



Digitization of Islamic Education in the Framework of Indonesian Regulations: Opportunities, Challenges, and Development Directions

Rifka Haida Rahma¹, Wedra Aprison², Nur Hakimah³, Devi Sospita⁴

¹ Institut Darul Qur'an (ID AQU) Payakumbuh, Indonesia

² UIN Sjech M. Djamil Djambek Bukittinggi, Indonesia

³ STAIN Mandailing Natal, Indonesia

⁴ Institut Darul Qur'an (ID AQU) Payakumbuh, Indonesia

Corresponding Author: Rifka Haida Rahma E-mail; rifkahaidarahma@idaqupayakumbuh.ac.id

Received: August 19, 2025 | Revised: August 22, 2025 | Accepted: August 25, 2025 | Online: Sep 27, 2025

ABSTRACT

The transformation of Islamic education in Indonesia has entered a new phase with the strengthening of digitalization supported by various national regulatory policies. This article aims to analyze the opportunities, challenges, and directions for the development of Islamic education digitalization within the framework of Indonesian regulations. The urgency of this research lies in the fact that digitalization is no longer just a trend, but a strategic necessity to improve the quality, accessibility, and competitiveness of Islamic education at the global level. However, its implementation is not without fundamental problems, such as infrastructure gaps, low digital literacy among teachers and educational personnel, and limited technology-based Islamic content. This study uses a qualitative approach based on literature review with content analysis of regulatory documents (National Education System Law, Islamic Boarding School Law, Merdeka Belajar policy) and relevant scientific articles. The results of the analysis show that Indonesian education regulations have provided ample space for the digitization of Islamic education, especially in curriculum development, learning innovation, and institutional management. However, the success of this transformation is largely determined by the readiness of human resources, the support of the technological ecosystem, and policy sustainability. This article emphasizes that future development should focus on improving teachers' digital capacity, integrating Islamic values into digital platforms, and multi-stakeholder synergy in realizing inclusive, moderate, and competitive digital Islamic education.

Keywords: Digitization, Islamic Education, Education Regulations, Transformation, Merdeka Belajar (Freedom Of Learning)

Journal Homepage <https://ejournal.iainbatanghari.ac.id/index.php/attasyrih/index>

This is an open access article under the CC BY SA license

<https://creativecommons.org/licenses/by-sa/4.0/>

How to cite: Rahma, H. R., Aprison, W., Hakimah, N., & Sospita, D. (2025). Digitization of Islamic Education in the Framework of Indonesian Regulations: Opportunities, Challenges, and Development Directions. *At-Tasyrih: Jurnal Pendidikan dan Hukum Islam*, 11(2), 319-327. <https://doi.org/10.55849/attasyrih.v11i2.389>

Published by: Pusat Penelitian dan Pengabdian Masyarakat, Institut Agama Islam Nusantara Batang Hari

INTRODUCTION

The development of digital technology in the era of the Fourth Industrial Revolution and Society 5.0 has changed almost all aspects of human life, including education. Education is no longer limited to conventional classrooms, but has transformed into flexible, open, and collaborative technology-based learning. This phenomenon has also spread to the realm of Islamic education in Indonesia, which is known for its diversity of institutions such as madrasas, Islamic

boarding schools, and Islamic religious universities. Digitalization is not merely seen as a tool, but as a key strategy to improve the quality, access, and relevance of Islamic education to the demands of the times (Anderson & Dron, 2011; Ghavifekr & Rosdy, 2015).

According to Mubiarto (2025), the digital era opens up great opportunities for Islamic education to expand the reach and effectiveness of learning through the integration of information technology. However, he also emphasized that digital transformation presents new challenges, such as infrastructure inequality, limited digital literacy among educators, and the suboptimal adaptation of technology-based curricula. Therefore, comprehensive policies and strategies are needed so that Islamic education can adapt without losing its Islamic values.

