, 2024), the concept of Deep Learning in Islamic education demonstrates distinctive characteristics compared to Western pedagogical approaches. In addition to cognitive and reflective aspects, it emphasizes the integration of spiritual and moral values rooted in Islamic sources such as the Qur'an and Hadith. In the study *A Study of Deep Learning Approach in Islamic Education and Western Education Perspective*, it is stated that Deep Learning in Islamic education is not merely "learning deeply," but rather a process of value internalization through reflection and transformation based on revelation (Qur'an Surah An-Nahl: 78; Ali Imran: 191) and human experiential realities (Nurhaswinda et al., 2025).

From a technological perspective, deep learning is also recognized as a branch of artificial intelligence and machine learning that simulates the way the human brain processes data and identifies patterns for decision-making. It utilizes artificial neural network architectures with multiple layers that enable the recognition of complex patterns from large-scale data (Mulyani, 2024). This system is capable of learning automatically from raw data without explicit programming intervention (Riyadi & Nugroho, 2025). Its structure consists of input layers, hidden layers, and output layers, where hidden layers play a crucial role in transforming data sequentially to produce accurate outputs (Hendrianty et al., 2024). Each neuron operates using weights and biases, which are adjusted during training through activation functions such as Rectified Linear Unit, Sigmoid, and Hyperbolic Tangent (Yoko et al., 2018).

In the context of education, Deep Learning is understood as a pedagogical approach that emphasizes mindful, meaningful, and joyful learning experiences. These three principles form the foundation of the approach. First, mindful learning refers to students' awareness in regulating their own learning processes, understanding learning objectives, and developing intrinsic motivation to achieve them. Second, meaningful learning occurs when students are able to apply knowledge contextually, not merely understand information but also connect it with real-life experiences, thereby supporting long-term retention and social responsibility. Third, joyful learning creates a positive, engaging, and motivating learning environment that supports emotional connection, creativity, and active participation. This condition also fulfills students' psychological needs, including safety, belonging, appreciation, and self-actualization (Hanifah et al., 2025).

Theoretically, the Deep Learning approach is aligned with the perspectives of Fullan and Wergin, which emphasize active student engagement in the learning process. This alignment is also evident in the Merdeka Curriculum, which prioritizes student participation and meaningful learning experiences (Akem et al., 2025; Engkizar et al., 2025). Although the curriculum does not mandate the use of technology, technological support plays an important role in facilitating twenty-first century competencies, particularly digital skills (Saputra et al., 2024).

Empirical findings indicate that the Deep Learning approach strengthens the implementation of the Merdeka Curriculum, particularly through the integration of

contextual and student-centered learning. In one junior secondary school, this approach enables students not only to understand learning materials but also to apply them in real-life contexts. Based on interviews with an Islamic Religious Education teacher, the implementation of Deep Learning has been carried out through practical activities such as learning about sacrificial worship and aqiqah, including training in proper animal slaughtering according to Islamic law. This implementation is conducted gradually as part of an educational transformation process (Engkizar, Muslim, et al., 2025; Ummah et al., 2025).

The results of observation, interviews, and documentation show that this approach not only improves students' cognitive abilities but also facilitates the internalization of religious values into daily behavior through reflective, collaborative, and contextual strategies. The initial stage of implementation begins with the preparation of lesson plans that no longer focus solely on cognitive competencies but also integrate affective and psychomotor aspects comprehensively. Teachers adopt a constructivist approach in which students actively construct meaning based on their lived experiences. This approach is consistent with the principles of Deep Learning, which emphasize deep conceptual understanding and real-life application (Komara et al., 2026).

In lesson planning, teachers formulate learning indicators that are reflective and applicable. This shift represents a transformation in the paradigm of Islamic Religious Education and Character Education from a normative and memorization-based approach toward a learning process that emphasizes deep understanding, active participation, and value internalization. Consequently, lesson planning becomes not merely an administrative requirement but a strategic instrument for creating meaningful and long-term learning experiences.

The implementation of mindful, meaningful, and joyful principles is reflected in classroom practices that encourage students to actively engage with learning materials. This is consistent with the view of Nurhaswinda et al (2025), which emphasizes that effective Islamic Education connects instructional content with students' real-life contexts and encourages reflection and application of religious values.

In practice, teachers employ reflective questioning strategies to deepen students' understanding. One teacher explained:

> …*Whenever I teach, I don't just deliver the material entirely through lectures; instead, I ask more questions or start with a discussion and guide the students to find the answers themselves. For example, when discussing the theme of Trustworthiness and Honesty in Daily Life, I ask, 'Have all of you applied the qualities of trustworthiness and honesty in your daily lives? If so, please share what specific activities you've done that truly demonstrate these qualities?.*

This strategy encourages students not only to understand concepts cognitively but also to internalize and reflect upon them in their daily lives. As a result, learning shifts from mere information transfer to a process of developing self-awareness, moral reflection, and religious character.

However, the implementation of this approach is not without challenges. Time limitations in classroom settings often constrain the depth of learning activities. Despite these challenges, the Deep Learning approach demonstrates strong potential as an innovative strategy in Islamic Religious Education and Character Education, particularly in fostering meaningful, reflective, and value-based learning experiences.

CONCLUSION

Islamic Religious Education and Character Education face significant challenges in balancing the transmission of authentic Islamic teachings with the demands of creativity, collaboration, critical thinking, and digital literacy in contemporary education. Conventional approaches that emphasize memorization are no longer sufficient to support meaningful learning and character development. The

findings of this study demonstrate that the Deep Learning approach, which emphasizes mindful, meaningful, and joyful learning, provides an effective pedagogical framework for addressing these challenges. Its implementation encourages students to actively construct knowledge, engage in reflective thinking, and apply religious values in real-life contexts. This approach contributes not only to cognitive development but also to the internalization of spiritual and moral values.

Furthermore, the integration of constructivist-based learning design, reflective strategies, and contextual activities supports a shift from normative and memorization-based instruction toward a more holistic and student-centered learning process. Although challenges such as limited instructional time remain, the Deep Learning approach shows strong potential in enhancing the quality of Islamic Religious Education and Character Education. This study contributes to the development of innovative pedagogical practices in Islamic education by providing empirical evidence on the effectiveness of Deep Learning in fostering meaningful, reflective, and value-based learning. It also offers practical implications for educators to design learning environments that support students' spiritual development and character formation in contemporary educational contexts.

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