

Research Article

Digital Books as Learning Media for Islamic Religious Education on Hajj and Umrah Material for Middle School Students

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Abstract. This study aims to analyze the application of deep learning in the transformation of religious moderation education in the digital era and its implications for the development of modern Islamic education. The research employs a qualitative descriptive approach using library research, reviewing literature on Islamic education, religious moderation, and artificial intelligence in learning contexts. Data were collected from academic books, scientific journals, articles, and other credible sources, then analyzed using content analysis to identify patterns, concepts, and relationships between technology and the strengthening of moderation values. The results indicate that the implementation of deep learning can transform Islamic education from a traditional rote-based model to a reflective, contextual, and interactive learning process. This technology enables the analysis of students' thinking patterns and behaviors, the reinforcement of moderation values, character formation, and the development of moderate digital literacy in a personalized and adaptive manner. The integration of technology and spirituality in digital Islamic education creates transformative learning experiences that strengthen empathy, ethical awareness, and students' reflective capacities. The study implies the importance of developing curricula, learning strategies, and teacher competencies based on artificial intelligence to produce a generation of students who are moderate, tolerant, and competent in facing the challenges of the digital era.

Keywords: Character Education; Deep Learning; Digital Literacy; Islamic Education; Religious Moderation

1. INTRODUCTION

The development of digital technology in the era of the Industrial Revolution 4.0 and Society 5.0 has brought fundamental changes to nearly all aspects of human life, including education. Digital transformation not only alters how humans communicate and work but also affects the way they think, learn, and interpret religious values (Akhyar, Zukdi, et al., 2024). One significant innovation in the field of artificial intelligence (AI) is deep learning, a technology capable of mimicking the human brain's way of processing data, recognizing patterns, and making decisions independently. In the educational context, deep learning functions not merely as a technological tool but also as a learning approach oriented toward deep understanding, critical reflection, and character formation (Febriani et al., n.d.).

Islamic education, particularly the education of religious moderation, now faces serious challenges amid the rapid flow of information and digital globalization. The spread of extremist ideologies, intolerance, and hate speech through social media has influenced the mindset of some young people. In fact, Islam emphasizes the importance of balance, justice, and moderation in religious practice (Muvid et al., 2023). This is reflected in the Quranic concept of *ummatan wasathan*, a balanced and just community in understanding and practicing religious teachings. This principle serves as the foundation for religious moderation education, guiding learners to develop a tolerant, inclusive understanding of Islam aligned with the spirit of mercy for all creation. In this context, deep learning can become a vital instrument for instilling these values through more profound, adaptive, and contextualized learning suited to the demands of the times. Allah said in *qur'an*:

Received: July 30, 2025;

Revised: August 29, 2025;

Accepted: September 25, 2025;

Published: September 30, 2025;

Curr. Ver.: September 30, 2025



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وَكَذَلِكَ جَعَلْنَاكُمْ أُمَّةً وَسَطًا لِتَكُونُوا شُهَدَاءَ عَلَى النَّاسِ وَيَكُونَ الرَّسُولُ عَلَيْكُمْ شَهِيدًا

"And thus We have made you a justly balanced (moderate) nation, so that you may be witnesses over the people and the Messenger may be a witness over you." (QS. Al-Baqarah [2]:143)

The deep learning approach in religious moderation education does not merely imply the application of artificial intelligence technology but also embodies the philosophy of learning deeply engaging in reflective and profound learning (Akhyar, Iswantir, et al., 2024). Through this approach, learners are encouraged not only to memorize religious texts but also to understand their meanings critically and relate them to the social realities they encounter. This aligns with the teaching of the Prophet Muhammad (peace be upon him):

إِنَّ اللَّهَ لَا يَنْظُرُ إِلَى صُورِكُمْ وَأَمْوَالِكُمْ وَلَكِنْ يَنْظُرُ إِلَى قُلُوبِكُمْ وَأَعْمَالِكُمْ

"Indeed, Allah does not look at your forms and your wealth, but He looks at your hearts and your deeds." (HR. Muslim)

This hadith emphasizes the importance of spiritual dimensions and meaningful engagement in all human activities, including learning. With the support of deep learning, educators can gain deeper insights into learners' study patterns, interests, and spiritual needs, allowing them to design learning that prioritizes character development rather than mere knowledge transfer.

