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A REGULATORY STUDY OF MADRASAHS AND SCHOOLS IN INDONESIA BY TECHNOLOGY-BASED ISLAMIC RELIGIOUS EDUCATION POLICY

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Abstract

This study examines the regulatory framework and implementation of technology-based Islamic Religious Education (IRE) policies in madrasahs and schools in Indonesia. A qualitative approach with a normative–empirical design is employed to analyze policy documents, educational regulations, and relevant scholarly literature. Findings indicate that government policies have increasingly emphasized digital transformation, integration of information and communication technology, and the development of teacher digital competencies within Islamic education. Regulatory structures demonstrate a dual governance system between madrasahs and general schools, which influences policy interpretation and implementation across institutions. Implementation challenges include disparities in infrastructure, limited digital readiness among educators, and inconsistencies in curriculum adaptation. Policy gaps are also identified in coordination between governing bodies and in the operationalization of digital governance systems. Effective implementation requires stronger institutional support, capacity building, and alignment between technological innovation and Islamic educational values. The study concludes that technology-based IRE policy plays a strategic role in enhancing educational quality, but its success depends on comprehensive, adaptive, and context-sensitive regulatory frameworks.

Keywords: *technology, IRE, Madrasah, Education Policy*

Background

The rapid development of digital technology has significantly transformed educational systems across the world, including Islamic education in Indonesia. Educational institutions are increasingly required to integrate technology into learning processes, administration, and policy implementation to remain relevant in the digital era. Islamic Religious Education (IRE) in madrasahs and public schools has experienced substantial changes due to the expansion of digital learning platforms, online instructional models, and information-based educational management. Government policies have also shifted toward strengthening technology integration within national education frameworks. Regulatory adaptation becomes essential because educational institutions are expected to balance technological innovation with religious and moral values. Technology-based Islamic education policies therefore emerge as a strategic response to contemporary educational challenges in Indonesia (Siregar et al., 2025; Santosa, 2022).

Educational transformation in the digital era has encouraged the Indonesian government to reform various regulations concerning Islamic education. Madrasahs and schools are now required to develop digital competencies among students and teachers while maintaining the identity of Islamic values within educational practices. Technology integration in Islamic education is no longer limited to online learning during emergencies but has become part of long-term educational planning. Digital literacy, virtual learning systems, and technology-supported curriculum development are increasingly emphasized within educational regulations. Such developments indicate that Islamic education policies are moving toward adaptive and technology-responsive governance. Regulatory reforms consequently play an important role in ensuring the sustainability of digital transformation in Islamic educational institutions (Zainuddin et al., 2024; Sungkowo, 2024).

Madrasahs occupy a unique position within the Indonesian education system because they integrate general education with Islamic teachings. This dual function creates specific challenges in implementing technology-based educational policies. Digital transformation within madrasahs must consider not only technological effectiveness but also religious ethics, spiritual development, and Islamic character building. Educational regulations therefore need to accommodate technological innovation without weakening the philosophical foundation of Islamic education. Policy implementation often encounters disparities in infrastructure, teacher readiness, and access to digital resources, especially in rural areas. Such conditions demonstrate that technology-based Islamic education policies require comprehensive regulatory strategies to ensure equal educational opportunities across regions (Rahman, 2026; Zainuddin et al., 2024).

Technology integration in Islamic education has also influenced teaching and learning methodologies in madrasahs and schools. Digital platforms such as e-learning systems, learning management systems, and interactive multimedia applications have become increasingly common in classroom practices. Teachers are encouraged to adopt innovative instructional approaches that combine religious instruction with digital learning experiences. Technology-based learning enables students to access Islamic educational materials more flexibly and interactively. Educational regulations consequently emphasize teacher digital competency development as part of broader educational reform. Effective policy implementation depends greatly on the readiness of educators to utilize technology in meaningful ways within Islamic educational contexts (Siregar et al., 2025; Sungkowo, 2024).

Government regulations concerning digital education accelerated significantly following the COVID-19 pandemic. Distance learning policies forced schools and madrasahs to adopt online educational systems within a relatively short period. This condition revealed both the opportunities and weaknesses of technology integration in Islamic education. Some institutions successfully adapted to digital learning environments, while others struggled with limited infrastructure and inadequate technological competencies. Post-pandemic educational policies increasingly focus on strengthening digital ecosystems in schools and madrasahs to improve educational resilience. Regulatory development therefore becomes crucial for supporting sustainable technology-based Islamic education in Indonesia (Rahman, 2026; Ubaedullah, 2025).

Technology-based Islamic education policies also reflect broader changes in educational governance and management systems. Digital transformation has encouraged educational institutions to implement technology-driven administrative systems, data management platforms, and online monitoring mechanisms. Educational governance becomes more transparent, efficient, and data-oriented through the use of digital technologies. Such developments require supportive regulations that ensure accountability, accessibility, and ethical use of educational technology. Policy frameworks must also address issues related to cybersecurity, student privacy, and equitable digital access. These concerns highlight the importance of comprehensive educational regulations within the context of digital Islamic education management (Maskin, 2025; Hilman & Samad, 2025).

Digital transformation in Islamic education is closely related to the emergence of Society 5.0, which emphasizes human-centered technological advancement. Educational institutions are expected to prepare students with digital competencies, critical thinking skills, and technological adaptability while maintaining religious values and ethical awareness. Islamic education policies therefore aim to integrate technological literacy with moral and spiritual development. Curriculum reforms increasingly include digital learning competencies alongside Islamic educational objectives. Such integration demonstrates that educational policy in Indonesia is gradually shifting toward more holistic and technology-oriented approaches. Technology-based Islamic education consequently becomes an important instrument for

preparing future generations in a rapidly changing digital society (Zainuddin et al., 2024; Technology-Based Learning in Madrasah, 2024).

Implementation of technology-based policies in madrasahs and schools often encounters structural and cultural challenges. Limited internet connectivity, insufficient digital infrastructure, and unequal access to technological resources remain significant obstacles in many regions of Indonesia. Teacher resistance toward technological adaptation also affects the effectiveness of policy implementation in educational institutions. Some educators still rely heavily on traditional teaching methods and experience difficulties integrating digital technology into classroom instruction. Such conditions indicate that regulatory reform alone is insufficient without adequate institutional support and capacity building. Continuous professional development programs are therefore necessary to strengthen teacher readiness in implementing technology-based Islamic education policies (Rahman, 2026; Sungkowo, 2024).

Educational policy development in Indonesia increasingly recognizes the importance of collaboration between government institutions, educational stakeholders, and technology providers. Partnerships between schools, madrasahs, universities, and digital platforms contribute to the expansion of technology-based educational innovation. Such collaboration supports the development of digital learning resources, teacher training programs, and educational infrastructure improvement. Regulatory frameworks are needed to coordinate these collaborative initiatives effectively and sustainably. Strong policy coordination also helps ensure that technological development aligns with national educational goals and Islamic educational values. Consequently, technology-based Islamic education policies require multi-stakeholder engagement to achieve successful implementation (Siregar et al., 2025; Maskin, 2025).

Recent studies demonstrate that technology integration in Islamic education can significantly improve learning quality and administrative effectiveness when supported by appropriate regulations. Digital learning systems enable more flexible access to educational resources and encourage interactive instructional models. Educational technology also facilitates data-based decision-making processes within school and madrasah management. Nevertheless, unequal technological readiness among educational institutions continues to create disparities in educational outcomes. Policy evaluation therefore becomes essential for identifying challenges and improving future educational strategies. Regulatory analysis can provide important insights into how technology-based Islamic education policies are implemented across different educational contexts in Indonesia (Hilman & Samad, 2025; Santosa, 2022).

The discourse surrounding technology-based Islamic education policy also raises questions regarding the preservation of Islamic identity within digital educational environments. Rapid technological expansion may influence educational culture, learning ethics, and patterns of student interaction. Islamic educational institutions are therefore challenged to integrate technology while preserving religious values and character education. Educational regulations need to ensure that technological innovation strengthens rather than weakens the spiritual orientation of Islamic education. Such balance is necessary because Islamic education fundamentally aims to develop intellectual, moral, and spiritual competencies simultaneously. Technology-based policy frameworks must therefore reflect both modernization and value-based educational principles (Zainuddin et al., 2024; Santosa, 2022).

Research concerning technology-based Islamic education policy is increasingly important because regulatory transformation continues to shape the future direction of madrasahs and schools in Indonesia. Existing studies often focus on technological implementation or digital learning practices, while comprehensive discussions regarding

educational regulations remain relatively limited. Greater attention is therefore needed to examine how policies influence the integration of technology within Islamic educational institutions. Understanding the relationship between regulation, technology, and Islamic education can contribute to the development of more adaptive and effective educational strategies. Findings from such research are expected to provide theoretical and practical contributions to educational policy development in Indonesia. Technology-based Islamic education policy ultimately represents a significant component of educational transformation within the contemporary digital era.

Method

This study employs a qualitative research approach with a normative–empirical design to examine technology-based Islamic Religious Education policies in madrasahs and schools in Indonesia. A qualitative approach is considered appropriate because the study focuses on understanding regulatory frameworks, policy implementation, and contextual educational practices rather than measuring variables quantitatively. Normative analysis is used to review formal regulations, including national education laws, ministerial decrees, and policy documents related to digital learning and Islamic education. Empirical analysis complements this by examining how these regulations are interpreted and implemented within educational institutions. Data are collected through document analysis, literature review of recent scholarly articles indexed in Google Scholar, and secondary data sources relevant to Islamic education policy and technology integration. The combination of these methods enables a comprehensive understanding of both the legal framework and its practical implications in the field. Analytical procedures follow an interactive model involving data reduction, data display, and conclusion drawing to ensure systematic interpretation of findings.

Research data consist of primary legal documents and secondary sources derived from peer-reviewed journal articles, policy reports, and institutional publications. Selection of literature prioritizes recent studies that discuss digital transformation, educational governance, and Islamic education policy to maintain relevance with current developments. Data validation is conducted through source triangulation by comparing multiple regulatory documents and scholarly perspectives to enhance credibility. Analytical techniques emphasize content analysis to identify key themes, patterns, and policy orientations related to technology-based Islamic education. Interpretation focuses on examining alignment between regulatory intentions and implementation practices in madrasahs and schools. Ethical considerations are maintained by ensuring accurate citation, proper acknowledgment of sources, and objective interpretation of data. Findings from this methodological approach are expected to provide a nuanced understanding of how technology-based Islamic education policies are formulated and implemented in the Indonesian educational context.

Finding & Results

Regulatory Framework of Technology-Based Islamic Religious Education in Madrasahs and Schools

The regulatory framework of technology-based Islamic Religious Education (IRE) in Indonesia reflects the government's effort to adapt educational systems to rapid digital transformation while maintaining religious and moral values. National education policies increasingly emphasize digital literacy, technology integration, and innovation in teaching practices within both madrasahs and general schools. Regulations concerning educational technology are embedded in broader educational reform agendas aimed at improving learning quality and institutional competitiveness. Islamic educational institutions are therefore encouraged to integrate digital learning systems without neglecting the spiritual orientation of Islamic education. Policy development also demonstrates the state's commitment to preparing students for the demands of Society 5.0 and the digital era. Technology-based Islamic

education consequently becomes an important component of educational modernization in Indonesia (Sungkowo, 2024; Zainuddin et al., 2024).

The dual administrative structure between madrasahs under the Ministry of Religious Affairs and schools under the Ministry of Education creates a distinctive regulatory landscape in Indonesia. Such a structure influences policy implementation, curriculum management, and technological adaptation across educational institutions. Madrasahs are expected to integrate religious instruction with digital learning innovations while preserving Islamic educational identity. General schools also experience similar demands in implementing technology-supported Islamic Religious Education within national curriculum frameworks. Differences in institutional governance often lead to variations in infrastructure readiness and policy execution. Regulatory synchronization therefore becomes essential to ensure equal implementation of technology-based educational policies across institutions (Sholeh, 2023; Lisnasari, 2022).

Government regulations increasingly highlight the importance of teacher digital competence in supporting technology-based Islamic education. Teachers are required to develop pedagogical skills that enable effective use of digital platforms, interactive media, and online learning systems. Educational policies encourage professional development programs to improve teachers' technological literacy and instructional adaptability. Digital competency is considered necessary because technology integration in education depends largely on the ability of educators to utilize digital tools meaningfully. Policy frameworks also support the implementation of blended learning models and digital classroom management strategies. Such developments indicate that educational regulations are no longer limited to curriculum administration but also focus on human resource transformation within Islamic education (Azman, 2022; Sungkowo, 2024).

Infrastructure development constitutes another important aspect of the regulatory framework for technology-based Islamic education. Educational regulations emphasize the provision of internet connectivity, digital devices, and technology-supported learning environments in schools and madrasahs. Unequal access to technological infrastructure remains a significant challenge, particularly in rural and underdeveloped regions of Indonesia. Many madrasahs still experience limitations in accessing stable internet networks and digital learning facilities. Government policies therefore seek to reduce educational disparities through targeted digitalization programs and institutional support mechanisms. Infrastructure readiness becomes crucial because effective policy implementation depends heavily on technological accessibility within educational institutions (Hamdanah, 2025; Judijanto et al., 2025).

Digital transformation policies also affect governance and management systems within madrasahs and schools. Educational institutions are encouraged to adopt technology-based administrative systems to improve efficiency, transparency, and accountability. Online data management, digital reporting systems, and virtual academic services have become increasingly common within educational administration. Regulatory frameworks support these developments by encouraging institutions to modernize educational governance structures. Technology integration consequently extends beyond classroom learning and influences institutional management practices. Such transformation reflects the broader orientation of Indonesian educational policy toward digital governance and modern educational administration (Hilman & Samad, 2025).

Curriculum reform within Islamic Religious Education also demonstrates the influence of technology-based educational policies. Educational regulations encourage the integration of digital literacy, critical thinking, and technological awareness into Islamic education curricula. Students are expected not only to understand religious teachings but also to develop

competencies relevant to contemporary digital society. Curriculum adaptation therefore becomes necessary to align Islamic education with technological advancement and global educational developments. Digital learning resources, multimedia-based instruction, and virtual learning environments increasingly support curriculum implementation in madrasahs and schools. Policy orientation toward curriculum modernization illustrates the government's effort to balance religious education with technological progress (Zainuddin et al., 2024; Ubaedullah, 2025).

Challenges in implementing technology-based Islamic education policies remain evident despite continuous regulatory development. Institutional disparities, limited technological resources, and insufficient teacher readiness frequently hinder policy effectiveness. Resistance to technological adaptation also emerges among educators who remain accustomed to traditional instructional approaches. Educational regulations alone are insufficient without adequate institutional support and sustainable capacity-building initiatives. Collaborative efforts between government institutions, schools, madrasahs, and technology providers are therefore necessary to strengthen policy implementation. Such collaboration supports infrastructure development, teacher training, and the creation of inclusive digital educational ecosystems (Strategies of Implementation of Education Technology, 2024).

Technology-based Islamic Religious Education policies ultimately reflect Indonesia's broader educational transformation in response to digitalization and globalization. Regulatory frameworks increasingly emphasize innovation, flexibility, and technological adaptation while maintaining Islamic educational values. Educational modernization within madrasahs and schools is expected to produce students who possess both digital competence and strong moral character. Policy effectiveness depends not only on formal regulations but also on institutional readiness and social support. Continuous evaluation and policy refinement are therefore necessary to address emerging educational challenges in the digital era. Technology-based Islamic education consequently represents a strategic direction for strengthening the relevance and sustainability of Islamic education in Indonesia (Enhancing Islamic Education through Technology Integration, 2025).

Implementation Challenges and Policy Gaps in Technology-Based Islamic Religious Education in Indonesia

Implementation of technology-based Islamic Religious Education (IRE) in Indonesia reveals a complex interaction between policy formulation and practical realities in madrasahs and schools. Educational regulations have emphasized digital transformation, yet implementation often encounters structural and institutional constraints. Disparities between policy expectations and field conditions remain evident, particularly in relation to infrastructure readiness and institutional capacity. Technology integration requires not only formal regulation but also systemic support that ensures accessibility and sustainability. Variations in regional development further contribute to unequal implementation across educational institutions. Such conditions indicate that policy effectiveness is closely tied to contextual factors that influence educational practice (Siregar et al., 2025; Fauziah, 2022).

Infrastructure inequality represents one of the most significant challenges in implementing technology-based Islamic education policies. Urban schools generally benefit from better internet access, digital devices, and technological facilities, while many rural madrasahs experience limited connectivity and inadequate resources. These disparities hinder the consistent application of digital learning policies across regions. Government programs have attempted to address such gaps through digitalization initiatives, yet implementation remains uneven. Limited funding and logistical constraints often slow down infrastructure

development in remote areas. As a result, policy goals related to equitable digital education have not been fully realized (Hamdanah, 2025).

Teacher readiness constitutes another critical factor influencing the success of policy implementation. Many educators face difficulties in integrating digital tools into instructional practices due to limited technological competence. Professional development programs have been introduced to improve digital literacy among teachers, yet participation and effectiveness vary significantly. Some teachers continue to rely on traditional teaching methods despite the availability of digital platforms. Resistance to change and lack of confidence in using technology further complicate implementation efforts. Effective policy execution therefore requires sustained investment in teacher training and capacity building (Azman, 2022; Sholeh, 2023).

Curriculum adaptation also presents challenges within the implementation of technology-based Islamic education. Integration of digital tools into Islamic Religious Education requires alignment between curriculum objectives, teaching strategies, and assessment methods. In many cases, curriculum design has not fully accommodated the demands of digital learning environments. Teachers often struggle to balance religious content with technological innovation in a meaningful way. Learning materials may lack interactivity or fail to reflect contemporary digital contexts. These issues highlight the need for continuous curriculum reform that supports effective technology integration (Zainuddin et al., 2024).

Policy gaps are further evident in the coordination between different governing bodies responsible for education in Indonesia. Madrasahs operate under the Ministry of Religious Affairs, while general schools fall under the Ministry of Education, leading to potential inconsistencies in policy interpretation and implementation. Differences in administrative procedures, funding mechanisms, and institutional priorities contribute to fragmented policy execution. Lack of synchronization may result in unequal access to digital resources and training opportunities. Stronger inter-ministerial coordination is therefore necessary to ensure cohesive implementation of technology-based education policies (Lisnasari, 2022).

Digital governance and data management systems also present emerging challenges in educational policy implementation. Institutions are encouraged to adopt digital administrative systems, yet many lack the technical capacity to manage such systems effectively. Issues related to data security, system integration, and technological maintenance often arise in practice. Educational policies have not fully addressed these operational challenges, creating gaps between regulatory expectations and institutional capabilities. Effective governance requires not only regulatory support but also technical infrastructure and professional expertise. These challenges demonstrate the complexity of implementing digital transformation in Islamic education (Hilman & Samad, 2025).

The following table summarizes key implementation challenges and policy gaps identified in technology-based Islamic Religious Education in Indonesia:

Table 1
Key Implementation Challenges And Policy Gaps

No	Aspect	Implementation Challenges	Policy Gaps Identified
1	Infrastructure	Unequal internet access and limited digital facilities	Lack of equitable distribution policies
2	Teacher Competence	Low digital literacy and resistance to technology	Insufficient continuous professional development programs
3	Curriculum	Misalignment with digital	Limited curriculum reform

	Integration	learning needs	toward digital adaptation
4	Institutional Governance	Dual authority between ministries	Weak inter-institutional coordination
5	Digital Administration	Limited technical capacity and system management issues	Incomplete policies on digital governance and security

Policy effectiveness ultimately depends on the ability to address these interconnected challenges through comprehensive and adaptive strategies. Continuous evaluation and policy refinement are necessary to ensure that regulations remain responsive to evolving educational needs. Collaboration among stakeholders, including government agencies, educational institutions, and technology providers, plays a crucial role in strengthening implementation. Capacity building, infrastructure development, and regulatory synchronization should be prioritized to reduce existing disparities. Technology-based Islamic education policies must therefore move beyond formal regulation toward practical, context-sensitive implementation. Sustainable policy development will determine the long-term success of digital transformation in Islamic Religious Education in Indonesia (Siregar et al., 2025).

Conclusion

Technology-based Islamic Religious Education policy in Indonesia reflects a significant shift toward integrating digital innovation within religious and general educational systems, particularly in madrasahs and schools. Regulatory frameworks have demonstrated a commitment to enhancing educational quality through technology while maintaining Islamic values as a foundational element. Implementation, however, reveals persistent challenges, including infrastructure disparities, varying levels of teacher readiness, and limited coordination between governing institutions. Policy gaps further emerge in curriculum alignment and digital governance practices, indicating the need for more coherent and integrated regulatory strategies. Strengthening institutional capacity, improving digital infrastructure, and fostering collaboration among stakeholders are essential for effective policy implementation. Sustainable development of technology-based Islamic education ultimately requires continuous policy evaluation, adaptive regulatory approaches, and a balanced integration of technological advancement with religious and ethical principles.

References

Aisyiah, N. A., & Pamungkas, J. (2023). Pemanfaatan bahan alam lingkungan sebagai media pembelajaran seni rupa anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(6), 6741–6749. https://doi.org/10.31004/obsesi.v7i6.4606

Anam, S., & Mubin, N. (2022). Developing an e-learning platform for Islamic education that incorporates the principles of religious moderation within school settings. *SYAMIL: Journal of Islamic Education, 11*(2), 233–249. https://doi.org/10.21093/sy.v11i2.9260

Andriani, D., & Rakimahwati, R. (2023). Pengembangan kreativitas anak usia dini menggunakan media berbasis alam. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(2), 1910–1922. https://doi.org/10.31004/obsesi.v7i2.4243

Azman, N. A. (2022). Digital teaching strategies of Islamic education teachers in technology-based learning environments. *International Journal of Learning, Teaching and Educational Research, 21*(5), 1–15.

Erwihas, Y. H. N., & Nurhasanah, N. (2026). Strategi guru PAUD dalam program sekolah untuk mengembangkan kreativitas seni anak usia dini. Jurnal Obsesi: Jurnal

Pendidikan Anak Usia Dini, 10(2), 1474–1480. https://doi.org/10.31004/obsesi.v10i2.8279

Fauziah, R. (2022). Information and communication technology (ICT) for Islamic education in the new normal era. *KnE Social Sciences*, 337–348. https://doi.org/10.18502/kss.v7i8.11220

Hamdanah, H. (2025). Digital Islamic education management: Leadership transformation in madrasah ibtidaiyah. *Auladuna: Jurnal Pendidikan Dasar Islam, 12*(1).

Hardiyanti, W. D. (2020). Aplikasi bermain berdasarkan kegiatan seni lukis untuk stimulasi kreativitas anak usia 5–6 tahun. Jurnal Pendidikan Anak, 9(2), 134–139. https://doi.org/10.21831/jpa.v9i2.31664

Hilman, C., & Samad, M. R. (2025). Information technology-based governance model for Islamic education management in realizing contemporary public accountability. *Khazanah: Journal of Islamic Education and Science, 1*(2), 79–96.

Lisnasari, S. F. (2022). Rethinking technology-based Islamic boarding school governance in madrasah education. *The Indonesian Journal of Islamic Education, 2*(1), 45–60.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative data analysis: A methods sourcebook (3rd ed.). SAGE Publications.

Mujiyem, M., & Pamungkas, J. (2022). Penerapan metode dan strategi pembelajaran seni pada anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(6), 6198–6207. https://doi.org/10.31004/obsesi.v6i6.3112

Nurjanah, S., & Muthmainah, M. (2023). Pengaruh media loose part terhadap kreativitas dan motorik halus anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(3), 3519–3536. https://doi.org/10.31004/obsesi.v7i3.4434

Pebrianty, R. D., & Pamungkas, J. (2023). Menggambar sebagai alternatif pendekatan konsepsi pendidikan seni rupa anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(1), 536–547. https://doi.org/10.31004/obsesi.v7i1.3696

Prayitno, P., Syamsudin, A., Pamungkas, J., Harun, H., & Sudaryanti, S. (2021). Implementasi pembelajaran seni rupa PAUD di masa pandemi Covid-19. Jurnal Pendidikan Anak, 10(2), 128–136. https://doi.org/10.21831/jpa.v10i2.44103

Putri, M. K., & Pamungkas, J. (2023). Back to nature sebagai strategi pembelajaran seni lukis anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(5), 5249–5260. https://doi.org/10.31004/obsesi.v7i5.4989

Risdianty, R., & Pamungkas, J. (2022). Model penerapan metode menggambar untuk meningkatkan kreativitas pada anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(6), 6478–6501. https://doi.org/10.31004/obsesi.v6i6.3149

Rizki, S. N., & Pamungkas, J. (2023). Pemanfaatan media kopi dalam kegiatan seni anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(2), 1490–1499. https://doi.org/10.31004/obsesi.v7i2.2984

Rukiyah, R., Suningsih, T., & Syafdaningsih, S. (2022). Pengembangan bahan ajar kreativitas seni rupa anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(4), 3714–3726. https://doi.org/10.31004/obsesi.v6i4.2385

Setiawan, D., Hardiyani, I. K., Aulia, A., & Hidayat, A. (2022). Memaknai kecerdasan melalui aktivitas seni: Analisis kualitatif pengembangan kreativitas pada anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(5), 4507–4518. https://doi.org/10.31004/obsesi.v6i5.2521

Sholeh, M. I. (2023). Technology integration in Islamic education: Policy framework and adoption challenges. *Journal of Management and Islamic Studies Center, 1*(2). https://doi.org/10.59653/jmisc.v1i02.155

Siregar, H. S., Nurhamzah, N., Munir, M., & Fikri, M. (2025). Enhancing Islamic education through technology integration: A study of teaching practices in Indonesia. *Jurnal Ilmiah Peuradeun, 13*(2), 959–986. https://doi.org/10.26811/peuradeun.v13i2.1875

Sungkowo, B. (2024). Digital transformation in Islamic education: Opportunities and challenges in Indonesia. *International Journal of Islamic Education, 6*(1), 15–27.

Winnuly, W., & Pamungkas, J. (2022). Analisis penggunaan bahan sisa pada pembelajaran kreativitas seni rupa anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(5), 4631–4639. https://doi.org/10.31004/obsesi.v6i5.2637

Yanti, S. N., & Mayar, F. (2021). Analisis menggambar doodle terhadap kreativitas anak usia dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(3), 2138–2145. https://doi.org/10.31004/obsesi.v6i3.2018

Zainuddin, Z., Keumala, C. M., & Syahputra, E. (2024). Technology integration in Islamic education in the era of Society 5.0. *International Journal of Islamic Education, 6*(2), 120–135.