

RECONSTRUCTION OF DIGITAL LEARNING ETHICS IN ADDRESSING CONTEMPORARY EDUCATIONAL CHALLENGES

Ummul Husna Rauter, Hasnil Aida

Universitas Alwashliyah Medan

Email. ummulhusna110@gmail.com, aidahasnil69@gmail.com

Abstrak

Perkembangan teknologi digital telah mentransformasi praktik pendidikan, termasuk pendidikan Islam, sekaligus menghadirkan berbagai tantangan etis baru. Penelitian ini bertujuan menganalisis tantangan dan etika penggunaan teknologi dalam pendidikan Islam serta merumuskan perspektif berbasis nilai untuk mendukung pembelajaran digital yang bertanggung jawab. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kepustakaan melalui penelaahan artikel jurnal ilmiah dan buku akademik yang relevan dengan literasi digital, integrasi teknologi, etika digital, integritas akademik, perilaku keagamaan, dan nilai-nilai pendidikan Islam. Data dianalisis menggunakan analisis isi kualitatif melalui tahapan identifikasi, kategorisasi, perbandingan, sintesis, dan interpretasi temuan literatur. Hasil penelitian menunjukkan bahwa tantangan utama meliputi ketimpangan kompetensi digital, kesiapan guru yang terbatas, kesulitan mengevaluasi informasi daring, penggunaan media sosial yang tidak bertanggung jawab, pelanggaran integritas akademik, serta melemahnya kontrol etis dalam lingkungan digital. Integrasi teknologi dalam pendidikan Islam perlu menghubungkan kompetensi digital dengan nilai kejujuran, tanggung jawab, amanah, kesadaran kritis, dan pembentukan karakter Islami. Penelitian ini memberikan kontribusi berupa kerangka konseptual berbasis nilai yang menempatkan teknologi sebagai instrumen pendidikan yang harus selaras dengan prinsip etika Islam.

Kata kunci: Literasi Digital, Etika Digital, Pendidikan Islam

Abstract

The rapid development of digital technology has transformed educational practices, including Islamic education, while simultaneously creating new ethical challenges. This study aims to analyze the challenges and ethics of technology use in Islamic education and to formulate a value-based perspective for responsible digital learning. This qualitative study employed a library research approach by examining relevant peer-reviewed journal articles and academic books addressing digital literacy, technology integration, digital ethics, academic integrity, religious behavior, and Islamic educational values. Data were analyzed using qualitative content analysis through identification, categorization, comparison, synthesis, and interpretation of relevant findings. The results indicate that the major challenges include unequal digital competence, limited teacher readiness, difficulties in evaluating online information, irresponsible social media use, academic misconduct, and weakening ethical control in digital environments. The study further finds that technology integration in Islamic education requires the integration of digital competence with honesty, responsibility, accountability, critical awareness, and Islamic character formation. The study contributes a value-based conceptual framework positioning technology as an educational instrument that must remain aligned with Islamic ethical principles. Strengthening teacher competence, students' digital literacy, institutional policies, and ethical guidance is essential for sustainable digital transformation in Islamic education.

Keywords: Digital Literacy, Digital Ethics, Islamic Education

INTRODUCTION

The rapid development of digital technology has transformed contemporary education by changing the ways knowledge is accessed, communicated, produced, and evaluated. Digitalization has encouraged educational institutions to move beyond conventional instructional practices toward learning environments that are increasingly flexible, interactive, connected, and technology-mediated. In Islamic education, this transformation provides substantial opportunities to broaden access to learning resources, facilitate communication between teachers and students, and diversify instructional strategies through digital platforms. Digital learning environments enable teachers to utilize multimedia resources, online learning platforms, interactive applications, and digital religious materials to create more engaging learning experiences. Nevertheless, the presence of technology does not automatically guarantee educational improvement. The effectiveness of digital transformation depends on how technology is pedagogically integrated, how teachers and students develop digital competencies, and how its use remains aligned with the fundamental objectives of education (Mintasih et al., 2024; Nata et al., 2024).

One of the most important prerequisites for successful digital transformation is digital literacy. Digital literacy extends beyond the technical ability to operate technological devices; it encompasses the capacity to search for, evaluate, interpret, produce, and communicate information critically and responsibly. Audrin and Audrin (2022) demonstrate that digital literacy represents a multidimensional competency that plays an important role in learning and educational processes. Tinmaz et al. (2022) similarly emphasize that digital literacy has become a fundamental competence in contemporary education because the increasing complexity of digital environments requires individuals to interact with information critically and effectively. The importance of digital literacy is further demonstrated by Li et al. (2025), whose meta-analysis identifies a significant relationship between digital literacy and students' academic achievement. These findings indicate that digital technology can provide meaningful educational benefits when access to technology is accompanied by the development of adequate cognitive, technical, and critical competencies.

The issue becomes more complex in Islamic education because educational success cannot be measured solely through academic achievement or technological proficiency. Islamic education has a broader mission that includes the development of intellectual capacity, moral character, spiritual awareness, responsibility, and ethical behavior. Consequently, technological integration in Islamic education requires an approach that connects digital innovation with Islamic values. Research by Mintasih et al. (2024) demonstrates that digital technology can be integrated into Islamic Religious Education when teachers possess appropriate competencies and are able to connect technological resources with pedagogical objectives. Neni et al. (2024) likewise emphasize the importance of integrating technology with Islamic values in learning strategies. At the broader institutional level, Fattah et al. (2026) show that digital literacy in Indonesian Islamic education is closely associated with educational policy, learning practices, and teacher readiness. These findings reinforce the argument that digital transformation in Islamic education requires more than technological infrastructure; it requires pedagogical competence and value-based guidance.

The expansion of digital environments also creates significant ethical challenges. Students increasingly encounter diverse information, opinions, religious interpretations, and social interactions through digital platforms. Such exposure may provide opportunities for religious learning, but it can also influence students' attitudes and behavior in ways that are difficult for educational institutions to control. Luthfi et al. (2022) demonstrate that religious content disseminated through social media can contribute to changes in adolescents' Islamic behavior, while Lailan and Aqso (2022) identify an association between social media use and adolescents' religious behavior. These findings illustrate those digital platforms function not merely as technological instruments but also as social and cultural environments capable of shaping students' values, perceptions, and religious practices. Therefore, the educational use of digital media requires critical literacy and ethical awareness so that students are able to distinguish beneficial information from misleading, inappropriate, or potentially harmful content.

Ethical challenges are becoming increasingly significant with the development of artificial intelligence and other advanced digital technologies. The ease of accessing, reproducing, modifying, and generating information creates new opportunities for learning but simultaneously raises concerns regarding plagiarism, academic dishonesty, misinformation, and the authenticity of students' academic work. Memarian and Doleck (2026) identify academic integrity and misconduct as important concerns associated with the growing use of artificial intelligence in higher education. From this perspective, digital ethics should not be positioned as a peripheral issue but as an integral dimension of contemporary education. Students need to understand not only how to use technology effectively but also why, when, and within what ethical boundaries technology should be used. In Islamic education, this requirement is particularly important because ethical behavior is inseparable from the educational process itself.

Digital ethics in Islamic education can be grounded in principles such as honesty, responsibility, respect, accountability, moderation, and the pursuit of beneficial knowledge. The use of technology should support educational and social benefits while preventing practices that undermine individual morality and collective well-being. Maburi et al. (2024) demonstrate the relevance of digital literacy and Islamic perspectives on social media ethics in developing students' critical attitudes and responsibility in online learning. Setiawan et al. (2025) similarly emphasize the importance of digital ethics in Islamic Religious Education for cultivating responsible behavior in digital environments. This orientation corresponds with the philosophical foundation of Islamic education, which does not separate knowledge from moral responsibility. Al-Attas (2019) places ethical and moral formation at the center of the educational process, indicating that knowledge and intellectual development should be accompanied by the formation of proper conduct and responsibility.

Although research on digital literacy, technological integration, teacher competence, and digital behavior has developed considerably, the existing literature remains fragmented across these dimensions. Systematic studies have examined digital literacy and its relationship with learning (Audrin & Audrin, 2022; Tinmaz et al., 2022), teacher digital competence (Claro et al., 2024; Heine et al., 2023), technology integration in Islamic Religious Education (Mintasih et al., 2024; Neni et al., 2024), and the influence of digital media on religious behavior (Lailan & Aqso, 2022; Luthfi et al., 2022). However,

these dimensions have rarely been synthesized into a comprehensive discussion that simultaneously examines the opportunities, risks, ethical principles, and Islamic educational foundations of technology use. This fragmentation constitutes an important research gap because technological transformation in Islamic education cannot be adequately understood by examining technological effectiveness alone. It must also be analyzed in relation to digital literacy, ethical responsibility, character formation, and Islamic values.

Against this background, this study aims to analyze the challenges and ethics of technology use in Islamic education through a library research approach. The study specifically examines the opportunities provided by digital technology, the ethical problems emerging from its use, the importance of digital literacy and ethical competence, and the Islamic values that can serve as a normative foundation for responsible technology use. The study contributes conceptually by bringing together technological, pedagogical, digital-literacy, ethical, and Islamic perspectives within a unified analytical framework. Its novelty is specifically targeted at developing a value-based conceptual understanding of digital technology use in Islamic education, in which technological advancement is positioned alongside moral responsibility rather than treated as an independent educational objective. Thus, the study seeks to formulate an analytical perspective that can strengthen the development of Islamic education capable of responding to digital transformation while maintaining its commitment to character formation, ethical conduct, spiritual development, and the responsible use of technology.

METHOD

This study employed a qualitative approach using a library research design to critically examine the challenges and ethics of technology use in Islamic education. Library research was selected because the focus of the study was conceptual and analytical, emphasizing the interpretation and synthesis of existing scholarly literature rather than the collection of empirical data through fieldwork. In this design, literature serves as the primary source of research data, enabling the researcher to identify, compare, interpret, and synthesize various perspectives concerning digital transformation, digital literacy, technology integration, and Islamic ethical values. The use of library research is consistent with the understanding that literature-based inquiry can function as an independent research method when the research problem can be addressed through systematic examination of documented knowledge (Zed, 2014).

The data sources consisted of peer-reviewed journal articles, academic books, and relevant educational and policy documents. Journal articles were prioritized because they provide current theoretical and empirical discussions concerning digital technology and its implications for education. The literature search focused on publications addressing digital literacy, digital competence, technology integration in Islamic education, digital ethics, social media and religious behavior, academic integrity, and the ethical implications of artificial intelligence in education. Books were used primarily to strengthen the philosophical and conceptual foundations of Islamic education and ethical thought. Relevant policy and educational documents were also considered when they provided contextual information concerning digital transformation and educational practices.

Data collection was conducted through systematic identification, selection, reading, and documentation of relevant literature. The search process involved the use of keywords such as *digital technology in education*, *digital literacy*, *digital ethics*, *Islamic education*, *Islamic Religious Education*, *technology integration*, *academic integrity*, and *Islamic values*. The selected literature was evaluated based on its relevance to the research objectives, academic credibility, clarity of publication information, and contribution to the discussion. Literature that was unrelated to the research focus or lacked sufficient academic credibility was excluded from the analysis.

The collected data were analyzed using qualitative content analysis. The analysis involved several interconnected stages: identifying relevant concepts, reducing information according to the research focus, categorizing findings into thematic dimensions, comparing arguments across sources, synthesizing converging and contrasting perspectives, and interpreting the findings within the framework of Islamic educational values. The main analytical categories included the opportunities of digital technology, digital literacy and competence, ethical challenges, academic integrity, religious behavior, and Islamic principles governing responsible technology use. The interpretation process sought to connect contemporary technological developments with fundamental Islamic educational values, particularly morality, responsibility, honesty, accountability, and the pursuit of beneficial knowledge.

To enhance the credibility of the findings, the study employed source triangulation by comparing arguments and findings across different types of scholarly sources, including journal articles and academic books. The researcher also conducted critical comparison among sources to identify consistency, differences, and conceptual gaps. Through this systematic process, the study developed a comprehensive interpretation of technology use in Islamic education and formulated a value-based perspective on the ethical use of digital technology.

RESULTS AND DISCUSSIONS

Digital Transformation Challenges in Islamic Education

The literature analysis indicates that digital transformation in Islamic education presents both opportunities and structural challenges. The central finding is that technological availability does not automatically result in meaningful educational transformation. Instead, the effectiveness of digital learning depends on the interaction between technological infrastructure, teachers' digital competence, students' digital literacy, pedagogical design, and ethical orientation. This finding is consistent with the systematic review conducted by Audrin and Audrin (2022), which conceptualizes digital literacy as a multidimensional competence rather than merely the ability to operate digital devices. Similarly, Tinmaz et al. (2022) emphasize that digital literacy encompasses a broader set of competencies required to access, evaluate, produce, and communicate information effectively in digital environments.

One of the most significant challenges is the unequal development of digital competence among educators and learners. Claro et al. (2024) demonstrate that teachers' digital competence is an important dimension of educational digitalization, while Heine et al. (2023) show that teachers' professional digital competence is closely associated with their ability to use digital resources

appropriately. In Islamic educational institutions, this issue becomes particularly important because teachers are expected not only to use technology but also to ensure that digital resources remain consistent with learning objectives and Islamic values. Mintasih et al. (2024) demonstrate that technology integration in Islamic Religious Education requires teacher competence and appropriate implementation models. Therefore, the problem is not simply whether teachers have access to technology, but whether they possess the pedagogical and ethical capacity to transform technological resources into meaningful learning experiences.

Another challenge concerns the quality of students' engagement with digital information. Easy access to information may increase learning opportunities, but without critical digital literacy, students may experience difficulties in evaluating the reliability and relevance of online content. Li et al. (2025) identify a significant relationship between digital literacy and academic achievement, suggesting that digital competence has implications beyond technical proficiency. In Islamic education, this challenge is intensified because students are exposed not only to general educational information but also to diverse religious interpretations circulating through digital platforms.

The literature also demonstrates that digital transformation can influence students' religious attitudes and behavior. Luthfi et al. (2022) show that religious content distributed through social media can contribute to changes in adolescents' Islamic behavior, while Lailan and Aqso (2022) identify a relationship between social media and adolescents' religious behavior. Consequently, digital transformation should be understood as a cultural and behavioral transformation, not merely a technological one. The principal challenge for Islamic education is therefore to develop a learning ecosystem in which technological competence is accompanied by critical literacy, teacher readiness, and ethical-religious guidance. Recent evidence from Indonesia further indicates that digital literacy in Islamic education is connected with policy, learning practices, and teacher readiness (Fattah et al., 2026). The findings consequently suggest that successful digital transformation requires an integrated institutional strategy rather than isolated adoption of digital applications.

Digital Ethics, Academic Integrity, and Islamic Educational Values

The second major finding concerns the ethical dimension of technology use in Islamic education. The literature demonstrates that digital technology is not ethically neutral because the consequences of its use depend on the purposes, behaviors, and values that guide users. Within Islamic education, this issue is particularly significant because education is oriented not only toward knowledge acquisition but also toward the formation of responsible and morally upright individuals. Al-Attas (2019) emphasizes the centrality of ethical formation in education, providing an important philosophical basis for understanding technology as a means that should remain subordinate to educational and moral objectives.

One of the most visible ethical problems is the difficulty of maintaining responsible behavior in digital environments. The abundance of online information makes it increasingly necessary for students to distinguish between reliable and unreliable sources. Digital literacy therefore has an ethical dimension because critical evaluation of information is connected with responsibility for the consequences of sharing or using that information. Audrin and Audrin (2022) and Tinmaz et al. (2022)

demonstrate that digital literacy involves critical and responsible engagement with information, rather than simple technological operation. In the context of Islamic education, this principle can be interpreted through the ethical demand to verify information before accepting or disseminating it.

Academic integrity represents another significant ethical concern. Digital technologies make it easier to access, reproduce, modify, and distribute information, while the emergence of artificial intelligence has further complicated questions concerning originality and authorship. Memarian and Doleck (2026) identify academic integrity and misconduct as important concerns associated with artificial intelligence in higher education. This finding demonstrates that technological innovation can simultaneously increase educational efficiency and create new opportunities for academic dishonesty. From an Islamic educational perspective, such behavior conflicts with the principles of honesty and trustworthiness that should characterize the pursuit of knowledge. Accordingly, academic integrity should not be treated merely as an institutional regulation but as part of students' moral formation.

The ethical implications of social media also require attention. Luthfi et al. (2022) demonstrate the influence of religious content on adolescents' Islamic behavior, indicating that digital environments can become important spaces for religious socialization. Lailan and Aqso (2022) similarly associate social media with adolescents' religious behavior. This indicates that ethical education cannot be limited to classroom behavior because students increasingly construct meanings and identities through online interaction. Maabruri et al. (2024) reinforce this perspective by linking digital literacy and Islamic social media ethics with students' critical attitudes and responsibility.

The analysis therefore suggests that Islamic digital ethics should integrate three dimensions: responsible information use, integrity in academic activity, and ethical interaction in digital communities. Setiawan et al. (2025) similarly emphasize the relevance of digital ethics within Islamic Religious Education. The important analytical implication is that ethical technology use cannot be achieved solely through technical restrictions or surveillance. External controls may reduce certain forms of misconduct, but sustainable ethical behavior requires internalized values. Islamic education consequently has a strategic role in developing students' moral awareness so that ethical decision-making continues even when direct supervision is absent.

Integration of Technology, Digital Literacy, and Islamic Character Formation

The third finding indicates that the appropriate response to digital challenges in Islamic education is not technological rejection but value-oriented integration. The literature suggests that technology can strengthen learning when it is positioned within an educational framework that simultaneously develops digital competence, critical thinking, ethical awareness, and Islamic character. This perspective shifts the discussion from the question of whether technology should be used toward a more fundamental question: how should technology be used so that digital innovation contributes to the educational objectives of Islam?

The integration of technology with Islamic values is supported by research demonstrating that digital resources can be incorporated into Islamic Religious Education through appropriate pedagogical models. Mintasih et al. (2024) emphasize the importance of teachers' competence and implementation

models in technology-supported Islamic Religious Education, while Neni et al. (2024) specifically highlight the integration of technological development with Islamic values in learning strategies. These findings suggest that technology should function as an instructional instrument rather than becoming the primary objective of learning. Digital platforms, multimedia resources, artificial intelligence, and online communication tools are educationally meaningful only when they facilitate deeper understanding and support the development of desirable attitudes and behaviors.

Teacher competence occupies a central position in this integration. Claro et al. (2024) and Heine et al. (2023) demonstrate that teachers' professional digital competence is an essential component of effective digital education. In Islamic education, however, professional competence requires an additional dimension: the ability to act as a mediator between technological possibilities and Islamic values. Teachers therefore need to guide students in evaluating information, using digital resources responsibly, maintaining academic integrity, and communicating respectfully in online environments. Nata et al. (2024) further emphasize the importance of strengthening digital literacy competence among Islamic Religious Education teachers in the context of digital learning.

Student digital literacy must simultaneously be developed as a form of intellectual and ethical empowerment. Li et al. (2025) demonstrate that digital literacy is associated with academic achievement, while Tinmaz et al. (2022) position digital literacy as a multidimensional competency. From the perspective of Islamic education, this competency should be extended to include moral judgment. Students should be able to ask not only whether digital information is useful or accurate but also whether its use is ethically appropriate and beneficial. Such an orientation transforms digital literacy from a technical competency into a component of character education.

The analysis further suggests that Islamic educational institutions need to establish an institutional culture of digital responsibility. Such a culture can include clear guidelines for technology use, academic integrity policies, responsible social media practices, teacher professional development, and critical digital-literacy programs. Evidence from Islamic educational contexts indicates that digital literacy is influenced by institutional policy, learning practices, and teacher readiness (Fattah et al., 2026), while comparative evidence from Indonesia and Thailand demonstrates the importance of contextual implementation in Islamic education (Ferdinan et al., 2026).

Thus, the integration of technology and Islamic character formation should operate at three interconnected levels: individual competence, pedagogical practice, and institutional culture. At the individual level, students need digital and ethical competence; at the pedagogical level, teachers need to integrate technology with meaningful learning and Islamic values; and at the institutional level, schools and madrasahs need policies that reinforce responsible digital behavior. The resulting framework positions digital transformation not as a departure from the objectives of Islamic education but as an opportunity to reinterpret and strengthen those objectives within contemporary technological environments.

CONCLUSIONS

This study concludes that digital transformation in Islamic education presents significant opportunities while simultaneously generating technological, pedagogical, and ethical challenges. The

literature analysis shows that digital literacy, teacher competence, responsible information use, academic integrity, and ethical interaction are central factors determining the quality of technology integration. Digital technology can expand access to Islamic learning resources, increase instructional flexibility, and support more interactive learning; however, these benefits may be weakened by inadequate digital competence, misinformation, irresponsible social media use, academic misconduct, and excessive dependence on technology. From the perspective of Islamic education, technology should therefore be positioned as an educational instrument governed by moral and spiritual values rather than as an independent educational objective. The study identifies honesty, responsibility, accountability, critical awareness, and social respect as essential foundations for digital ethics. Its principal contribution is a value-based perspective that integrates digital literacy, technological competence, ethical responsibility, and Islamic character formation within a unified educational framework. The findings imply that Islamic educational institutions should strengthen teacher digital competence, develop students' critical and ethical digital literacy, formulate institutional guidelines for responsible technology use, and integrate Islamic values into digital learning practices. Such integration can ensure that technological advancement contributes not only to educational effectiveness but also to the formation of morally responsible and spiritually grounded learners.

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