Furthermore, the integration of deep learning into religious moderation education enables the creation of personalized, adaptive, and contextually relevant learning models (All et al., 2025). This technology can analyze learning behavior data to design materials suited to individual learning styles while instilling Islamic values oriented toward compassion, tolerance, and social responsibility. This aligns with the Quranic verse:

يَرْفَعُ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ ۗ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ

"Allah will raise those who have believed among you and those who were given knowledge by degrees. And Allah is Acquainted with what you do." (QS. Al-Mujādilah [58]: 11)

Thus, the deep learning approach in transforming religious moderation education in the digital era is not only an adaptation to technological advances but also an actualization of Islamic values that encourage humans to think, learn, and act profoundly. Through the synergy of artificial intelligence and spiritual intelligence, Islamic education can transform to become more relevant, humanistic, and transformative, producing a generation of digitally literate Muslims who are morally upright and exemplary in fostering a peaceful and just civilization.

2. RESEARCH METHOD

This study employs a descriptive qualitative approach using a library research method to analyze the application of deep learning in transforming religious moderation education in the digital era (Agusta, 2024). A qualitative approach was chosen because this research focuses on understanding the concepts, principles, and implications of technology-based moderation education, rather than on quantitative measurement. The study is descriptive in nature, presenting the analysis in a systematic, coherent, and comprehensive manner to depict the phenomenon in depth.

Research data were collected through a literature review encompassing academic books, scientific journals, scholarly articles, research reports, and other credible sources related to Islamic education, religious moderation, and the application of deep learning in education. The data collection process involved selecting relevant, credible, and up-to-date sources to ensure the validity and accuracy of the resulting analysis.

Once the data were gathered, content analysis techniques were employed to examine, categorize, and interpret information relevant to the research theme. The analysis involved identifying patterns, concepts, and relationships between the application of deep learning and the reinforcement of religious moderation values, as well as examining its implications for the development of Islamic education. Findings from the literature were

then critically synthesized to construct a comprehensive, thorough, and systematic conceptual framework.

Through this library research method, the study provides an in-depth understanding of how deep learning technology can be integrated into religious moderation education, including its impacts, opportunities, and challenges in implementation within the digital era. The results of this research are expected to serve as a conceptual reference for the development of curricula, learning strategies, and policies in modern Islamic education.

3. RESULTS AND DISCUSSIONS

Transformation of Learning Paradigm in Islamic Education

The implementation of deep learning in Islamic education has driven a paradigm shift from traditional learning models, which focus on rote memorization and one-way knowledge transmission, toward a more constructivist, reflective, and contextual approach. Traditional learning models in religious education often emphasize the ability to memorize religious texts without providing learners with the opportunity to internalize meanings, analyze social contexts, or relate religious teachings to their real-life experiences. This aligns with Tilaar's (2002) critique in *Perubahan Paradigma Pendidikan Nasional*, which asserts that effective education must balance cognitive, affective, and psychomotor aspects so that learners not only acquire knowledge but also understand and apply it in life (Noprianto & Nurdin, 2025).

The new paradigm of Islamic education that leverages deep learning emphasizes meaningful learning, a process that focuses on deep understanding, critical reflection, and practical application of religious concepts. Constructivist theories by Piaget and Vygotsky support this approach by highlighting that learners actively construct their own understanding through interaction with their environment, social experiences, and guidance from educators as facilitators (Akhyar, Sesmiarni, et al., 2024). In the context of religious moderation, this approach enables learners to comprehend values of tolerance, inclusivity, and balance in religious practice while encouraging them to act as agents of peace within pluralistic social interactions.

Moreover, literature on religious moderation, such as that presented by the Wahid Institute (2017) in *Pedoman Moderasi Beragama di Indonesia*, emphasizes the need for value-based education that fosters balance (equilibrium), respect for differences, and rejection of extremism. Deep learning facilitates the integration of these values into digital learning systems, for instance, through interactive simulations, social case analyses, and collaborative projects that stimulate critical reflection and value-based decision-making (Wati et al., 2025). This aligns with Yusuf's (2018) perspective in *Pendidikan Islam Moderat: Teori dan Praktik*, which asserts that learning for religious moderation should emphasize understanding social context, intercultural dialogue, and critical and ethical thinking skills rather than merely transferring doctrinal content (Syamraeni & Sholichah, 2024).

In practice, deep learning can be utilized to personalize education so that each learner receives materials and experiences tailored to their needs and abilities. For example, adaptive learning algorithms can assess learners' tendencies in understanding religious concepts and provide focused guidance on areas requiring reinforcement, including the development of moderate character. Consequently, deep learning functions not merely as a technological tool but also as a pedagogical method that supports the transformation of Islamic education into a more humanistic, contextual, and socially responsive system.

Overall, this paradigm transformation emphasizes the integration of knowledge mastery, character development, and reflective capacity among learners. Modern Islamic education that incorporates deep learning has the potential to produce a generation that not only understands religious teachings theoretically but also applies them in real life with moderation, tolerance, and critical thinking. This approach represents a strategic step in preparing learners to navigate the complexities of social and digital life in the era of globalization.

Strengthening the Values of Religious Moderation through Analysis of Thinking Patterns and Behavior

Strengthening the values of religious moderation in contemporary education cannot be separated from a deep understanding of learners' thinking patterns and behaviors. Moderation values, which emphasize balance, tolerance, and inclusivity, require concrete implementation through systematic, reflective, and contextual learning processes (Kholili, 2025). In this regard, deep learning technology provides a significant contribution through its ability to analyze behavioral data, map learners' cognitive and affective tendencies, and offer tailored learning strategies to effectively shape moderate character.

Theoretically, the strengthening of moderation values can be understood through Bandura's social-cognitive theory, which emphasizes the interaction between the individual, the environment, and behavior in the learning process. In the context of religious moderation education, learners are not passive recipients of material; rather, they engage in reflection, observation, and self-evaluation regarding their attitudes, perceptions, and value choices. Deep learning facilitates this process by analyzing learners' digital interaction data, such as responses to learning modules, contributions in discussion forums, and collaborative assignment outcomes. This analysis allows educators to identify thinking tendencies that may indicate intolerance, extremism, or a lack of critical thinking, enabling targeted pedagogical interventions.

Moreover, literature on religious moderation emphasizes the need for adaptive and personalized value-based education. According to the Wahid Institute in Pedoman Moderasi Beragama di Indonesia, moderation education should teach principles of balance between individual rights and social interests, encourage appreciation of diversity, and develop critical thinking skills to reject extremism. Implementing these principles through deep learning allows for empirical reinforcement of moderation values. For example, adaptive learning systems can provide feedback tailored to learners' cognitive and affective profiles, encouraging them to evaluate their views and attitudes and stimulating critical reflection on complex social and religious issues (Havidotinnisa & Rofaida, 2025).

In addition to the cognitive dimension, strengthening moderation values also involves affective and social aspects. Goleman's emotional intelligence theory highlights that the ability to manage emotions, understand others' feelings, and develop empathy is key to forming tolerant and moderate individuals. Deep learning can support the development of these competencies through interactive modules simulating social scenarios and value conflicts, training learners to make wise decisions, consider different perspectives, and internalize moderation values in real-life actions.

Furthermore, modern Islamic education literature emphasizes the integration of moderation values with digital literacy. Yusuf (2018) in *Pendidikan Islam Moderat: Teori dan Praktik* asserts that learners must critically assess religious content circulating in digital media, distinguish valid information from intolerant propaganda, and develop objective analytical skills. The use of deep learning enables learning systems to provide personalized and adaptive experiences, encouraging learners to think critically, identify biases, and construct arguments grounded in principles of balance and justice (Maulana & Wahyudi, 2024).

Thus, strengthening the values of religious moderation through the analysis of thinking patterns and behavior is not merely a process of knowledge transfer but a process of character formation and the development of learners' reflective capacities. This approach emphasizes the synergy between technology and pedagogy, where digital systems serve as tools to facilitate self-reflection, guide ethical decision-making, and shape inclusive social behavior. The outcome is learners who can navigate complex social contexts, respect differences, reject extremist attitudes, and internalize the values of moderation in their daily lives.

Integration of Technology and Spirituality in Digital Islamic Learning

The integration of technology in Islamic education does not merely focus on increasing efficiency or access to information but also aims to strengthen the spiritual dimension of learners. In the modern context, learners are often confronted with abundant information, social complexities, and ethical challenges that require a balance between cognitive abilities and spirituality. Therefore, the integration of technology, particularly deep learning, becomes a strategic tool to create learning experiences that are not only

interactive and adaptive but also emphasize reflection, self-awareness, and the development of spiritual values.

Mezirow's transformative learning theory supports this perspective. Transformative learning emphasizes that meaningful learning occurs when individuals are able to reflect on their experiences, critically assess their assumptions, and consciously shift their perspectives. In digital Islamic education, deep learning can facilitate this reflective process through the analysis of learning behavior, digital social interactions, and learners' responses to value-based content. Technology-based learning systems can provide simulations of real experiences, interactive case studies, and collaborative projects that integrate cognitive, affective, and spiritual aspects, enabling learners to internalize principles of moderation, tolerance, and social ethics in a practical way (Fadli, 2023).

Furthermore, literature on modern Islamic education emphasizes the importance of integrating technology and spirituality to cultivate individuals who are not only intellectually competent but also emotionally and morally mature. According to Yusuf (2018) in *Pendidikan Islam Moderat: Teori dan Praktik*, moderate education must balance intellectual development, spiritual awareness, and social responsibility. Deep learning provides mechanisms to monitor and analyze learners' study patterns, allowing educators to adjust content and learning strategies that support spiritual development, such as through digital reflection, interactive dialogue, and social projects emphasizing empathy, solidarity, and justice.

Additionally, the theory of emotional and spiritual intelligence is relevant in this context. Technology integration in Islamic learning can stimulate learners' emotional and spiritual intelligence by providing learning experiences that emphasize self-awareness, emotional regulation, empathy, and understanding of moral values. Interactive modules, social scenario simulations, and AI-based case analyses encourage learners to understand the consequences of their actions on others, foster social responsibility, and internalize religious values in practical ways. In this way, technology acts as a mediator that integrates knowledge, morality, and spirituality, making digital Islamic learning not only informative but also transformative.

Moreover, literature on digital literacy and moderation education highlights the importance of learners' ability to manage their interactions with the digital world ethically and wisely. The Wahid Institute (2017) emphasizes that moderation education should equip learners with critical thinking skills, content evaluation abilities, and ethical awareness in using technology. The application of deep learning in digital education enables the creation of an educational ecosystem that facilitates these competencies, through online behavior analysis, adaptive content adjustments, and projects that strengthen moderation values in digital contexts (Kumowal, 2024).

Thus, the integration of technology and spirituality in digital Islamic learning not only enriches the learning experience but also enables holistic education. Technology-based Islamic education does not merely emphasize knowledge transfer but also character formation, moral reinforcement, and the development of learners' spiritual capacities. This process produces learners who can internalize the values of moderation, think critically and reflectively, and practice ethical and spiritual principles in social interactions, both in real-life and digital contexts.

Character Development and Moderate Digital Literacy among Learners

The development of learners' character in the context of religious moderation education in the digital era requires a holistic, comprehensive, and adaptive approach. Moderate character is not merely a conceptual understanding of tolerance or balance but is reflected in the attitudes, behaviors, and decisions learners make in daily life, including in their digital interactions. Technology-based education, particularly through the application of deep learning, allows this character-building process to be more systematic and measurable by analyzing learners' thinking patterns, learning preferences, and behavioral tendencies (Hidayati et al., 2025).

A key focus in character development is the consistent internalization of moderation values. With the support of digital learning systems, learners can engage in activities that encourage critical reflection on their attitudes, decisions, and the consequences of their actions, both within the school environment and in broader social contexts. Adaptive learning systems can adjust the level of difficulty, content, and types of interaction according to each learner's needs and characteristics. This enables a

personalized learning process, where learners gain experiences relevant to real-life situations, making moderation values easier to understand, accept, and internalize.

In addition to value internalization, digital literacy is also an integral component of moderate character development. Digital literacy is not only the technical ability to operate devices and digital platforms but also encompasses critical skills to evaluate content, understand the ethical implications of information consumed, and act responsibly within digital environments. Deep learning-based education can provide interactive experiences that stimulate learners to identify valid information, recognize biases in digital content, and consider the social consequences of their online interactions. In this way, learners are trained to become responsible, critical, and ethical users of technology.

Character development in moderation also emphasizes the cultivation of social and emotional competencies. Digital learning activities can be designed to foster empathy, collaboration, and conflict resolution skills (Aliyah & Norlianti, 2025). For example, collaborative simulations and group-based digital projects allow learners to face situations that require compromise, respect for differing opinions, and inclusive problem-solving. Such experiences promote the development of individuals who are not only cognitively competent but also emotionally and socially mature, characteristics that define a moderate individual.

Furthermore, character development through moderate digital literacy helps learners develop self-awareness regarding their identity and responsibilities as members of the digital society. Learners learn to balance individual rights with social responsibilities and to integrate principles of moderation into real-world actions, including the use of social media, online forums, and other digital communication platforms. This approach ensures that moderation education extends beyond the classroom, permeating everyday digital experiences, making learners more adaptive, critical, and responsible in navigating modern information and interactions.

By combining value internalization, digital literacy, and the development of social-emotional competencies, deep learning-based education can cultivate learners with fully developed moderate character. Learners are not only capable of critical and rational thinking but also act inclusively, ethically, and with respect for diversity. Such character serves as a foundational element in creating a harmonious, tolerant, and competitive society in the digital era while preparing a generation capable of using technology wisely and productively for social welfare.

Implications for the Development of Artificial Intelligence-Based Islamic Education

The integration of artificial intelligence, particularly deep learning, into Islamic education carries broad implications for curriculum development, learning strategies, and the interaction patterns between educators and learners. The application of this technology enables the transformation of Islamic education from traditional models to systems that are more adaptive, personalized, and data-driven. One of the primary implications is the ability to design learning that is responsive to learners' needs, abilities, and individual characteristics. By analyzing learning behavior data, AI-based systems can identify areas requiring reinforcement, adjust instructional materials, and provide real-time feedback, making the learning process more effective and meaningful (Noer, 2024).

In terms of curriculum, the implementation of AI allows for the systematic integration of moderation values at every stage of learning. Values such as tolerance, balance, and inclusivity can be internalized through adaptive learning modules, collaborative projects, and digital simulations that demand critical reflection. This enables Islamic education to emphasize not only theoretical knowledge acquisition but also the development of social, emotional, and ethical competencies that characterize moderate individuals (Afida et al., 2025). AI also supports the development of more dynamic assessment methods, where evaluations are based on learners' behavioral achievements, reflections, and understanding of religious values in real-life contexts rather than solely on memorization or test performance.

Furthermore, AI integration opens opportunities for more inclusive and equitable Islamic education. This technology enables high-quality learning access for learners from diverse backgrounds, whether in urban or rural areas. Intelligent digital learning systems can adjust language, context, and complexity levels according to learners' needs, thereby

minimizing educational gaps. This contributes to the equitable distribution of Islamic education quality and the strengthening of moderate character across all societal layers.

From the perspective of educator capacity development, AI allows teachers to act more as facilitators, mentors, and designers of learning experiences rather than merely sources of knowledge. Educators can utilize analytic data from deep learning systems to understand learner behavior trends, design targeted pedagogical interventions, and develop innovative learning strategies that combine technology, creativity, and spiritual values (Muvid et al., 2023). Thus, AI-based Islamic education not only transfers knowledge but also cultivates the professional and ethical competencies of educators as agents of learning transformation.

Moreover, the strategic implications of AI use include enhancing Islamic education's capacity to adapt to social, cultural, and technological changes. Dynamic learning systems can adjust to contemporary developments, digital trends, and global information challenges, equipping learners with critical, analytical, and reflective thinking skills (Gusli et al., 2024). This also strengthens the goals of modern Islamic education: to cultivate individuals who are knowledgeable, ethical, moderate, and capable of becoming positive agents of change in society.

Overall, the development of AI-based Islamic education presents transformative opportunities in learning, curriculum design, character development, and educator empowerment. Such systems enable holistic, adaptive education oriented toward producing learners who are moderate, tolerant, and competent in facing real-life challenges in the digital era. Artificial intelligence serves as a catalyst bridging technology, pedagogy, and spiritual values to create Islamic education that is relevant, effective, and transformative.

4. CONCLUSIONS

The deep learning approach in transforming religious moderation education in the digital era presents a new paradigm that holistically integrates technology, pedagogy, and spiritual values. The transformation of the learning paradigm emphasizes a shift from traditional methods focused on memorization to reflective, constructivist, and contextual learning, in which learners actively construct their understanding, internalize moderation values, and relate them to real social experiences. Analyzing learners' thinking patterns and behaviors through deep learning-based systems enables the systematic reinforcement of moderation values, including balance, tolerance, inclusivity, as well as critical and ethical thinking skills in facing social and digital challenges.

The integration of technology and spirituality in digital Islamic education highlights the importance of learning experiences that are not only interactive and adaptive but also transformative, fostering self-reflection, moral awareness, and the development of emotional and social capacities. The use of interactive modules, simulations, and collaborative projects allows learners to understand the consequences of their actions, cultivate empathy, and internalize principles of moderation in both everyday life and digital contexts. Character development and moderate digital literacy are strategic steps in shaping learners who are intelligent, responsible, critical, and inclusive, enabling them to navigate digital information flows wisely and ethically.

The implications of developing AI-based Islamic education include enhancing curriculum effectiveness, learning strategies, and educator capacities, as well as creating an adaptive, personalized, and inclusive educational ecosystem. Intelligent digital learning systems enable personalized content, real-time learning achievement analysis, and the empowerment of educators as facilitators and designers of learning experiences. Overall, the application of deep learning in religious moderation education allows for the creation of a generation of learners who are moderate, tolerant, reflective, and highly competent, preparing them to become productive and ethical agents of change in a dynamic digital era.

REFERENCE LIST

- Afida, I., Wahidah, N., & Permatasari, Y. D. (2025). Penguatan Moderasi Beragama dalam Kurikulum PAI: Studi Literatur terhadap Tantangan dan Peluang di Era Digital. *Jurnal Miftahul Ilmi: Jurnal Pendidikan Agama Islam*, 2(1), 103–114.
- Agusta, E. S. (2024). Pemanfaatan Literasi Digital Keagamaan Dalam Menumbuhkan Sikap Moderasi Beragama Siswa. *Jurnal Lingkar Mutu Pendidikan*, 21(1), 1–9.
- Akhyar, M., Iswanti, M., Febriani, S., & Gusli, R. A. (2024). Strategi Adaptasi dan Inovasi Kurikulum Pendidikan Islam di Era Digital 4.0. *Instructional Development Journal (IDJ)*, 5(1), 18–30.
- Akhyar, M., Sesmiarni, Z., Febriani, S., & Gusli, R. A. (2024). Penerapan Kompetensi Profesional Guru Pendidikan Agama Islam (PAI) dalam Meningkatkan Keterampilan Berpikir Kritis Siswa. *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, 7(2), 606–618.
- Akhyar, M., Zukdi, I., & Deliani, N. (2024). Value-Based Leadership of Islamic Education Teachers and Its Role in Disciplinary Religious Practice Formation: A Qualitative Case Study in an Indonesian Public School. *Jurnal Pendidikan Islam*, 13(2), 97–105.
- Aliyah, S. R., & Norlianti, N. (2025). MODEL PEMBELAJARAN PAI BERBASIS DEEP LEARNING. *Jurnal Pendidikan Indonesia*, 6(5).
- All, M. A. A. H., Suhaeb, F. W., & Idrus, I. I. (2025). Penguatan Pendidikan Moderasi Beragama: Strategi Membangun Generasi Muda yang Toleran dan Inklusif di Era Disrupsi Digital. *J-CEKI: Jurnal Cendekia Ilmiah*, 4(4), 679–680.
- Fadli, A. (2023). Transformasi digital dan moderasi beragama: Memperkuat ummatan wasathan di indonesia. *Schemata: Jurnal Pascasarjana UIN Mataram*, 12(1), 1–14.
- Febriani, S., Iswanti, M., & Akhyar, M. (n.d.). Pengembangan dan Inovasi Kurikulum Pendidikan Islam dalam Menghadapi Era Digital 4.0. *Instructional Development Journal*, 7(1).
- Gusli, R. A., Iswanti, M., Akhyar, M., & Lestari, K. M. (2024). Inovasi kurikulum pendidikan Islam Era 4.0 di MTsN 1 Pariaman. 5(2), 77–88. <https://doi.org/10.32832/idarah.v5i2.16401>
- Havidotinnisa, S., & Rofaida, R. (2025). DARI PENGETAHUAN KE PEMBELAJARAN: PERAN MODERASI TRANSFORMASI DIGITAL DALAM PROSES PEMBELAJARAN ORGANISASI PEMERINTAH. *CURRENCY (Jurnal Ekonomi Dan Perbankan Syariah)*, 4(1), 561–576.
- Hidayati, Y., Lutfiah, I., Rahmat, I., & Halimah, S. (2025). Pengembangan Kurikulum Pendidikan Agama Islam (PAI) dalam Menyongsong Era Digital dan Moderasi Beragama. *Innovative: Journal Of Social Science Research*, 5(3), 7965–7974.
- Kholili, A. (2025). Kultur Digital: Tantangan Dan Peluang Moderasi. *Kultur Budaya Dan Digital*, 35.
- Kumowal, R. L. (2024). Moderasi Beragama Sebagai Tanggapan Disrupsi Era Digital. *DA'AT: Jurnal Teologi Kristen*, 5(2), 126–150.
- Maulana, S. M. A., & Wahyudi, B. (2024). Peran Pendidikan Dalam Membentuk Moderasi Beragama Di Lingkungan Masyarakat Majemuk. *Al-Abshor: Jurnal Pendidikan Agama Islam*, 1(3), 207–219.
- Muvid, M. B., Ridho, A., Yumnah, S., Saputra, G., Sa'diyah, H., Sa'adillah, R., Fitriyono, E. N., & Ardiansa, J. (2023). Transformasi PAI dalam Penguatan Sikap Moderasi Beragama di Era Digital. *Global Aksara Pers*.
- Noer, M. F. (2024). KURIKULUM PENDIDIKAN AGAMA ISLAM BERBASIS DEEP LEARNING (Pendekatan Pemahaman Multidimensi Nilai-Nilai Keagamaan. *Risda: Jurnal Pemikiran Dan Pendidikan Islam*, 9(1).
- Noprianto, N., & Nurdin, N. (2025). Artificial Intelligence (AI) Dan Studi Keislaman: Menjaga Integritas Etika dan Spiritualitas Islam di Era Digital. *Prosiding Kajian Islam Dan Integrasi Ilmu Di Era Society (KIHIES) 5.0*, 4(1), 128–132.
- Syamraeni, S., & Sholichah, H. (2024). Transformasi Nilai Religius di Era Digital: Analisis Literatur Berdasarkan Tujuan Hifz al-'Aql. *Socio Religia*, 5(2).
- Wati, S., Kuriaya, K., & Akhyar, M. (2025). Integrating Ecopedagogy into the Islamic Religious Education Curriculum to Foster Ecological Awareness. *Dirasah: Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, 8(2), 713–723.