The transformation of Islamic education in Indonesia cannot be separated from the national regulatory framework that provides a legal umbrella and policy direction. Law Number 20 of 2003 concerning the National Education System emphasizes the importance of equal access and improving the quality of education, while Law Number 18 of 2019 concerning Islamic boarding schools formally recognizes Islamic boarding schools as part of the national education system. In addition, the Merdeka Belajar (Freedom of Learning) policy initiated by the Ministry of Education, Culture, Research, and Technology encourages the use of digital technology in the curriculum and learning. The Ministry of Religious Affairs has also developed various digital initiatives such as madrasah e-learning, the EMIS application, and the pesantren accreditation information system. This shows that national regulations have opened up great opportunities for the digitization of Islamic education, both in terms of curriculum, institutions, and education management (Abidah et al., 2020; Wahyuni et al., 2025).

Wahyuni et al., (2025) emphasize that the implementation of Islamic education policies requires synergy between institutional strategies and government regulations so that digitization does not merely become a trend but a pillar for strengthening the quality of Islamic education. On the other hand, Salsabila et al., (2024) show that the integration of Islamic education technology into the Merdeka Curriculum still faces technical and conceptual obstacles, especially in terms of developing digital-based Islamic materials that are in line with the values of religious moderation.

However, there are a number of serious challenges in the implementation of the digitization of Islamic education in Indonesia. First, the digital infrastructure gap remains a major obstacle, especially for Islamic educational institutions located in rural and remote areas. Many Islamic boarding schools and madrasas do not yet have adequate internet access or digital devices that support online learning (Hidayat et al., 2024). Second, human resource capacity is still limited. Teachers and educational staff often lack sufficient digital literacy, both in terms of technical application use and pedagogically integrating technology into Islamic values-based learning (Eraku et al., 2021). Third, there is still a lack of digital content that is in line with the principles of moderate Islam. Most digital education platforms are still oriented towards general content, while digital Islamic materials integrated with the national curriculum are still rarely developed (Salsabila et al., 2024).

This situation creates a gap between regulations and practices in the field. National regulations have outlined the importance of educational transformation through digitalization, but its implementation is still not fully in line with expectations. For example, the Merdeka Curriculum provides space for digital innovation, but not all madrasas and Islamic boarding schools are able to implement it due to limited resources. Similarly, the Islamic Boarding School Law encourages institutional autonomy and independence, but not all Islamic boarding schools are ready to utilize digital technology as an instrument for institutional strengthening. Most research on Islamic education in the digital era still focuses on online learning practices during the COVID-19 pandemic (Firman & Rahayu, 2020; Hidayat et al., 2024), even though after the pandemic ends, the issue of digitization will become even more relevant as a long-term strategy in the development of national Islamic education.

The urgency of this research lies in the need for a comprehensive analysis of how Indonesian regulations function as a framework for the digital transformation of Islamic education. Most previous studies have emphasized the technical aspects of using digital platforms or case studies of online learning in madrasas and Islamic boarding schools. Very few studies have

focused on the relationship between national regulations, the opportunities created, the challenges that arise, and the direction of development that must be taken to ensure the sustainability of the digitization of Islamic education.

Thus, this study attempts to fill this gap by highlighting the regulatory framework as the main foundation for the digital transformation of Islamic education in Indonesia. The research questions to be answered are: (1) What are the opportunities for the digitization of Islamic education within the Indonesian regulatory framework? (2) What are the challenges faced in its implementation? (3) What is the future direction of development that can ensure the sustainability of Islamic education digitalization that is inclusive and in accordance with Islamic values? The purpose of this study is to provide a critical mapping of the relationship between Indonesian education regulations and the digitalization of Islamic education, as well as to offer strategic recommendations for future policy and educational practice development.

The contribution of this research lies in its interconnective approach, which not only highlights digitalization practices in the field but also directly links them to the national regulatory framework. This approach provides a theoretical contribution by expanding the study of Islamic education towards public policy analysis oriented towards digitalization. Practically, this research provides recommendations that can be used as a reference by policymakers, madrasah administrators, Islamic boarding school leaders, and Islamic education stakeholders to design regulation-based and sustainable digitalization strategies. Thus, this research is expected to strengthen academic literature and serve as a policy reference in the transformation of Islamic education in Indonesia in the digital era.

RESEARCH METHODOLOGY

This study uses a qualitative approach with a library research method that focuses on exploring academic literature, regulations, and education policies in Indonesia, particularly those related to the digitization of Islamic education. This approach was chosen because it is suitable for examining complex social and educational phenomena, which require contextual and interpretive understanding (Creswell & Poth, 2018). Library research allows for the examination of various secondary sources, including legislation, journal articles, books, and research reports relevant to the research theme.

The main data sources consist of three categories. First, formal regulatory documents, including Law Number 20 of 2003 concerning the National Education System, Law Number 18 of 2019 concerning Islamic Boarding Schools, and the Merdeka Belajar (Freedom of Learning) policy issued by the Ministry of Education, Culture, Research, and Technology. Second, academic articles from reputable international journals discussing the digitization of education, digital literacy, Islamic education, and education policy. Third, academic books and national research reports reviewing the transformation of Islamic education, the digitization of education, and technology-based curricula. Data were collected through systematic searches of scientific databases. Literature selection was based on inclusion criteria, namely publication within the last 10 years (2015–2025), relevance to the topic, and source credibility. Older literature was still used if it had conceptual or regulatory significance.

Data analysis was conducted using content analysis techniques, which, according to (Krippendorff, 2019), are used to interpret the meaning of texts through a process of coding, categorization, and interpretation. The analysis took place in three stages. First, data reduction by identifying the main themes from the literature, such as opportunities for the digitization of Islamic education, implementation challenges, and the role of regulation. Second, presentation of data in the form of a structured analytical narrative in accordance with the research focus. Third, drawing conclusions based on consistent patterns of findings.

Validity is maintained through source triangulation by comparing formal regulations, scientific articles, and books. In addition, an interconnective approach is used as formulated by Abdullah (2007), which integrates normative-theological, empirical-sociological, and regulatory dimensions in the study of Islamic education. This approach allows for analysis that not only highlights the technical aspects of digitization but also considers the social, cultural, and religious

implications. The limitation of this study lies in the use of secondary data that does not fully capture the empirical dynamics in the field. To mitigate this, the literature reviewed was expanded to include diverse perspectives and provide a comprehensive analysis.

RESULT AND DISCUSSION

The results of this study indicate that the digitization of Islamic education in Indonesia has been a significant phenomenon over the past two decades, especially after the introduction of various strategic government policies that encourage national digital transformation and the renewal of the Islamic education curriculum. Strong regulations, such as Law Number 20 of 2003 concerning the National Education System and the 2021–2024 Indonesian Digital Transformation Roadmap policy, have become the legal basis and policy direction that encourages the integration of technology into the national education system, including Islamic education (Ministry of Education and Culture, 2020; Ministry of National Education, 2003).

In this context, a review of the literature and policies reveals three main interrelated dimensions: (1) regulations and policy directions for the digitization of Islamic education, (2) strategic opportunities arising from the digitization process, and (3) implementation challenges and development directions. These three dimensions form the basis for understanding the position of Islamic education amid the tide of digital modernization and how regulations can serve as instruments to ensure that digitization is inclusive, ethical, and in line with Islamic values.

Regulation and Policy Direction for the Digitalization of Islamic Education

A review of regulatory documents shows that the legal basis for education in Indonesia provides ample space for Islamic educational institutions to adapt to technological developments. Law No. 20 of 2003 emphasizes the importance of utilizing information and communication technology to improve the effectiveness and efficiency of learning (Ministry of National Education, 2003). This regulation is the starting point for the integration of digital systems in educational institutions, including Islamic boarding schools and madrasas, which were previously known to be very traditional.

The 2021–2024 Indonesian Digital Transformation Roadmap then reinforced the government's policy direction in strengthening digital infrastructure, developing human resource competencies, and utilizing data and technology to improve public services, including in the education sector (Ministry of Education and Culture, 2020). In this roadmap, the education sector is positioned as one of the main priorities for promoting digital literacy and the equitable use of technology.

UNESCO (2021) also emphasizes that the digital transformation of education must be based on the principles of equality, social justice, and ethical responsibility. This is in line with the mission of Islamic education, which places knowledge as a means to build a civilized society (madani). Therefore, the Indonesian government's policy can be understood as an effort to frame the digitization of education in the spirit of inclusiveness, where Islamic educational institutions have equal opportunities in accessing technology and resources.

Research by Ikhsanudin et al. (2022) shows that the Merdeka Belajar policy also provides flexibility for Islamic educational institutions to develop technology-based learning models without losing their Islamic characteristics. This program encourages digital curriculum innovation, the use of learning management systems (LMS), and the development of e-learning platforms based on spiritual values. However, this policy still requires more specific operational guidelines so that it can be implemented effectively in madrasahs and Islamic boarding schools, which have different characteristics from public schools.

In addition, the results of the study show that existing regulations do not explicitly regulate digital ethics in the context of Islamic education. In fact, according to Azra (2019), the transformation of Islamic education must always be based on religious ethical and moral values so as not to lose its spiritual direction. Regulations that only emphasize technical aspects without considering the social and cultural context of Islamic educational institutions can result in digitalization that lacks values and is solely oriented towards administrative efficiency. Thus, the

direction of the digitalization policy for Islamic education in Indonesia can be understood as a top-down and bottom-up process: the government provides the legal framework and infrastructure, while Islamic educational institutions play an active role in translating regulations into practices that are relevant to their context.

Strategic Opportunities for the Digitalization of Islamic Education

Digitalization has opened up enormous opportunities for Islamic education to transform into a more open, collaborative, and innovative learning system. According to Warschauer (2004), technology plays an important role in expanding social inclusion and overcoming disparities in access to learning resources. This principle of digital equity is relevant to the world of Islamic education, which has institutions distributed throughout remote areas. Research shows that there are four main strategic opportunities in the digitization of Islamic education in Indonesia:

a. Access to Knowledge and Learning Reach

Through the use of digital platforms, students in Islamic boarding schools and madrasas can access global Islamic literature, take online courses, and interact with teachers and scholars from various regions (Nugroho & Astutik, 2024). This enriches scientific insight while broadening the horizon of understanding of moderate and contextual Islam. In a study by Ansori et al. (2022), digitization in Islamic boarding schools is even predicted to be a catalyst for the revival of global Islam because it enables the transfer of knowledge across countries without geographical boundaries. Thus, digitization is not only a learning tool but also a means of Islamic da'wah and cultural diplomacy.

b. Efficiency and Innovation in Education Management

Digitization also provides efficiency in the management of educational institutions. Data-based administrative systems, digital finance, and integrated academic management help Islamic boarding schools and madrasas improve transparency and accountability (Bahri et al., 2024). Maram and Fanani (2025) found that the use of digital systems in curriculum management and assessment facilitates collaboration between teachers, students, and parents. This opportunity is reinforced by government policies that encourage the integration of big data in education management. Data collected from various educational institutions can be used as a basis for evidence-based policy formulation.

c. Integration of Islamic Values and Science

Digitalization not only modernizes learning methods but also opens up space for the integration of Islamic values and advances in modern science. This is in line with Selwyn's, (2016) idea that educational technology should not only change tools and media, but also the learning paradigm. Digital-based Islamic education can combine spiritual teachings with mastery of science and technology to produce a generation that is both religious and globally competent.

d. Opportunities for Economic and Social

Empowerment Islamic boarding schools have great potential in digital economic development. Many Islamic boarding schools have begun to develop digital entrepreneurship based on economic independence for the community (Muiz, 2023). Strengthening the digital ecosystem through digital skills training, sharia e-commerce, and Islamic financial literacy can be a strategy for the economic empowerment of santri and the surrounding community. Restalia and Khasanah (2025) emphasize that Islamic education in the digital era has a strategic role in shaping ethical, productive, and Islamic values-based digital citizenship. Therefore, the opportunities for digitization are not only in the academic realm, but also in character building and socio-economic empowerment.

Challenges in Implementing the Digitalization of Islamic Education

Although the opportunities for digitalization are enormous, research shows that the implementation process still faces complex challenges involving structural, cultural, and technical factors.

a. Infrastructure and Access Gaps

Data from the Central Statistics Agency (2022) shows that the gap in access to the internet and digital devices is still high, especially in rural areas where many Islamic boarding schools are located. Limited internet networks often hinder online learning activities, preventing them from being carried out optimally. Muiz (2023) highlights that some Islamic boarding schools still rely on traditional methods of learning due to a lack of technological support. This has led to a gap between advanced Islamic educational institutions in urban areas and those in disadvantaged areas.

b. Limited Digital Literacy of Teachers and Students

Research by Supardi and Hakim, (2021) and Bahri et al. (2024) confirms that most madrasah and Islamic boarding school teachers do not yet have adequate digital competence. These limitations include the ability to use technological devices, understand digital learning platforms, and manage content based on Islamic values. In this context, digital literacy training and certification are urgently needed. Restalia and Khasanah (2025) remind us that without strong digital pedagogical competencies, technology will only become a symbol of modernization without bringing about fundamental changes in the quality of learning.

c. Regulatory and Technical Guidance Disparities

National regulations such as the Nasional Education System Law (2003) and digital transformation policies do provide strategic direction, but they do not yet provide contextual technical guidance for Islamic educational institutions. This has led many madrasas and Islamic boarding schools to innovate independently without clear policy support. According to Maram and Fanani (2025), the digitization of Islamic education requires an adaptive approach that takes into account differences in resources and institutional culture. Without coordination and specific policies, the digitization process is prone to producing quality disparities between institutions.

d. Issues of Ethics and Digital Moderation

Another increasingly prominent challenge is the emergence of ethical issues in the use of technology. Religious content in the digital space is often mixed with extremist ideologies and intolerant narratives. Therefore, Islamic education needs to strengthen the values of moderation in its digital literacy (Azra, 2019). Warschauer (2004) emphasizes that technology is not neutral; it reflects the values and interests of those who control it. Therefore, it is important for Islamic educational institutions to develop a digital ethics policy based on the principle of rahmatan lil 'alamin.

Direction of Islamic Education Digitalization Development in Indonesia

The discussion shows that the direction of Islamic education digitalization development in Indonesia needs to be focused on three main strategies: strengthening contextual regulations, increasing digital human resource capacity, and integrating Islamic values into technology policies.

a. Strengthening Digital Regulations and Governance

The government needs to strengthen more operational and contextual regulations for Islamic educational institutions. These regulations must include minimum standards for technology use, data protection, and digital ethics based on Islamic values. In addition, digital governance in Islamic boarding schools and madrasas needs to be developed based on the principles of transparency and cross-institutional collaboration. Nugroho and Astuti (2024) emphasize the importance of partnerships between Islamic educational institutions, the government, and the private sector in providing sustainable digital infrastructure and services.

b. Improving Human Resource Capacity and Digital Literacy

Digital transformation will not succeed without strengthening human resources. Teachers, ustaz, and educational staff must receive continuous training on digital pedagogy, cyber security, and Islamic content creation. Pesantren-based digital upskilling programs can be a solution, as proposed by Bahri et al. (2024), namely community-based training utilizing pesantren alumni networks and the support of Islamic philanthropic institutions.

c. Integration of Islamic Values in the Digital Ecosystem

The development of Islamic educational technology must be based on Islamic values that emphasize manners, responsibility, and the blessings of knowledge. Restalia and Khasanah (2025)

emphasize the importance of developing Islamic digital ethics to guide user interactions in cyberspace so that they remain based on morality and benefit. The integration of these values is not only in learning content but also in technology design, evaluation systems, and digital curricula. Thus, Islamic education can be a pioneer in building a humanistic and ethical digital ecosystem.

Theoretical Implications and Novelty of the Research

The results of this study reinforce the view that the digitization of Islamic education cannot be understood merely as an adaptation to technology, but rather as part of an epistemological movement to reconstruct the relationship between knowledge, faith, and progress. Theoretically, this study expands the concept of digital transformation in Islamic education, which was previously focused only on technical aspects, into a more integrative paradigm—combining public policy, Islamic ethics, and social participation. The novelty of this study lies in its emphasis on the relationship between national regulations and the practice of digitization in Islamic educational institutions. So far, most studies (Ansori et al., 2022; Muiz, 2023) have highlighted the internal aspects of educational institutions without directly linking them to government policies. This study shows that the success of digital transformation cannot be separated from the synergy between the regulatory framework and institutional creativity.

CONCLUSION

The digitization of Islamic education within the framework of Indonesian education regulations is an inevitability that cannot be avoided amid global social, cultural, and technological changes. This article shows that national regulations, such as the 2003 National Education System Law and the 2020 Merdeka Belajar (Freedom of Learning) policy, have provided a legal basis and strategic framework for Islamic educational institutions to transform themselves to become more adaptive, innovative, and competitive. These regulations not only emphasize the role of technology in improving the quality of education, but also provide strong legitimacy for Islamic boarding schools, madrasas, and Islamic universities to innovate their curricula, learning methods, and digital-based educational management.

However, the process of digitizing Islamic education in Indonesia is not without a number of structural, cultural, and technical challenges. From a structural perspective, the technological infrastructure gap between urban and rural areas is still evident and has implications for unequal access to digital education. From a cultural perspective, resistance to change among some groups and concerns about the loss of traditional pesantren values pose a dilemma. Meanwhile, from a technical perspective, the limited digital literacy of educators and the weak data security system in education are serious problems that must be addressed.

Nevertheless, opportunities for the development of Islamic education digitalization are wide open. The use of technology can expand the reach of Islamic preaching and education through online platforms, integrate traditional methods with digital approaches, and provide interactive learning models that are more suited to the needs of the digital-native generation. The Merdeka Belajar (Freedom of Learning) policy and other regulatory support allow Islamic educational institutions to be more flexible in developing digital curricula that are interconnected with modern science, while maintaining their religious identity.

The contribution of this article lies in its emphasis that national education regulations function not only as normative rules, but also as transformative instruments that enable the sustainable development of Islamic education digitalization. Thus, future development must focus on the integration of regulations, technology, and Islamic values. The implementation of this strategy requires close collaboration between the government, educational institutions, the community, and the private sector to ensure that the digitization of Islamic education is inclusive, fair, and effective.

Finally, digital transformation in Islamic education is not merely a technological agenda, but also a civilizational movement that positions Islam as a religion of rahmatan lil ‘alamin that is relevant to the dynamics of the times. With a strong regulatory foundation, the digitization of

Islamic education can be directed to become a strategic instrument in producing a generation of Muslims who are superior, have good character, and are ready to face global challenges.

REFERENCES

- Abdullah, A. (2007). *Islamic Studies dalam paradigma integrasi-interkoneksi: Sebuah antologi*. Suka Press.
- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The impact of COVID-19 on Indonesian education and its relation to the philosophy of "Merdeka Belajar". *Studies in Philosophy of Science and Education*, 1(1), 38–49. <https://doi.org/10.46627/sipose.v1i1.9>
- Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12(3), 80–97. <https://doi.org/10.19173/irrodl.v12i3.890>
- Ansori, A., Rohmatulloh, D. M., Sudrajat, D., Asnaeni, S. A. M., & Utami, S. (2022). Digital innovation in pesantren education: Prediction to welcome global Islam awakening. *Nazhruna: Jurnal Pendidikan Islam*, 5(2), 645–661. <https://doi.org/10.31538/nzh.v5i2.2222>
- Azra, A. (2019). *Pendidikan Islam: Tradisi dan modernisasi menuju milenium baru*. Prenadamedia.
- Bahri, S., Wahid, A. H., & Najiburrahman. (2024). Digital transformation in pesantren: The kyai's role in improving educational services. *Indonesian Journal of Education and Social Studies*, 3(2), 61–72. <https://doi.org/10.33650/ijess.v3i2.3417>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th (ed.)). SAGE Publications.
- Eraku, S. S., Baruadi, M. K., Anantadajaya, S., Fadjarajani, S., Supriatna, U., & Arifin, A. (2021). Digital literacy and educators of Islamic education. *Edukasi Islami: Jurnal Pendidikan Islam*, 10(1), 1–10. <https://doi.org/10.30868/ei.v10i01.1533>
- Firman, F., & Rahayu, S. (2020). Pembelajaran online di tengah pandemi COVID-19. *Indonesian Journal of Educational Science*, 2(2), 81–89. <https://doi.org/10.31605/ijes.v2i2.659>
- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175–191. <https://doi.org/10.21890/ijres.23596>
- Hidayat, M. T., Hasim, W., & Hamzah, A. (2024). Pembelajaran daring selama pandemi COVID-19: Solusi atau masalah baru dalam pembelajaran? *Journal Civics and Social Studies*, 4(2), 47–56. <https://doi.org/10.31980/journalcss.v4i2.129>
- Ikhsanudin, I., Nyarminingsih, N., & Nursikin, M. (2022). Merdeka Belajar dan Implikasinya terhadap Evaluasi Pembelajaran Pendidikan Agama Islam. *Al Yazidiy: Jurnal Sosial Humaniora Dan Pendidikan*, 4(1), 110–120. <https://doi.org/10.55606/ay.v4i1.40>
- Kebudayaan, K. P. dan. (2020). *Kebijakan Merdeka Belajar*. Kementerian Pendidikan dan Kebudayaan Republik Indonesia.
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology* (4th ed.). SAGE Publications.
- Maram, A. N., & Fanani, Z. (2025). Digital transformation in pesantren: Impacts and challenges in Islamic education. *Paedagogia: Jurnal Kajian, Penelitian Dan Pengembangan Kependidikan*, 16(3), 313–324. <https://doi.org/10.31764/paedagogia.v16i3>
- Mubiarto, A. N. (2025). Challenges and opportunities for Islamic education in the digital age. *Jurnal Multidisiplin*, 1(2), 123–128. <https://doi.org/10.70963/jm.v1i2.166>
- Muiz, A. (2023). Pesantren in the digital era: Looking for the chances and the challenges. *At-Tarbawi: Jurnal Kajian Kependidikan Islam*, 8(1), 31–46. <https://doi.org/10.22515/attarbawi.v8i1.6246>
- Nasional, K. P. (2003). *Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 78. Sekretariat Negara*.
-

-
- Nugroho, A., & Astutik, A. P. (2024). Digital transformation of Islamic boarding school education (Transformasi digital pendidikan pesantren). *Indonesian Journal of Islamic Studies*, 12(2). <https://doi.org/10.21070/ijis.v12i2.1723>
- Restalia, W., & Khasanah, N. (2025). Transformation of Islamic education in the digital age: Challenges and opportunities. *Tadibia Islamika*, 4(2), 85–92. <https://doi.org/10.28918/tadibia.v4i2.8964>
- Salsabila, U. H., Rifki, M., Oktavianda, T., Annisa, & Fauzan Abid, D. (2024). Integrasi teknologi pendidikan agama Islam dalam Kurikulum Merdeka. *IHSAN: Jurnal Pendidikan Islam*, 2(1), 136–147. <https://doi.org/10.61104/ihsan.v2i1.133>
- Selwyn, N. (2016). *Education and technology: Key issues and debates* (2nd ed.). Bloomsbury Academic.
- Statistik, B. P. (2022). *Statistik telekomunikasi Indonesia 2022*. BPS.
- Supardi, & Hakim, M. V. F. (2021). Investigation of the Digital Competence of Madrasah Teachers During the Covid-19 Pandemic. *Al-Ishlah: Jurnal Pendidikan*, 13(3), 2335–2342. <https://doi.org/10.35445/alishlah.v13i3.1246>
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. UNESCO.
- Wahyuni, S., Anggi, M. S., Aprianto, I., & Jamrizal. (2025). Implementasi strategi dan kebijakan pendidikan Islam. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, 2(10), 509–515. <https://doi.org/10.5281/zenodo.16739398>
- Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. MIT Press.
-

Copyright Holder :

© Rifka Haida Rahma et. al. (2025).

First Publication Right :

© At-Tasyrih: Jurnal Pendidikan dan Hukum Islam

This article is under:

