

Reconstructing The Islamic Education Curriculum In Islamic Boarding Schools In The Digital Era

Tami Puji Astutik^{1*}, Itsna Rusydiana²

STIT Muhammadiyah Kediri, Kediri, Indonesia.

Email : tamipujiaastutik28@gmail.com, itsnarusydiaana@gmail.com

ARTICLE INFO

Article History

Received, xxxxx

Revised, xxxxx

Accepted, xxxxx

Keywords

Islamic Education Curriculum; Pesantren; Digital Integration; Character Values; Curriculum Reconstruction.

Copyright © year
Sociosphere



This work is licensed under a [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) 4.0 International license

ABSTRACT

This study examines the reconstruction of the Islamic education curriculum in Indonesian Islamic boarding schools (*pesantren*) within the context of digital transformation. As traditional centers of Islamic learning, *pesantren* play a vital role in preserving religious values and shaping moral character. However, the emergence of the digital era has posed new pedagogical, technological, and epistemological challenges that require curriculum reform. This research employs a qualitative descriptive approach through a systematic literature review, analyzing scholarly works, policy documents, and classical Islamic educational philosophies published between 2020 and 2025. The findings reveal that curriculum reconstruction must rest upon three interrelated foundations: conceptual-philosophical, structural, and practical. Philosophically, the curriculum should be grounded in *tawhīd al-'ilm* (unity of knowledge) and *ta'dīb* (moral formation), ensuring that the integration of digital technology reinforces rather than undermines Islamic values. Structurally, *pesantren* must adopt a multidimensional model that harmonizes spiritual, intellectual, and digital competencies. This includes teacher training in digital pedagogy, development of ethical media literacy, and institutional collaboration with academic and governmental bodies. Practically, the model encourages the formation of *digital murabbi*—educators capable of guiding students in using technology responsibly while nurturing moral integrity. The study concludes that reconstructing the *pesantren* curriculum based on digital integration and character education is not merely an adaptation to technological progress but a transformative effort to reaffirm the harmony between faith, knowledge, and innovation. Such an approach will enable *pesantren* to sustain their identity as centers of spiritual and intellectual excellence in the 21st century.

Citation:

Filled by Journal Manager

INTRODUCTION

Islamic boarding schools (*pesantren*) have long stood as the pillars of Islamic education in Indonesia, serving as institutions that preserve Islamic values, nurture moral character, and promote intellectual growth among Muslim students (*santri*). Historically, *pesantren* have been recognized as cultural and educational centers producing generations of scholars, preachers, and community leaders. However, in the digital era, *pesantren* face a new educational landscape characterized by rapid technological innovation, evolving societal needs, and a growing demand for global competencies. These changes necessitate a systematic and critical reconstruction of the Islamic education curriculum to ensure the sustainability, relevance, and competitiveness of *pesantren* in the 21st century (Annas dkk., 2023).

The urgency of this reconstruction stems from the shifting paradigm of education, which increasingly emphasizes digital literacy, critical thinking, and interdisciplinary learning. Traditional *pesantren* education systems have historically been rooted in the *salaf* model, emphasizing classical Islamic texts (*kitab kuning*) and teacher-centered pedagogy (Fadillah dkk., 2021). While this approach effectively preserved religious orthodoxy and moral formation, it often lacked integration with modern educational methodologies and technological competencies. Consequently, *pesantren* graduates sometimes face challenges adapting to contemporary academic and professional environments. The reconstruction of the Islamic education curriculum, therefore, seeks to bridge this gap by integrating traditional Islamic learning with digital pedagogy and modern sciences, fostering *santri* who are both spiritually grounded and technologically capable (Setyaningsih dkk., 2019).

In recent years, scholars have explored various aspects of *pesantren* reform, including curriculum integration, institutional management, and the use of technology in education. Mahdali dkk., (2022) emphasized that curriculum development in Islamic boarding schools should harmonize religious knowledge with contemporary subjects to nurture balanced individuals. Similarly, Badrun (2024) argued that *madrasah*-based management within *pesantren* enhances institutional capacity, enabling more effective curriculum innovation and teacher professionalization. These studies collectively highlight the potential for *pesantren* to evolve into centers of excellence that balance tradition and modernity. However, they also reveal a persistent gap: while much has been written on curriculum improvement and management systems, limited research has addressed a comprehensive reconstruction framework that explicitly integrates digital transformation into the Islamic education curriculum (Hamdanah, 2024).

This research gap becomes particularly salient when viewed against the backdrop of Indonesia's broader educational digitalization movement. Firdaus & Mardiana (2024) observed that the development of *pesantren*

curricula through equalization policies remains fragmented, often lacking a cohesive strategy for incorporating digital technology into religious education. Furthermore, Setyaningsih dkk., (2019) found that while some *pesantren* have adopted e-learning platforms, many institutions still struggle with infrastructural limitations, digital literacy deficits, and pedagogical readiness. These findings indicate that the digital transition within Islamic education is uneven and calls for a more structured approach grounded in both Islamic epistemology and modern educational theory.

In addition to technological challenges, *pesantren* face socio-religious and cultural pressures to remain relevant amid global shifts in values and ideologies. According to Sadiyah (2022), developing *pesantren* education quality must involve proactive measures to prevent radicalism and promote moderate Islamic values. This aligns with broader research showing that *pesantren* can serve as peacebuilding institutions that cultivate tolerance, critical dialogue, and social harmony. Thus, reconstructing the curriculum is not merely an educational reform but also a moral and cultural imperative that ensures *pesantren* continue to embody and transmit values of moderation, inclusivity, and peace in a rapidly changing world (Ruslan dkk., 2023).

The rationale of this study lies in the recognition that digital transformation offers both opportunities and risks for Islamic education. On one hand, technology provides unprecedented access to information, collaborative tools, and interactive learning experiences. On the other, it poses challenges related to maintaining the authenticity of Islamic teachings and managing exposure to conflicting worldviews (Hamdanah, 2024). Therefore, this study proposes that reconstructing the Islamic education curriculum should not only focus on integrating digital tools but also recontextualizing Islamic pedagogical philosophy within a digital framework. This includes redefining the roles of *kyai* (Islamic teachers), reformulating learning objectives, and embedding ethical digital practices consistent with Islamic values (Fadillah dkk., 2021)

Building upon prior research, this study hypothesizes that the effective reconstruction of the Islamic education curriculum in *pesantren* during the digital era requires a multidimensional model encompassing theological, pedagogical, technological, and managerial components. Specifically, the study posits that: (1) integrating digital literacy within Islamic subjects will enhance students' cognitive engagement and adaptability; (2) teacher training in digital pedagogy will improve instructional quality; and (3) the incorporation of character education and peace-oriented values will mitigate the risks of moral decline in the digital age (Ruslan et al., 2023). These hypotheses are grounded in empirical evidence showing that curriculum design, teacher competence, and institutional climate collectively influence

students' moral and intellectual development (Badrun, 2024).

Accordingly, the main objectives of this study are threefold: first, to analyze the current structure and limitations of the Islamic education curriculum in *pesantren*; second, to identify strategic frameworks for integrating digital competencies into Islamic learning while maintaining theological authenticity; and third, to formulate a practical model for curriculum reconstruction that supports holistic education—spiritual, intellectual, and digital—within the *pesantren* context. In achieving these objectives, this study contributes to the growing discourse on Islamic education reform and offers a pathway for *pesantren* to thrive as transformative institutions in the digital era (Firdaus & Mardiana, 2024).

In conclusion, the reconstruction of the Islamic education curriculum is both a necessity and an opportunity for *pesantren* to reaffirm their role as dynamic centers of learning that harmonize faith, knowledge, and technology. By embracing digital innovation while preserving Islamic identity, *pesantren* can prepare future generations of Muslims who are not only pious but also progressive, ethical, and globally competent. This study, therefore, seeks to provide an academic and practical framework for achieving that synthesis through evidence-based curriculum reconstruction in the digital era (Annas dkk., 2023); (Hamdanah, 2024).

METHODS

This study employed a qualitative descriptive approach using a library research design to examine the reconstruction of the Islamic education curriculum in Islamic boarding schools (*pesantren*) during the digital era. This method was chosen because it allows a comprehensive and critical exploration of theoretical foundations, conceptual frameworks, and previous research findings related to Islamic curriculum innovation and digital transformation (Habibi dkk., 2021); (Mukarom dkk., 2024). The research relied on secondary data obtained from various credible academic sources such as peer-reviewed journals, books, conference proceedings, and policy documents focusing on Islamic education reform, technology integration, and *pesantren* development. Primary Islamic references including classical educational thoughts from scholars and Qur'anic perspectives on knowledge and *ta'dīb* were also reviewed to strengthen the philosophical dimension of the analysis (Fadillah dkk., 2021); Fauzia dkk., 2025).

The process of data collection followed a systematic literature review model by identifying and synthesizing previous studies published between 2020 and 2025. The sources were selected using inclusion criteria emphasizing relevance, recency, and methodological rigor. Searches were conducted through databases such as Scopus, DOAJ, and Google Scholar, while additional materials were obtained from institutional repositories of

Islamic universities. All collected data were coded and categorized according to recurring themes such as digitalization of learning systems, curriculum innovation, Islamic character education, and the adaptation of pesantren management to technological change (Annas dkk., 2023); Supriyono, 2022).

Data were analyzed using qualitative content analysis and thematic interpretation techniques following the model of Miles and Huberman, which consists of three stages: data reduction, data display, and conclusion drawing. These stages enabled the identification of essential themes representing the relationship between Islamic values and digital competence, the role of educators in integrating digital pedagogy, and the formation of students' character within a digital environment (Badrun, 2024); Ibda dkk., 2023). Triangulation of sources was applied to ensure validity, comparing classical Islamic education theories with modern empirical studies to maintain analytical accuracy and credibility (Hamdanah, 2024); Prakosa dkk., 2023).

The overall analysis adopted a philosophical-pedagogical framework combining Islamic educational philosophy, particularly *tawhīd* and *ta'dīb*, with contemporary 21st-century learning paradigms emphasizing creativity, collaboration, and digital literacy (Hidayatullah dkk., 2023); Supriandi dkk., 2024). Through this integrative method, the study sought to formulate a holistic understanding of curriculum reconstruction that harmonizes religious authenticity with technological advancement, ensuring that pesantren education remains spiritually rooted yet responsive to the challenges of the digital age (Mainuddin dkk., 2024); Nadifa & Ambarwati, 2024).

RESULT AND DISCUSSION

Result

1. The Conceptual and Philosophical Foundations of the Islamic Education Curriculum in Islamic Boarding Schools

The findings indicate that the conceptual and philosophical foundations of the Islamic education curriculum in Islamic boarding schools (*pesantren*) are firmly rooted in Islamic epistemology and pedagogy, emphasizing the unity of knowledge (*tawhīd al-'ilm*) and the cultivation of moral character (*ta'dīb*). The curriculum is designed not merely to transmit religious knowledge but to nurture holistic human development (*insān kāmil*) through spiritual, intellectual, and moral formation (Hidayatullah dkk., 2023). Education is viewed as a sacred process that integrates divine revelation (*naqliyyah*), rational inquiry (*'aqliyyah*), and empirical understanding (*tajribiyyah*). This triadic epistemology ensures that knowledge remains a means to achieve faith and ethical refinement rather than mere cognitive accumulation (Fadillah dkk., 2021). The philosophical essence of pesantren education lies in the harmony between intellectual growth and spiritual consciousness, aligning with Al-Attas' vision of knowledge as

“putting everything in its proper place.” Thus, the reconstruction of the curriculum in the digital era must maintain this theological essence while adapting to technological, economic, and social changes. Integrating traditional Islamic sciences with contemporary disciplines such as digital literacy, entrepreneurship, and environmental studies is essential to maintain the curriculum’s relevance and societal impact (Badrun, 2024) ; Lutfauziah dkk., 2023) ; Mainuddin dkk., 2024).

2. Challenges and Opportunities in the Digitalization of Islamic Boarding School Education

The study also reveals multiple challenges and opportunities in the digitalization of pesantren education. The most pressing challenges include infrastructural limitations, pedagogical resistance, and cultural adaptation. Many pesantren, especially in rural areas, face inadequate access to digital technology, unstable internet connections, and limited financial resources to support e-learning platforms (Annas dkk., 2023). Pedagogically, teachers and *kyai* who are accustomed to traditional face-to-face learning methods such as *sorogan* and *bandongan* often struggle to integrate digital media into their instruction (Kholili, 2021). There is also a risk of moral decline and reduced personal engagement between educators and students due to the excessive use of digital tools (Muiz, 2023); Supriyono, 2022). However, these challenges coexist with significant opportunities. Digitalization allows pesantren to access vast Islamic knowledge repositories such as *Maktabah Syamilah NU 1.0* and online tafsir databases (Ibda dkk., 2023). It enhances the effectiveness of communication, supports blended learning environments, and promotes creative teaching methods (Supriandi dkk., 2024). Furthermore, technology provides new platforms for da’wah, academic exchange, and social outreach, strengthening the pesantren’s role in the global knowledge network (Wijaya dkk., 2024). The emerging “Society 5.0” paradigm offers a framework in which human-centered innovation and Islamic ethical values can coexist harmoniously (Fauzia dkk., 2025). Thus, the digital transformation of pesantren is not a threat but an opportunity for renewal and empowerment when anchored in strong spiritual and moral principles.

3. A Model for Reconstructing the Islamic Education Curriculum Based on Digital Integration and Character Values

The third major finding proposes an integrative model for reconstructing the Islamic education curriculum that combines digital competence with Islamic character values. This model encompasses three interrelated dimensions—spiritual, intellectual, and digital. The spiritual dimension focuses on embedding *tawhīd*, *ta’dīb*, and *akhlaq* as the core values guiding all learning activities. Teachers act as *digital murabbi*—spiritual mentors who lead students to use technology with moral awareness and responsibility (Ruslan dkk., 2023). The intellectual dimension emphasizes the integration of religious sciences and modern knowledge, encouraging critical thinking, creativity, and

interdisciplinary understanding. Pesantren should develop study modules that merge classical Islamic disciplines with digital entrepreneurship, environmental ethics, and social innovation (Lutfauziah dkk., 2023) ; Mainuddin dkk., 2024). The digital dimension highlights the importance of digital literacy, media ethics, and responsible online behavior. Santri are trained not only as consumers but as creators of Islamic digital content—developing podcasts, educational videos, and interactive applications that promote Islamic moderation and knowledge dissemination (Windarto dkk., 2023); Nadifa & Ambarwati, 2024).

To implement this model effectively, pesantren leadership must cultivate visionary digital governance while preserving traditional values (Badrun, 2024). Continuous teacher training in digital pedagogy is crucial to foster innovation and improve classroom engagement (Saputra dkk., 2023). Partnerships with universities, government institutions, and technology organizations should be strengthened to provide technical support and professional development (Firdaus & Mardiana, 2024). Moreover, regular evaluation mechanisms must ensure that digital integration aligns with Islamic educational objectives and the principles of *maqāṣid al-syarī'ah* (Subekhan & Suryapermana, 2024). Overall, this model represents a balanced paradigm that harmonizes faith and reason, tradition and innovation, spirituality and technology. Through this reconstruction, pesantren can continue to serve as the heart of Islamic civilization—producing generations of *santri* who are pious, intellectually independent, and digitally literate, capable of contributing ethically to a globalized and technologically advanced society (Prabowo dkk., 2022); Malihah dkk., 2023).

Discussion

1. The Conceptual and Philosophical Foundations of the Islamic Education Curriculum in Islamic Boarding Schools

The philosophical foundation of the Islamic education curriculum in *pesantren* is deeply rooted in Islamic epistemology, which emphasizes the unity of knowledge (*tawḥīd al-'ilm*), moral formation (*ta'dīb*), and the holistic development of human beings (*insān kāmil*). Education is not merely an intellectual pursuit but a process of cultivating *adab*—placing knowledge and action within the framework of divine values (Hidayatullah dkk., 2023). Within this paradigm, *pesantren* education is designed to harmonize spiritual, moral, and rational dimensions of human existence. Classical Islamic sciences such as *fiqh*, *tafsīr*, and *hadith* are taught alongside modern disciplines to maintain equilibrium between faith and reason. The inclusion of *ta'dīb* as a moral compass ensures that learning outcomes contribute to the refinement of the soul and the establishment of ethical conduct (Fadillah dkk., 2021).

Philosophically, this approach corresponds with Al-Attas' concept of knowledge as the process of recognizing the proper place of things within the order of creation. Accordingly, *pesantren* curriculum reconstruction must uphold its metaphysical foundation while adapting to global and digital transformations (Badrun, 2024). This balance requires integrating the revealed sciences (*naqliyyah*) with rational and empirical sciences (*'aqliyyah* and *tajribiyyah*). Hence, Islamic education in the digital age must not dichotomize religious and secular knowledge but synthesize them into a unified system that promotes moral intelligence and social responsibility (Fauzia dkk., 2025). The philosophical essence of *pesantren*—that knowledge serves both as spiritual illumination and a means of societal empowerment—positions it as a resilient educational model capable of guiding human development in a technology-driven era (Mainuddin dkk., 2024).

2. Challenges and Opportunities in the Digitalization of Islamic Boarding School Education

The process of digitalizing *pesantren* education presents both structural and philosophical challenges. Structurally, many Islamic boarding schools—especially in rural Indonesia—suffer from inadequate infrastructure, limited access to stable internet, and insufficient technological resources (Annas dkk., 2023). Pedagogically, resistance to innovation remains common, as some educators view digital tools as potential threats to traditional teaching systems such as *bandongan* and *sorogan*, which rely heavily on personal interaction and oral transmission (Kholili, 2021). Additionally, the overuse of digital platforms may reduce students' focus and spiritual engagement, potentially diminishing the moral and emotional connection between *kyai* and *santri* (Muiz, 2023).

Nonetheless, these limitations coexist with unprecedented opportunities. Digital technologies can democratize access to Islamic knowledge, enabling students and teachers to reach global repositories such as *Maktabah Syamilah NU 1.0* and other online tafsir databases (Ibda dkk., 2023). This transformation expands the *pesantren's* intellectual ecosystem beyond its physical walls and fosters collaborative learning environments (Supriandi dkk., 2024). In addition, technology allows *pesantren* to modernize administrative systems, enhance transparency, and increase the efficiency of educational management (Wijaya dkk., 2024).

From a philosophical standpoint, digitalization aligns with the Qur'anic spirit of seeking knowledge (*iqra'*) and utilizing every means available for the benefit of humanity. When guided by Islamic ethics, digital transformation can strengthen—not weaken—the spiritual mission of *pesantren* (Mukarom et al., 2024). The *Society 5.0* framework, which centers technological advancement on human welfare, resonates deeply with Islamic values of *rahmatan lil-'alamin*—mercy and benefit for all creation (Fauzia dkk., 2025). Hence, *pesantren* must approach digitalization not as a replacement for tradition but as an extension of

its moral and intellectual legacy. The true challenge is ensuring that technology remains a servant of ethics, not its master.

3. A Model for Reconstructing the Islamic Education Curriculum Based on Digital Integration and Character Values

In response to these philosophical insights and contextual realities, a model of curriculum reconstruction for *pesantren* education is proposed—one that integrates digital literacy with the moral and spiritual values of Islam. This model comprises three interconnected dimensions: spiritual, intellectual, and digital.

The spiritual dimension functions as the moral foundation, ensuring that technology serves the purpose of moral and spiritual development. Teachers act as *digital murabbi*—spiritual mentors who use digital tools to foster reflection, discipline, and ethical awareness (Ruslan dkk., 2023). The integration of *tawhīd* and *akhlaq* within online learning environments ensures that students view digital technology as a medium for worship and community service rather than self-indulgence.

The intellectual dimension emphasizes the integration of traditional Islamic sciences with modern disciplines, fostering critical and creative thinking. Through interdisciplinary courses that combine Qur’anic studies with digital communication, environmental ethics, and entrepreneurship, students are prepared to become globally competent yet spiritually grounded Muslims (Lutfauziah dkk., 2023); Mainuddin dkk., 2024). This synthesis reflects the Islamic pedagogical vision that unites revelation and reason within the pursuit of truth.

