



## E-Learning and Multimedia in Islamic Schools: Bridging Tradition and Digital Transformation

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**Received: 02-10-2025**

**Revised: 18-10-2025**

**Accepted: 19-10-2025**

### ABSTRACT

The rapid advancement of information and communication technology (ICT) has significantly transformed education, including Islamic elementary schools. Conventional practices centered on lectures and memorization are now challenged by the need for integration of e-learning and multimedia. This study aims to examine the development of ICT based instructional media in Islamic elementary education and analyze its impact on students' motivation, comprehension, and Islamic values. The research employed a Systematic Literature Review (SLR) method, reviewing articles indexed in SINTA accessed through Google Scholar between 2015 and 2025. The selection process followed four stages: identification, screening, eligibility, and final inclusion. Content analysis was used to categorize findings according to types of media, purposes of implementation, key outcomes, and research trends. The results reveal that e-learning, interactive multimedia, gamification, and blended learning models enhance student engagement, motivation, and comprehension. Nonetheless, challenges remain, particularly limited digital infrastructure, low teacher digital literacy, and unequal access across regions. The study concludes that ICT integration in Islamic elementary education represents not only a technological innovation but also a pedagogical strategy that bridges traditional approaches with digital transformation.

**Keywords:** *Digital Transformation, E-learning, Islamic Education, Instructional Media, Multimedia.*

### ABSTRAK

Perkembangan teknologi informasi dan komunikasi (TIK) telah membawa perubahan signifikan dalam pendidikan, termasuk pada sekolah dasar Islam. Tradisi pembelajaran konvensional yang berfokus pada ceramah dan hafalan kini dihadapkan pada kebutuhan integrasi e-learning dan multimedia. Penelitian ini bertujuan untuk mengkaji perkembangan media pembelajaran berbasis TIK dalam pendidikan dasar Islam serta menganalisis dampaknya terhadap motivasi, pemahaman, dan nilai-nilai keislaman siswa. Metode penelitian menggunakan Systematic Literature Review (SLR) dengan menelaah artikel dari Google Scholar yang terindeks jurnal SINTA dalam rentang waktu 2015–2025. Proses seleksi dilakukan melalui empat tahap, yaitu identifikasi, screening, eligibility, dan inklusi akhir. Analisis konten digunakan untuk mengelompokkan hasil penelitian berdasarkan jenis media, tujuan implementasi, temuan utama, dan tren penelitian. Hasil penelitian menunjukkan bahwa e-learning, multimedia interaktif, gamifikasi, dan model pembelajaran campuran mampu meningkatkan keterlibatan, motivasi, dan pemahaman siswa. Namun, kendala utama terletak pada keterbatasan infrastruktur digital, rendahnya literasi digital guru, serta

kesenjangan akses antarwilayah. Kesimpulannya, integrasi TIK dalam pendidikan dasar Islam tidak hanya menjadi inovasi teknologi, tetapi juga strategi pedagogis untuk menjembatani tradisi dan transformasi digital.

**Kata Kunci:** *Transformasi Digital, E-Learning, Pendidikan Islam, Media Pembelajaran, Multimedia.*

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## INTRODUCTION

The rapid development of information and communication technology (ICT) has brought profound changes to almost every aspect of human life, including education (Habibulloh & Ali, 2024; Alfinnas, 2018). Digital progress has not only transformed how people interact and access information but has also significantly influenced teaching models, learning methods, and instructional media design (Hasmiza, 2025; Zulmi et al., 2024; Tang, 2018). Globally, e-learning and multimedia have emerged as essential instruments of educational innovation, as they provide opportunities for learning that is more interactive, flexible, and responsive to the needs of twenty-first-century learners (Nurbayanni et al., 2023; Shohel, 2022; Rana & Mishra, 2017). This transformation is not limited to general education but has also extended to religious-based education, including Islamic education at the elementary level (Pahrudin et al., 2025; Bustami et al., 2023; Walid, 2022). Accordingly, integrating e-learning and multimedia into Islamic elementary education has become an important issue that requires comprehensive investigation.

Traditionally, Islamic elementary schools, such as Islamic primary schools, have been characterised by conventional instructional methods (Nasri & Mulyohadi, 2023; Ayyad, 2022; Za & Syahrizal, 2022). Lectures, rote memorisation, and the use of printed textbooks have dominated the learning process, particularly in subjects such as Islamic Religious Education. These methods emphasise not only the mastery of religious knowledge but also the cultivation of character and moral values through direct interaction with teachers as role models. However, the presence of digital technologies introduces both opportunities and challenges to these long-established traditions (Picauly, 2024; Zebua, 2023; Setyorini, 2022; Triyanto, 2020). On one hand, digital innovation enables the delivery of Islamic educational content in more engaging, varied, and contextualised ways. On the other hand, it raises concerns about resource limitations, pedagogical readiness, and the potential erosion of traditional values in Islamic education.

Previous studies have demonstrated that digital transformation in Islamic education can produce positive impacts. For instance, Asai et al., (2024), Feriansyah (2023), and Laili et al., (2022) confirmed that the application of blended learning in Islamic Religious Education increased student engagement while supporting differentiated learning tailored to individual capabilities. Similarly, Rahmasari et al. (2023), Lubis & Mavianti (2022) found that using interactive multimedia in early

childhood Qur'an learning enhanced comprehension and learning motivation. These findings suggest that integrating e-learning and multimedia is not merely a matter of adopting technology but represents a pedagogical strategy to improve the quality of learning in Islamic elementary schools.

Nevertheless, several challenges continue to hinder the implementation of e-learning and multimedia in Islamic elementary contexts. One major issue lies in the limited availability of digital infrastructure, particularly in rural or disadvantaged areas. A study by Ndibalema (2022), Agormedah et al. (2020), and Rahiem (2020) revealed that unstable internet connections, insufficient digital devices, and limited device storage capacity are among the key obstacles to online learning. Similarly, Aydin (2021) and Rashid (2016) reported that the digital divide remains a serious problem that causes unequal access to ICT-based learning. These findings highlight that although the potential for adopting technology is significant, its success heavily depends on the availability of adequate infrastructure.

In addition to infrastructure, the readiness of human resources, especially teachers, plays a crucial role in the digital transformation of Islamic elementary education. Teachers are responsible for delivering content, designing learning materials, and managing digital platforms effectively. Yet, research indicates that the digital competence of many Islamic education teachers remains relatively low. Sadaf & Johnson (2017) emphasised that limited digital literacy among teachers has contributed to monotonous and less interactive online learning experiences. This demonstrates that digital transformation cannot be achieved without continuous professional development, training, and mentoring for teachers.

From the learners' perspective, the use of e-learning and multimedia also creates both opportunities and challenges. Digital media can increase motivation, create enjoyable learning experiences, and foster active participation when designed appropriately. A study Safitri et al. (2025) showed that interactive multimedia in Islamic Religious Education enhanced students' enthusiasm and comprehension. However, Hutauruk (2020) and Sholichin et al. (2020) found that some students experienced boredom during online learning, particularly when instructional design lacked variety or home learning environments were not supportive. These contrasting findings indicate that e-learning and multimedia design must carefully adapt to learners' characteristics, needs, and contexts to prevent disengagement.

Beyond technical and pedagogical aspects, the integration of e-learning in Islamic education raises critical questions regarding the preservation of Islamic values. Concerns have been expressed that the unregulated use of digital media may expose learners to content inconsistent with Islamic principles. Mursidin (2023) and Yanti et al. (2023) cautioned that digital transformation in Islamic education risks undermining moral values without strong content curation and digital ethics. Consequently, the

development of ICT-based instructional media in Islamic elementary schools must focus on technological sophistication and ensure alignment with the moral and spiritual mission of Islamic education.

Another dimension of this issue is the disparity between urban and rural schools (Chen, 2024; Basyit, 2019). Islamic elementary schools in urban settings generally have better access to the internet, more adequate facilities, and more technologically competent teachers. Conversely, schools in remote or underdeveloped regions often struggle with limited devices, poor connectivity, and scarce human resources. This discrepancy creates unequal educational opportunities and widens the quality gap between different regions. Addressing this disparity requires inclusive policies to ensure that digital transformation benefits all learners regardless of their geographical or socioeconomic background.

These observations reveal the complex nature of e-learning and multimedia adoption in Islamic elementary education. While technology offers significant opportunities to modernise teaching methods in line with the demands of the digital age, it also presents structural, cultural, and pedagogical barriers that must be carefully navigated. Without addressing these barriers, digital transformation risks creating new inequalities or weakening the core values of Islamic education. For this reason, it is crucial to conduct research that examines how e-learning and multimedia can effectively bridge the gap between traditional Islamic teaching practices and the demands of digital transformation in elementary education.

The unprecedented growth of information and communication technology (ICT) has transformed the educational landscape globally, requiring educators to adapt teaching models that respond to digital demands (Anis, 2024; Carvalho et al., 2023). In this transformation, e-learning and multimedia have become essential components of instructional innovation. Their importance extends beyond the use of digital tools; these elements contribute to improving learning quality, fostering active engagement, and enhancing the integration of Islamic values into modern education. In Islamic elementary schools, where the mission of education includes both cognitive and moral development, the effective utilisation of ICT-based media can strengthen pedagogical relevance and maintain the spiritual character of learning in the digital era (Ismail et al., 2024; Yunita & Mulyadi, 2024).

Understanding these variables is therefore critical, as e-learning and multimedia provide opportunities to align traditional Islamic pedagogies with contemporary digital competencies. Implementing these technologies enables flexible learning environments, encourages independent study, and supports the holistic development of learners. Furthermore, their integration reflects a broader educational shift from teacher-centred to learner-centred approaches, which resonates with

modern pedagogical theory and Islamic educational philosophy emphasising balance (*tawazun*) and holistic development (*tarbiyah*).

However, despite the increasing recognition of digital learning in general education, studies focusing specifically on ICT-based instruction within Islamic elementary schools remain scarce. Previous research has largely concentrated on the technical adoption of digital tools or the evaluation of online learning systems, without fully addressing their pedagogical implications, value integration, or long-term impact on Islamic learning outcomes. Moreover, there is limited synthesis of how e-learning and multimedia have evolved over the past decade, particularly concerning their role in enhancing students' motivation, comprehension, and moral formation.

To address this research gap, the present study systematically reviews publications from 2015 to 2025 to map the development, trends, and challenges of ICT-based instructional media in Islamic elementary education. This review highlights the progress of digital transformation in Islamic schools. It contributes to the discourse on how technology can serve as a bridge between traditional Islamic pedagogy and modern educational innovation.

Accordingly, the objectives of this study are fourfold: (1) to document current practices in the use of e-learning and multimedia in Islamic elementary schools, (2) to identify the major obstacles that hinder the effective implementation of these technologies, (3) to explore the impact of ICT based learning media on students' motivation, comprehension, and character development, and (4) to propose practical recommendations for harmonizing tradition and digitalization in Islamic elementary education. The findings are expected to provide valuable insights for policymakers, school administrators, and educators in designing policies, improving teacher competencies, and developing contextually relevant instructional media. Ultimately, the integration of e-learning and multimedia should not merely symbolise modernisation but serve as an effective means of delivering Islamic education that is relevant, value-oriented, and competitive in the digital era.

## METHODS

The design of this study is a qualitative descriptive approach employing a Systematic Literature Review (SLR) method. This design was selected to systematically identify, analyse, and synthesise previous research on the development of e-learning and multimedia in Islamic elementary education. The SLR design allows researchers to obtain comprehensive insights into research trends, theoretical frameworks, and practical implications over the past decade (2015–2025). This method was selected because it provides a comprehensive overview of research trends, scholarly contributions, and gaps that warrant further investigation (Hodaifah et al., 2025).

The participants in this study were 15 journal articles related to e-learning and multimedia in Islamic elementary education, published between 2015 and 2025. The articles were obtained from Google Scholar and limited to national academic journals indexed in SINTA. Each article represented a distinct research contribution serving as the primary data source for analysis.

The main instrument used in this study was a data extraction matrix developed to record essential information from each selected article, including authors, year of publication, research objectives, methodology, key findings, and implications. This matrix ensured consistency and transparency throughout the review process.

The search process was conducted using keywords such as “e-learning in Islamic education,” “multimedia in Islamic elementary schools,” “ICT-based instructional media in Islamic studies,” and “digital learning in Islamic elementary education.” The results were filtered based on publication year, SINTA index, and relevance to the research focus.

Data analysis was conducted through content analysis and thematic analysis. The content analysis aimed to extract key concepts and research findings from each article, while the thematic analysis identified recurring patterns, themes, and emerging trends related to ICT-based learning in Islamic elementary education. The analysis was carried out in three stages: data reduction, thematic presentation, and interpretation of findings.

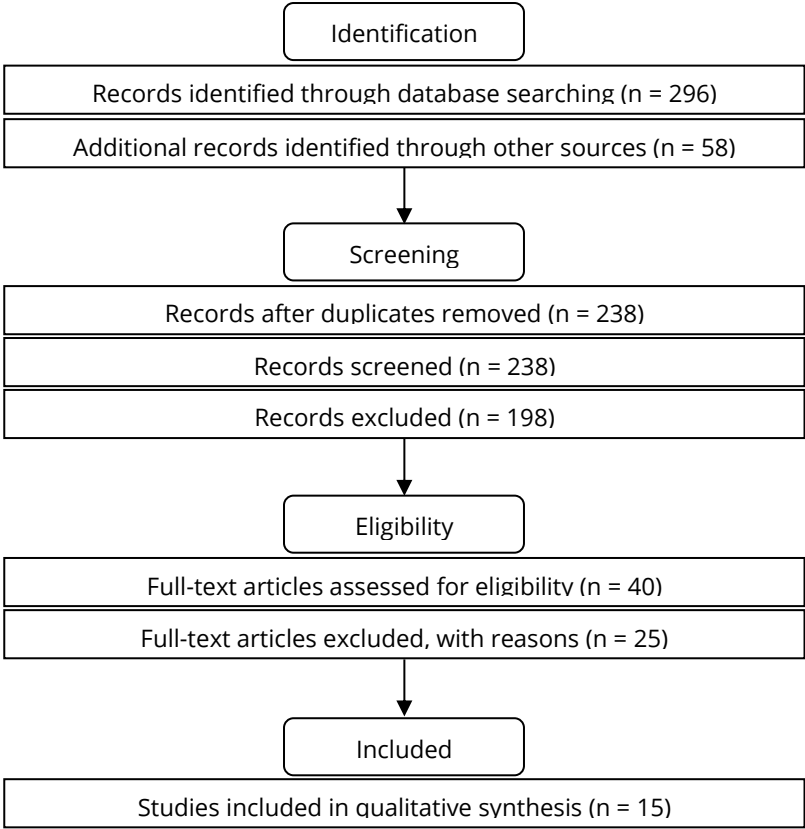


Figure 1. Flow Diagram of Literature Selection

RESULT

The systematic review identified a total of 15 journal articles published between 2015 and 2025 that met the inclusion criteria. These studies were drawn from SINTA-indexed journals and focused on using e-learning platforms, multimedia resources, ICT-based instructional media, and gamification strategies within Islamic elementary education. Most of the studies were published after 2019, indicating a significant increase in scholarly interest following the COVID-19 pandemic, which accelerated the adoption of digital learning tools in educational settings, including Islamic schools.

Table 1. Literature Synthesis of E-Learning and Multimedia in Islamic Schools

No.	Category	Findings
1.	Types of ICT Based Media Implemented	<p>Analysis revealed several categories of ICT based media used in Islamic elementary education:</p> <ul style="list-style-type: none"><li>a. E-learning platforms (<i>e.g., Moodle, Google Classroom, and locally developed Learning Management Systems</i>) (Ramos &amp; García-Varela, 2024).</li><li>b. Multimedia resources such as interactive videos, digital storytelling, and animated learning modules.</li><li>c. Gamification approaches, including quiz-based applications and reward-based learning games.</li><li>d. Blended learning models, which combine traditional face-to-face instruction with online learning components.</li></ul> <p>These media were primarily employed to support the teaching of Islamic Religious Education (PAI), Qur’anic memorization, Islamic history, and moral education (Mayub &amp; Wardana, 2021).</p>
2.	Impact on Learning Outcomes	<p>The reviewed studies consistently demonstrated positive effects of ICT based media on student learning outcomes. Several key findings emerged:</p> <ul style="list-style-type: none"><li>a. Increased student motivation and engagement: Multimedia and gamification approaches enhanced students’ enthusiasm, particularly in subjects often perceived as abstract, such as Islamic history or moral education (Anwar &amp; Inayati, 2025; Wangi &amp; Wajdi, 2022).</li><li>b. Improved comprehension and retention: E-learning platforms and multimedia content supported deeper understanding of religious concepts and facilitated long-term retention of Qur’anic verses (Fadlillah et al., 2025; Fitriani et al., 2025; Suriana et al., 2025; Istiqomah Rahmawati et al., 2021).</li><li>c. Enhanced collaboration and interaction: Digital platforms enabled greater interaction between teachers and students, fostering more dynamic and student center learning environments (Setiyono et al., 2025).</li></ul>



3.	Challenges and Limitations	Despite the positive outcomes, several challenges were highlighted across the studies: a. Infrastructure limitations: Many Islamic elementary schools in rural or under resourced areas faced difficulties in providing stable internet connections and sufficient digital devices (Rohmiati, 2025; Rashed & Mohd. Hanipah, 2022; Apriliana, 2021). b. Teachers' digital literacy: A number of studies emphasized that teachers often lacked adequate training in designing and implementing ICT based learning (Bingimlas, 2009). c. Cultural and pedagogical concerns: Some stakeholders expressed concerns about whether digital tools might reduce the authenticity of traditional Islamic learning practices, which are often based on direct teacher-student interaction (Wajdi et al., 2025; Zainal, 2025; Alkandari, 2024).
4.	Trends in Research Development	The review revealed a clear trend of increasing integration of digital technology in Islamic elementary education over the past decade. While early studies (2015–2017) primarily explored basic e-learning adoption, more recent works (2020–2025) shifted towards innovative pedagogical designs, such as gamification, blended learning, and the contextualization of Islamic values within digital media. This shift reflects both technological advances and a growing awareness of the need to align Islamic educational traditions with 21 <sup>st</sup> century digital competencies.

DISCUSSION

The integration of e-learning and multimedia into Islamic elementary education reflects broader global trends in digital learning while maintaining distinctive features shaped by religious and cultural values. The reviewed literature demonstrates that ICT-based media offer pedagogical opportunities and contextual challenges. In this discussion, the findings are analysed in light of established theories in educational technology, instructional design, and Islamic pedagogy, while considering the sociocultural realities of elementary Islamic schools.

Similar findings were reported by Muslim (2024), who noted that digital technology in Islamic education can enhance accessibility and contextualization of religious content while requiring adaptation to preserve Islamic identity. This indicates that digital transformation in Islamic schools is not merely a technological adjustment but a multidimensional shift involving pedagogical, moral, and sociocultural factors.

The adoption of e-learning and multimedia in Islamic elementary schools can be understood through the lens of constructivist learning theory, which posits that learners actively construct knowledge through interaction with content and meaningful experiences (Hanif et al., 2025). The reviewed studies highlight that ICT-



based tools, such as interactive videos, gamified applications, and digital learning platforms, foster environments where students are not passive recipients but active participants. For example, Liu et al., (2020) reported that multimedia-assisted Qur'anic memorisation increased learner autonomy and engagement. This aligns with Zhang et al., (2023) about Cognitive Theory of Multimedia Learning (CTML), emphasising that combining verbal and visual information supports deeper comprehension and memory retention. However, unlike Rathnasekara et al., (2025) who reported minimal engagement when teachers lacked technological fluency, this review found that student engagement increases significantly when multimedia is pedagogically aligned and culturally relevant.

The integration of ICT also resonates with connectivism theory (Siemens, 2005), which underscores the role of digital networks in shaping learning. In Islamic elementary schools, e-learning platforms serve not only as content repositories but as interactive spaces where learners can collaborate with peers and maintain continuity of religious studies outside the classroom. This shift challenges the traditional reliance on face-to-face teaching, offering a blended framework where Islamic values can be conveyed through both digital and personal interaction. These findings extend the work of Souza et al., (2024), who demonstrated that digital collaboration tools enhance learning independence and interactivity in general education. Thus, within the Islamic context, such connectivity represents a bridge between *tadris* (teaching) and *tarbiyah* (moral nurturing).

A recurring theme in the reviewed literature is ICT-based media's ability to enhance students' motivation and participation in subjects that may otherwise seem abstract or challenging. This finding can be explained through Self-Determination Theory (SDT) (De Vega & Rahayu, 2023), highlighting the importance of autonomy, competence, and relatedness in motivating learners. Multimedia and gamified platforms, by offering interactive tasks, instant feedback, and reward systems, meet these psychological needs and thus stimulate intrinsic motivation.

Arafah et al., (2024) and Hanum (2024) for instance, found that gamification in Islamic religious education significantly increased student engagement. By incorporating quizzes, badges, and game-like challenges, gamification aligns with SDT's principle that learners are more motivated when they perceive themselves as competent and autonomous. This suggests that technology does not merely deliver content but also transforms the emotional and motivational landscape of Islamic education, which is crucial for young learners at the elementary level.

Similarly, Mardani (2025) confirmed that interactive multimedia in Qur'anic learning improved comprehension and emotional connection with religious content. However, Kholidatuzzuhriyah et al., (2025) reported opposite trends where

monotonous design led to decreased motivation, suggesting that ICT integration must be adaptive and context-driven.

One of the central discussions in Islamic education is how to balance technological innovation with the preservation of religious and cultural traditions. Islamic pedagogy has historically emphasised *ta'dib* (holistic discipline of mind and character) and *tarbiyah* (nurturing moral and spiritual growth). Critics of digital education often argue that e-learning may undermine the face-to-face interaction between teacher and student, which is central to transmitting knowledge, values, and character (*halal haram* distinctions, *adab*, and ethics).

However, the reviewed literature suggests that ICT-based tools can be harmonised with Islamic values if implemented thoughtfully. For example, Bashir et al., (2023) emphasised blended learning models, which integrate classroom instruction with digital media, allowing teachers to retain their role as moral exemplars while utilising multimedia to enhance comprehension. This approach resonates with the theory of technological pedagogical content knowledge (TPACK) (Jibril & Adedokun-Shittu, 2023; Mishra & Koehler, 2006), which stresses that effective teaching with technology requires the integration of pedagogical, technological, and content knowledge. In Islamic schools, this means designing digital tools that transmit religious content and embody Islamic values in their structure and use.

Despite the promising outcomes, several studies in the review identified systemic challenges that hinder the widespread adoption of ICT-based media in Islamic elementary schools. Chief among them are infrastructure limitations, including insufficient internet access, a lack of digital devices, and budget constraints, particularly in rural and underfunded schools. This finding aligns with the diffusion of innovation theory (Straub, 2009), which notes that adopting new technologies is influenced by contextual factors such as compatibility with existing values, complexity, and resource availability.

This finding is consistent with Maryam & Yasin (2025), Rohman et al., (2024), and Istiqomah (2023), who reported that technical barriers and limited connectivity are the primary constraints in Islamic schools. These results also support the diffusion of innovation theory, which emphasises that adoption success depends on compatibility with local contexts and resource readiness (Van Houtven et al., 2023; Sayginer & Ercan, 2020; Pandey & Yadama, 1992).

Teacher preparedness also emerged as a significant barrier. Many educators lack sufficient digital literacy and confidence in integrating ICT into their pedagogical practices (Pratolo & Solikhati, 2020). This supports the claims of Mishra & Koehler (2006) that professional development is essential to build teachers' TPACK competencies. ICT tools may be underutilised or misapplied without adequate training, leading to superficial adoption rather than meaningful integration.

Another important dimension concerns the cultural and religious appropriateness of ICT-based media. Educational psychology emphasises the role of cultural context in shaping learning processes (Parrish & Berschot, 2010; Saroglou, 2011). In Islamic education, learning is not merely about cognitive outcomes but also about shaping students' spiritual and moral identities. This means that digital tools must be carefully designed to reflect Islamic ethics and avoid content or practices that might conflict with religious teachings.

The reviewed studies show that when multimedia is contextualised, such as using Qur'anic recitations in digital storytelling or embedding Islamic historical narratives into interactive modules, it enhances academic achievement and religious identity formation. This finding suggests that ICT, rather than diluting Islamic education, can actually strengthen it if applied within a culturally and religiously grounded framework.

The temporal analysis of publications reveals a clear trend: early works (2015–2017) largely focused on exploring the feasibility of e-learning platforms, while more recent studies (2020–2025) emphasise innovative and integrated approaches, including gamification, blended learning, and mobile learning. This mirrors global shifts in educational technology, where the focus has moved from simple adoption of digital tools to pedagogical innovation (Friedman & Deek, 2003).

Moreover, the post-pandemic period has accelerated digital transformation, forcing Islamic schools to reconsider the role of ICT in education. While the initial adoption may have been reactive, the sustained research interest suggests a long-term ICT-based approach integration. This indicates that the future of Islamic elementary education lies not in replacing traditional methods but in bridging tradition and modernity, where technology becomes a vehicle for transmitting religious knowledge in ways that resonate with contemporary learners.

The discussion highlights several practical implications. First, policymakers should invest in infrastructure development to reduce the digital divide in Islamic elementary schools. Without adequate resources, the benefits of ICT-based media will remain limited to urban or well-funded institutions. Second, teacher professional development is critical to ensure educators can effectively design and implement ICT-based instruction. This includes technical training and pedagogical guidance on integrating technology with Islamic content and values. Third, curriculum developers should prioritise the creation of contextualised digital materials that reflect Islamic ethics, ensuring cultural sensitivity and pedagogical appropriateness. Consistent with Ayuriyanti & Surjono (2024) and Tatal (2023), contextually embedded learning media were shown to improve both knowledge retention and value internalisation.

Finally, the findings imply that the integration of ICT in Islamic education should be seen not merely as a technological reform but as a broader educational

transformation. By embedding Islamic principles into digital learning environments, schools can produce a spiritually grounded and digitally literate model of education, equipping students to thrive in the 21<sup>st</sup> century while remaining rooted in their religious and cultural identity.

## CONCLUSION

This study systematically reviewed the development of e-learning and multimedia in Islamic elementary education over the past decade (2015–2025). The review reveals that the integration of ICT-based instructional media has profoundly reshaped pedagogical practices, introducing new approaches such as e-learning platforms, multimedia learning, gamification, and blended learning. These practices demonstrate that digital tools are not merely instructional aids but key elements in transforming Islamic education into a more interactive, flexible, and learner-centred model consistent with constructivist and connectivism learning frameworks. *First*, regarding current practices, the findings show that most Islamic elementary schools have adopted e-learning and multimedia to varying degrees, primarily for teaching Qur'an, Fiqh, and moral education. Multimedia elements such as interactive videos and digital storytelling have enhanced comprehension and engagement, while gamification strategies have created emotionally positive learning experiences.

*Second*, in addressing the challenges, the review identifies three major barriers: inadequate infrastructure, uneven access to digital devices, and low teacher digital competence. These findings confirm that technical and human readiness remain decisive factors in determining the success of ICT integration, aligning with Diffusion of Innovation and TPACK theories. *Third*, concerning the pedagogical and affective impact, the reviewed studies consistently report improvements in students' motivation, autonomy, and learning outcomes. Through the lens of Self Determination Theory, digital tools have been shown to fulfil learners' needs for competence and autonomy, fostering intrinsic motivation and stronger engagement in religious subjects. *Fourth*, the evidence supports the adoption of blended learning and contextualised instructional design to bridge tradition and modernity. When ICT-based media are developed within an Islamic ethical framework emphasising *ta'dib* and *tarbiyah*, they strengthen rather than diminish religious identity. Hence, e-learning can coexist with traditional pedagogical values, forming a balanced educational ecosystem.

Overall, the study concludes that ICT integration in Islamic elementary education represents both a pedagogical opportunity and a cultural responsibility. To maximise its potential, policymakers and educators should focus on equitable digital access, sustained teacher training, and developing culturally grounded digital resources. Future research should further explore the longitudinal impacts of ICT on students' moral formation and the development of value-based multimedia tailored

for Islamic learning environments. Ultimately, harmonising Islamic principles with technological innovation can create a spiritually grounded and globally relevant educational paradigm.

## **DECLARATIONS**

### **Author contribution statement**

The author independently designed the study, conducted the literature review and data analysis, and prepared, revised, and finalised the manuscript.

### **Funding statement**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. The study was self-funded by the author.

### **Data availability statement**

The data supporting the findings of this study are derived from previously published articles indexed in SINTA and available through Google Scholar. All sources used in this review are properly cited in the reference list. No new data were created or analysed in this study.

### **Declaration of interest statement**

The author declares that no known financial interests or personal relationships could have influenced the work reported in this paper.

### **Additional information**

The author provides no additional information beyond what is stated in the manuscript. All aspects of the study, including the design, analysis, and writing, were carried out independently by the author.

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