



Effectiveness and Challenges of Digital and Conventional Islamic Religious Education Learning Media: Quantitative Analysis Based on SLR

Adun Rahman^{1*}, