Implementation of Deep Learning in Improving Islamic Religious Education and Character Education

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Abstract

Islamic Religious Education and Ethics in the era of the 4.0 industrial revolution and 5.0 society face complex challenges between the transmission of authentic Islamic teachings and the need for creativity, collaboration, critical thinking, and digital literacy. The conventional approach that emphasizes memorization often fails to shape a strong spiritual character. Deep Learning, as part of artificial intelligence, is introduced as a solution with the principles of mindful, meaningful, and joyful learning. This approach is in line with the Merdeka Curriculum, which emphasizes active student participation and the integration of technology for 21st-century skills. This study examines the implementation of Deep Learning in junior high schools through observation, interviews with Islamic Education teachers, and documentation. The results show that constructivist-based lesson plan (RPP) planning encourages students to construct a deep and applicable understanding of religious teachings. The implementation of Deep Learning principles, such as reflective discussions and hands-on practices (e.g., qurbani sacrifice), enhances spiritual awareness, internalization of values, and application in real life. Despite challenges such as time constraints, this approach has the potential to create a religious and adaptive golden generation in 2045.

INTRODUCTION

Islamic Religious Education and Morality Education play a role and make efforts to provide guidance and nurturing to students so that in the future they will have an understanding of and be able to apply Islamic law and make it a way of life or guidance for living (Firdaus et al., 2018; Setiawan et al., 2021). Islamic Religious Education has an important contribution in shaping the morals and religious character of students (Apriani et al., 2024). In public schools, especially junior high schools, Islamic Religious Education not only provides conceptual Islamic teachings but also serves as a means of internalizing spiritual and ethical values in their daily lives.

Education in Indonesia is currently undergoing a major transformation to adapt to the demands of the 21st century, namely skills such as critical thinking, creativity, and collaboration, which are increasingly becoming the main focus. In order for the younger generation to be ready to face various global challenges, education in Indonesia needs a more innovative approach, not only in terms of curriculum development but also in the learning approaches that are applied (Raup et al., 2022). One approach that is currently receiving more attention is the Deep Learning approach.

Deep Learning emphasizes the importance of a learning process that prioritizes deep understanding, enabling students to implement knowledge meaningfully, rather than simply memorizing it. This approach seeks to shift conventional learning methods that tend to emphasize memorization and repetition (Nabila et al., 2025). The Deep Learning approach in Indonesia is very much in line with the principles of the Merdeka curriculum, which emphasizes freedom in learning (Mujtahid et al., 2026). The curriculum provides opportunities for students to explore deeper and more relevant learning by considering the interests and potential of each student (Diarera & Budiarti, 2024; Hidayah et al., 2024; Milah et al., 2023). Therefore, the Deep Learning approach, which focuses on meaningful and conscious learning experiences, is highly relevant and suitable for implementation in the Indonesian education system.

Deep Learning is still relatively new because this approach was designed by the Ministry of Primary and Secondary Education in 2024, so it has not been widely implemented in schools, especially at the junior high school level. Deep Learning focuses on deeper and more meaningful learning, offering great potential for improving the quality of education, but its implementation in Indonesia is still limited (Suwandi et al., 2024). Based on the results of an interview conducted by the author with one of the Islamic Education and Ethics teachers at Junior High School 9 Pariaman in November, Mrs. Nita Herwina, she explained that the Deep Learning approach in Islamic Education and Ethics learning is still in the process of development and implementation. This shows that Junior High School 9 Pariaman is ready to implement a more innovative Deep Learning approach.

METHODS

This study was conducted using a descriptive qualitative approach, as the main focus of this study was not on measuring numbers, but rather on deepening meaning and conceptual understanding. This study aims to explore how the Deep Learning approach, which is generally discussed in the context of general education, can be adapted and developed in the field of Islamic Religious Education and Ethics. The author conducted interviews and field surveys to obtain information and knowledge related to the Deep Learning approach. The data obtained from the interviews and field surveys were then analyzed by grouping the information into important themes in accordance with the problem formulation. The author began by sorting out the information considered most relevant, then systematically organizing it to identify the issues to be discussed. From this process, the author attempted to develop a comprehensive understanding of how the Deep Learning approach can contribute to Islamic Religious Education and Ethics learning (Abishev et al., 2025; Engkizar et al., 2022, 2023; Ikhlas et al., 2025; Okenova et al., 2025; Ummah et al., 2025).

This article is expected to not only present theory, but also offer new and inspiring perspectives for teachers, lecturers, and Islamic education practitioners. The approach used provides space for deep reflection and allows readers to see the great potential of integrating Islamic Religious Education and Morality values into meaningful learning practices (Engkizar et al., 2024, 2025; Mutiaramses et al., 2025; Rahman et al., 2025).

RESULT AND DISCUSSION

Islamic Religious Education and Morality in the era of the 4.0 industrial revolution and Society 5.0 face complex challenges. On the one hand, teachers are required to transmit Islamic teachings authentically, but on the other hand, they must also be able to respond to the needs of the times, which emphasize creativity, collaboration, critical thinking, and digital literacy. In reality, most Islamic Religious Education and Moral Education learning is still stuck in a conventional approach that emphasizes text memorization, repetition of material, and shallow cognitive mastery (Rianda, 2024; Afriani, 2024). This has caused Islamic Religious Education and Moral Education to lose its essence as an education that humanizes humans and shapes a strong spiritual character.

The concept of Deep Learning was first introduced in 1980 and was further developed in line with technological and informational developments in the 1990s. Deep Learning is part of artificial intelligence that uses neural networks with multiple layers to achieve a high level of accuracy in completing various tasks (Raup et al., 2022).

In the context of education, Deep Learning is a learning approach that focuses on creating a learning atmosphere and learning process that is mindful, meaningful, and enjoyable. These are the main principles of the Deep Learning approach. The three main principles that support the Deep Learning approach are: First, Mindfulness. Mindfulness is the learning experience that students gain when they are aware of being active learners and are able to regulate themselves. Students understand the learning objectives, are intrinsically motivated to learn, and actively develop learning strategies to achieve their goals. When students are mindful of learning, they will acquire knowledge and skills as lifelong learners.

Secondly, it is meaningful. Meaningful learning occurs when students can apply their knowledge contextually. The learning process for students is not limited to understanding information or mastering content, but is oriented towards the ability to apply knowledge. This ability supports long-term retention. Learning that is connected to the students' environment allows them to understand who they are, how to position themselves, and how they can contribute back. The concept of meaningful learning involves students with real issues in personal or local and national or global contexts. Learning must involve parents, society, or the community as sources of practical knowledge, as well as foster a sense of responsibility and concern in students.

Second, it is enjoyable. Enjoyable learning is a positive, challenging, fun, and motivating learning environment. Enjoying learning helps students connect emotionally, making it easier for them to understand, remember, and apply knowledge. When students enjoy the learning process, their intrinsic motivation will grow, encouraging curiosity, creativity, and active engagement. Thus, learning builds a memorable learning experience. Enjoyment in learning is also realized when learners feel comfortable and their needs are met, such as physiological needs, the need to feel safe, the need for affection and belonging, the need for appreciation, and the need for self-actualization.

Regarding the Deep Learning approach according to Fullan's theory and Wergin's theory related to Deep Learning in accordance with the principles of the Merdeka Curriculum, which focuses on the participation of students in the entire learning process, this includes deep involvement with learning experiences in line with the statement that a person must be fully involved in the experience. The Merdeka Curriculum does not require the use of technology in learning, but technology plays an important role in supporting curriculum implementation, especially in 21st-century skills development such as digital skills (Arifin & Mu'id, 2024).

The Deep Learning approach has emerged as a learning method that reinforces the implementation of the Merdeka Curriculum, particularly through the use of digital technology as one of its frameworks. This suitability is the reason why the Ministry of Primary and Secondary Education has integrated Deep Learning into the learning process. This approach is expected to not only prioritize learning outcomes, but also emphasize a deep understanding of concepts, the relationship between ideas, and the application of knowledge in everyday life, especially in Islamic Religious Education and Morality, which use Islamic teachings as their main foundation. At 9 Junior High School Pariaman, located on Jl. Puti Bungsu, Marunggi Village, South Pariaman District, Pariaman City, West Sumatra, this Deep Learning approach enables students to not only understand the material but also implement it in real life.

Based on interviews with Islamic Education teachers in class IX.2, this approach optimizes learning to achieve a common goal, namely creating the Golden Generation of 2045. He explained that Deep Learning has been applied in activities such as the materials on Qurbani and Aqiqah through direct practice, including training in the procedures for slaughtering animals in accordance with Islamic law. This implementation is carried out gradually and systematically as part of the learning transformation in the Merdeka Belajar (Freedom of Learning) policy. The results of observations, interviews, and documentation show that this approach not only improves students' cognitive abilities but also encourages the internalization of religious values into daily behavior through reflective, collaborative, and contextual strategies. The first step in implementing Deep Learning in Islamic Religious Education at 9 Junior High School Pariaman was the development of Teaching Modules or Lesson Plans (RPP) that no longer focus solely on cognitive competencies, but comprehensively involve affective and psychomotor aspects. Islamic Education teachers have begun to adopt a constructivist approach in designing learning activities, in which students are no longer passive recipients of information, but active subjects who construct the meaning of religious teachings based on their life experiences. This constructivist approach is in line with the principle of deep learning, which emphasizes that students understand concepts deeply and are able to apply them in real-life contexts (Wibowo et al., 2025).

In developing lesson plans, teachers begin to establish reflective and applicable learning outcome indicators. This step is very important because the Deep Learning approach not only changes the way of teaching, but also the overall paradigm of Islamic Religious Education, from normative and rote learning to learning that is oriented towards deep understanding, active participation, and internalization of religious values in daily behavior. Thus, the lesson plan is not merely an administrative document, but a strategic tool for creating meaningful and long-lasting learning experiences for the spiritual and moral development of students. The implementation of the mindful, meaningful, and joyful principles of the Deep Learning approach in Islamic Religious Education is applied by referring to the three main principles described above, namely: mindful, meaningful, and joyful learning.

These three principles form the basis for developing learning strategies that encourage students to not only memorize material, but also understand its meaning and apply it in real-life situations. These three principles complement each other in creating a holistic and in-depth learning experience for students. This is in line with the view (Wafa et al., 2025) that effective Islamic Religious Education learning is one that is able to connect the teaching material with the reality of students' lives and encourage them to reflect on and apply religious values in practical life. Learning using the Deep Learning approach. In the context of Islamic Religious Education, this is realized through reflective activities that encourage students to realize the

meaning, purpose, and implications of the religious teachings they learn. The Islamic Religious Education teacher explained that he began to completely abandon the lecture method and switched to more interactive and reflective strategies:

I no longer just deliver material using the lecture method, but rather ask more questions or hold preliminary discussions and guide students to find the answers themselves. For example, when discussing the theme of social ethics and Islamic communication, I ask, "Have you ever hurt or spoken harshly to your parents? If so, is that in accordance with the ethics taught by the Prophet?"

Questions like this encourage students to not only memorize, but truly feel and understand the meaning of the lesson. When a child makes a mistake, I will also ask the student about the mistake and its cause, as well as how to solve it. Activities like this are effective in increasing students' spiritual and moral self-awareness. Through these activities, students are not only invited to understand religious concepts cognitively, but also to reflect on how these values can be absorbed into their daily lives. This process transforms Islamic Religious Education from merely transferring information or memorizing rituals into a means of building deep understanding, self-awareness, and religious character development. The success of the Deep Learning approach is inseparable from challenges such as limited learning time, which makes time management difficult. This implementation is expected to be a new innovation in the history of education, especially in Islamic Religious Education.

CONCLUSION

Islamic Religious Education and Character Education face complex challenges between the transmission of authentic Islamic teachings and the need for creativity, collaboration, critical thinking, and digital literacy, with conventional approaches that continue to emphasize rote memorization. Deep Learning, as part of artificial intelligence, was introduced in the 1980s and applied in education through the principles of mindfulness, meaningfulness, and joyfulness, which are in line with the Merdeka Curriculum and the integration of digital technology.

At Junior High School 9 Pariaman, the application of Deep Learning based on interviews with informants, observation, and documentation optimizes Islamic Religious Education learning through direct practices such as qurbani and aqiqah, encouraging students to implement the material in real life. The planning of constructivist-based learning implementation plans covers affective and psychomotor aspects, with reflective, collaborative, and contextual strategies to improve cognitive abilities, internalization of religious values, and spiritual awareness, despite challenges such as time constraints. This approach transforms Islamic Religious Education from normative memorization into holistic learning that supports the formation of strong spiritual character and the Golden Generation of 2045, while strengthening the Merdeka Curriculum with 21st-century skills. Its contributions include empirical academic evidence of effectiveness.

REFERENCES

Abishev, A. R., Abdullah, M., & Abdulghani, N. A. (2025). Five Challenges to Quranic Learning in Islamic Educational Institutions. *Journal of Quranic Teaching and Learning, 1*(3), 83–92. https://joqer.intischolar.id/index.php/joqer/article/view/11

Apriani, I., Damopolii, M., & Datunsolang, R. (2024). Pengembangan Kecerdasan Spiritual Siswa Melalui Profil Pelajar Pancasila Dalam Kegiatan Keagamaan Ika Apriani[1] , Mujahid Damopolii [2] , Rinaldi Datunsolang[3]. *Instruktur: Jurnal Pendidikan Guru Madrasah Ibtidaiyah, 4*(1), 57–69. https://doi.org/10.51192/instruktur.v4i1.929

Diarera, D., & Budiarti, W. N. (2024). Optimalisasi Kurikulum Merdeka Melalui Pembelajaran Diferensiasi: Menggali Konsep, Implementasi, Dan Dampaknya.

Social, Humanities, and Educational Studies (SHES): Conference Series, *7*(3). https://doi.org/10.20961/shes.v7i3.92643

Engkizar, E., Jaafar, A., Hamzah, M. I., Fakhruddin, F. M., Oktavia, G., & Febriani, A. (2023). Changes in Students' Motivation to Memorize the Quran: A Study at Quranic Higher Education Institutions in Indonesia. *International Journal of Islamic Studies Higher Education*, *2*(3), 240–258. https://doi.org/10.24036/insight.v2i3.240

Engkizar, E., Jaafar, A., Hamzah, M. I., Langputeh, S., Rahman, I., & Febriani, A. (2025). Analysis Problems of Quranic Education Teachers in Indonesia: Systematic Literature Review. *International Journal of Islamic Studies Higher Education*, *4*(2), 92–108. https://insight.ppj.unp.ac.id/index.php/insight

Engkizar, E., Jaafar, A., Sarianto, D., Ayad, N., Rahman, A., Febriani, A., Oktavia, G., Puspita, R., & Rahman, I. (2024). Analysis of Quran Education Problems in Majority Muslim Countries. *International Journal of Islamic Studies Higher Education*, *3*(1), 65–80. https://doi.org/10.24036/insight.v3i1.209

Engkizar, E., Sarianti, Y., Namira, S., Budiman, S., Susanti, H., & Albizar, A. (2022). Five Methods of Quran Memorization in Tahfidz House of Fastabiqul Khairat Indonesia. *International Journal of Islamic Studies Higher Education*, *1*(1), 54–67. https://doi.org/10.24036/insight.v1i1.27

Firdaus, A., Maulida, A., & Sarbini, M. (2018). Peran Guru Pendidikan Agama Islam Dan Budi Pekerti Dalam Pembinaan Akhlak Peserta Didik Di Sdn Cibereum 4 Bogor Selatan. In *Prosiding Al Hidayah Pendidikan Agama Islam* (Vol. 1, Issue Desember 2018). Prosiding Al Hidayah Pendidikan Agama Islam. https://doi.org/10.30868/ppai.v1i1B.334

Hidayah, H., Qushwa, F. G., Munawwaroh, I., Putri, D. F., & Hasanah, R. (2024). Leadership Transformation and Organizational Strengthening in Improving Collaboration and Operational Effectiveness of Islamic Boarding Schools. *Journal of Social Studies and Education*, *1*(2), 126–139. https://doi.org/10.61987/jsse.v1i2.519

Ikhlas, R. Z., Ulwi, K., & Patri, P. (2025). Arabic Language Program Management for Muhadatsah Class. *Journal of Arabic Literature, Teaching and Learning*, *1*(2), 27–37. https://jaliter.intischolar.id/index.php/jaliter/article/view/3

Milah, S., Syihabuddin, S., Somad, M. A., & Hidayat, M. (2023). *Religious Character Education in Early Childhood Through Habituation Method* (pp. 5–9). https://doi.org/10.4108/eai.26-11-2022.2339549

Mujtahid, Assidiqi, A. H., & Sadiyah, D. (2026). Implementasi Pembelajaran Mendalam (Depp Learning) Di Sekolah Dasar Sebagai Penguatan. *Jurnal Ilmu Pendidikan Guru Sekolah Dasar Dan Usia Dini*, *02*(2), 31–37. https://doi.org/10.70134/pedasud.v2i2.711

Mutiaramses, M., Alkhaira, S., Zuryanty, Z., & Kharisna, F. (2025). Seven Motivations for Students Choosing to Major in Elementary School Teacher Education in Higher Education. *Multidisciplinary Journal of Thought and Research*, *1*(2), 23–37. https://mujoter.intischolar.id/index.php/mujoter/article/view/14

Nabila, S. M., Septiani, M., Fitriani, F., & Asrin, A. (2025). Pendekatan Deep Learning untuk Pembelajaran IPA yang Bermakna di Sekolah Dasar. *Primera Educatia Mandalika: Elementary Education Journal*, *2*(1), 9–20. https://jiwpp.unram.ac.id/index.php/primera

Okenova, B., Xu, W., & Adel, S. (2025). The Practice of Moderate Education to Prevent Interreligious Conflict. *Muaddib: Journal of Islamic Teaching and Learning*, *1*(2), 36–54. https://muaddib.intischolar.id/index.php/muaddib/article/view/8

Rahman, I., Wati, W., Putri, N., Wulandari, R., & Habibi, U. A. (2025). Commercialization of Quranic Tahfidz Houses in Indonesia: Da'wah or

Business? *Journal of Quranic Teaching and Learning*, *1*(2), 34–48. https://joqer.intischolar.id/index.php/joqer/article/view/6

Raup, A., Ridwan, W., Khoeriyah, Y., Supiana, S., & Zaqiah, Q. Y. (2022). Deep Learning dan Penerapannya dalam Pembelajaran. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, *5*(9), 3258–3267. https://doi.org/10.54371/jiip.v5i9.805

Setiawan, F., Hutami, A. S., Riyadi, D. S., Arista, V. A., & Dani, Y. H. Al. (2021). Kebijakan Penguatan Pendidikan Karakter Melalui Pendidikan Agama Islam. *Al-Mudarris (Jurnal Ilmiah Pendidikan Islam)*, *4*(1), 1–22. https://doi.org/10.23971/mdr.v4i1.2809

Suwandi, Putri, R., & Sulastri. (2024). Inovasi Pendidikan dengan Menggunakan Model Deep Learning di Indonesia. *Jurnal Pendidikan Kewarganegaraan Dan Politik*, *2*(2), 69–77. https://doi.org/10.61476/186hvh28

Ummah, A. K., Kakoh, N. A., Mahmudi, M. B., Wardani, A. Z., & Ummah, A. K. (2025). Efforts of Dormitory Supervisors in Overcoming Problems in the Quran Memorization Dormitory. *Journal of Theory and Research Memorization Quran*, *1*(1), 1–14. https://joesmiq.intischolar.id/index.php/joesmiq/article/view/52