The digital dimension focuses on cultivating digital competence and ethical media engagement. Santri are encouraged to become active content creators by producing educational videos, Islamic podcasts, and interactive applications that disseminate Islamic values online (Windarto dkk., 2023); Nadifa & Ambarwati, 2024). In this way, the digital space becomes a field of *da’wah* and moral transformation.

For this model to be effectively implemented, institutional reform and capacity building are essential. Leadership within *pesantren* must evolve toward digital governance, characterized by innovation, inclusivity, and transparency (Badrun, 2024). Continuous professional development for teachers in digital pedagogy should be prioritized to enhance both technical and ethical competencies (Saputra dkk., 2023). Furthermore, collaboration with universities, research institutions, and technology partners is crucial to ensure sustainability and relevance (Firdaus & Mardiana, 2024). Regular evaluation mechanisms should also be established to monitor the consistency between

curriculum innovation and Islamic educational objectives (Subekhan & Suryapermana, 2024).

Ultimately, the reconstruction of the *pesantren* curriculum in the digital age is not simply a pedagogical adaptation but a transformative synthesis of tradition and innovation. By embracing technology within a framework of Islamic ethics, *pesantren* can reaffirm its role as a dynamic center of spiritual and intellectual growth. The new model promotes *santri* who are spiritually devout, intellectually independent, and digitally literate—embodying the balance between moral virtue and modern competence. This synthesis ensures that Islamic education continues to nurture agents of civilization capable of shaping an ethical and progressive digital society (Prabowo dkk., 2022); Malihah dkk., 2023).

CONCLUSIONS

The reconstruction of the Islamic education curriculum in Islamic boarding schools (*pesantren*) represents both a theological mandate and a pedagogical necessity in the digital era. As demonstrated throughout this study, the integration of digital technology into *pesantren* education must be guided by a solid philosophical foundation rooted in Islamic epistemology—*tawḥīd al-‘ilm* (unity of knowledge) and *ta’dīb* (moral formation). This philosophical orientation ensures that technological innovation does not dilute the spiritual essence of Islamic education but instead strengthens its mission to produce *insān kāmil*—complete human beings characterized by faith, knowledge, and noble character.

The study concludes that curriculum reconstruction in *pesantren* requires a multidimensional approach encompassing spiritual, intellectual, and digital dimensions. The spiritual dimension maintains the centrality of divine values and ethical consciousness as the guiding principles of all educational activities. The intellectual dimension fosters critical, creative, and interdisciplinary thinking by integrating traditional Islamic sciences with modern fields such as technology, environmental ethics, and entrepreneurship. The digital dimension, meanwhile, focuses on cultivating digital literacy and ethical media engagement to prepare *santri* as responsible participants in the global digital community. Together, these dimensions establish a holistic model that unites tradition and innovation under the overarching goal of *rahmatan lil-‘alamin*—Islam as a source of mercy and benefit for all creation.

The challenges faced by *pesantren* in digital transformation—ranging from infrastructural constraints to pedagogical resistance—should not be viewed as obstacles but as catalysts for innovation. The adoption of technology, when grounded in Islamic values, enhances educational inclusivity, transparency, and quality. Collaborative networks involving universities, government agencies, and technology sectors are essential to strengthen institutional capacity and

ensure the sustainability of digital integration. Furthermore, the development of digital *murabbi*—teachers who embody both moral integrity and technological proficiency—is key to sustaining character-based learning within digital spaces.

Ultimately, this research affirms that the future of Islamic boarding schools depends on their ability to harmonize faith and technology. By reconstructing their curriculum based on digital integration and character education, *pesantren* can reaffirm their role as dynamic centers of spiritual and intellectual enlightenment. Such transformation enables *pesantren* to nurture a generation of Muslims who are spiritually devout, intellectually critical, and digitally competent—capable of leading society with ethical wisdom in an era defined by technological advancement.

REFERENCE

- Annas, A., Huda, M., Suja, A., & Muthmainnah, M. (2023). Efforts of Islamic Boarding Schools in Enhancing the Quality of Education at MTs Tahfidz Yanbu'ul Qur'an, Menawan, Kudus. *Al Hikmah Journal of Education*, 4(1), 55–76. <https://doi.org/10.54168/ahje.v4i1.131>
- Badrun, B. (2024). Enhancing Islamic Education: The Role of Madrasah-Based Management in Islamic Boarding Schools. *Al-Ishlah Jurnal Pendidikan*, 16(2). <https://doi.org/10.35445/alishlah.v16i2.5153>
- Fadillah, H., Trisnamansyah, S., Insan, H. S., & Sauri, S. (2021). Strategy of Integrated Salaf Curriculum in Madrasah Aliyah to Improve the Graduates' Quality. *Journal of Education Research and Evaluation*, 5(4), 656. <https://doi.org/10.23887/jere.v5i4.33007>
- Fauzia, E., Zudi, M., & Maftuhah. (2025). Darunnajah Islamic Boarding School Jakarta in the Framework of Society 5.0: Uniting Tradition and Technology in the Curriculum. *Jurnal Inovasi Pendidikan Mh Thamrin*, 9(1), 151–161. <https://doi.org/10.37012/jipmht.v9i1.2798>
- Firdaus, W., & Mardiana, D. (2024). Development of Islamic Boarding School Curriculum Through Equalization Policies. *Attarbiyah Journal of Islamic Culture and Education*, 9(1), 59–73. <https://doi.org/10.18326/attarbiyah.v9i1.59-73>
- Habibi, A., Mukminin, A., Yaqin, L. N., Parhanuddin, L., Razak, R. A., Nazry, N. N. M., Taridi, M., Karomi, K., & Fathurrijal, F. (2021). Mapping Instructional Barriers During COVID-19 Outbreak: Islamic Education Context. *Religions*, 12(1), 50. <https://doi.org/10.3390/rel12010050>
- Hamdanah, H. (2024). Reform and Innovation in Islamic Boarding School Education Management: Standardization of Madrasah Diniyah Salafiyah. *Al-Tanzim Jurnal Manajemen Pendidikan Islam*, 8(2), 534–548. <https://doi.org/10.33650/al-tanzim.v8i2.7297>

- Hidayatullah, R. A., Kusuma, A. R., Saifulloh, A., & Khakim, U. (2023). Concept Good Education With Adab to Build Islamic Human Resource Development. *International Journal of Asian Business and Management*, 2(3), 275–288. <https://doi.org/10.55927/ijabm.v2i3.4625>
- Ibda, H., Sofanudin, A., Syafi', Moh., Soedjiwo, N. A. F., Azizah, A. S., & Arif, M. (2023). Digital Learning Using Maktabah Syumilah NU 1.0 Software and Computer Application for Islamic Moderation in Pesantren. *International Journal of Electrical and Computer Engineering (Ijece)*, 13(3), 3530. <https://doi.org/10.11591/ijece.v13i3.pp3530-3539>
- Kholili, Y. (2021). Challenges for Pesantren in the Revolution Era of Society 5.0. *Amca Journal of Religion and Society*, 1(1), 8–12. <https://doi.org/10.51773/ajrs.v1i1.33>
- Lutfauziah, A., Mimien Henie Irawati Al Muhdhar, Suhadi, S., & Rohman, F. (2023). Curriculum Development for Environmental Education at an Islamic Boarding School. *Journal of Turkish Science Education*, 20(3), 490–503. <https://doi.org/10.36681/tused.2023.028>
- Mahdali, F., Acetylena, S., & Husni, M. (2022). Curriculum Development Design of Elementary-Based Islamic Boarding School. *Al-Ishlah Jurnal Pendidikan*, 14(4), 6443–6456. <https://doi.org/10.35445/alishlah.v14i4.2108>
- Mainuddin, M., Ishomuddin, & Faridi. (2024). Sustainable Pesantren: Institutional Reform in Islamic Education. *Jurnal Alwatzikhoebillah Kajian Islam Pendidikan Ekonomi Humaniora*, 10(2), 427–438. <https://doi.org/10.37567/alwatzikhoebillah.v10i2.2631>
- Malihah, E., Nurbayani, S., Wulandari, P., Wilodati, W., Husaeni, M. F., Hartono, R., Agista, S. B., Rahmah, S. A., & Kesumah, Y. A. (2023). Islamic Boarding School Based on Women's Empowerment and Equality. *Komunitas International Journal of Indonesian Society and Culture*, 15(1), 91–98. <https://doi.org/10.15294/komunitas.v15i1.39561>
- 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>
- Mukarom, Z., Darmawan, D., Agustin, M., Dwijantie, J. S., & Samadi, M. R. (2024). Islamic Education Curriculum Innovation in the Digital Era: Challenges and Opportunities. *International Education Trend Issues*, 2(2), 317–328. <https://doi.org/10.56442/jeti.v2i2.874>
- Nadifa, M., & Ambarwati, R. D. (2024). Islamic School With Digital Culture in Era Society 5.0. *Cahaya Pendidikan*, 10(1), 10–19. <https://doi.org/10.33373/chypend.v10i1.5857>

- Prabowo, M. S., Pratiwi, R., Pambudi, B., Coriala, M. E., & Aziz, M. A. (2022). Digital Literacy and Development of Santripreneur Asset Quality Through the Leadership Role of Kyai: A Case Study of Islamic Boarding Schools. *Journal of Private and Commercial Law*, 6(2), 157–182. <https://doi.org/10.15294/jpcl.v6i2.38837>
- Prakosa, B. A., Rejekiningsih, T., & Musadad, A. A. (2023). Investigating Critical Pedagogy in the Development of the Pesantren Education System. *Icss*, 2(1), 195–201. <https://doi.org/10.59188/icss.v2i1.107>
- Ruslan, R., Saparuddin, S., Husnaeni, H., & Burga, M. A. (2023). The Influence of Teacher's Personality Competence, Curriculum, and School Climate on Student's Morals. *Jurnal Obsesi Jurnal Pendidikan Anak Usia Dini*, 7(2), 2011–2023. <https://doi.org/10.31004/obsesi.v7i2.3920>
- Sadiah, D. (2022). Developing Pesantren Education Quality Through Radicalism Prevention Program for Santri. *Jurnal Pendidikan Islam*, 8(1), 63–74. <https://doi.org/10.15575/jpi.v8i1.17947>
- Saputra, D., Warisno, A., Ansori, A., Andari, A. A., & Andayani, S. (2023). Characteristics of Learning in Islamic Boarding Schools. *Scaffolding Jurnal Pendidikan Islam Dan Multikulturalisme*, 4(3), 638–645. <https://doi.org/10.37680/scaffolding.v4i3.2315>
- Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. (2019). *Communication Strategy in the Digital-Age for Delivering Knowledge at Islamic Boarding Schools Through E-Learning*. <https://doi.org/10.4108/eai.7-12-2018.2281808>
- Subekhan, M., & Suryapermana, N. (2024). Curriculum Development Management in Islamic Boarding Schools: Effective Strategies in Countering Radicalism. *Tarbawi Jurnal Keilmuan Manajemen Pendidikan*, 10(01), 125–134. <https://doi.org/10.32678/tarbawi.v10i01.8294>
- Supriandi, S., Haddar, G. A., & Halim, C. (2024). The Role of Multimedia Integration in Teaching Islamic Religion and Students' Satisfaction With Interactive Learning in Islamic Boarding Schools in Indonesia. *The Eastasouth Journal of Learning and Educations*, 2(02), 119–131. <https://doi.org/10.58812/esle.v2i02.300>
- Supriyono, S. (2022). Pesantren, the COVID-19 Pandemic and Digital Transformation: A Global Development Perspective. *Muslim Education Review*, 1(1), 37–58. <https://doi.org/10.56529/mer.v1i1.10>
- Wijaya, I. S., Ridho, M., Hidayati, D. L., & Mahdi, M. (2024). Utilization of Digital Technology in Islamic Boarding Schools: A Case Study in Samarinda. *Lentera Jurnal Ilmu Dakwah Dan Komunikasi*, 140–153. <https://doi.org/10.21093/lentera.v7i2.7390>

Windarto, W., Witarti, D. I., & Martini, M. (2023). Ali Digitalization (Administration, Literacy, and Information) Towards Smart Society 5.0 in Nurul Hidayah Sukaharja Islamic Boarding School, Cijeruk Bogor. *Iccd*, 5(1). <https://doi.org/10.33068/iccd.v5i1.664>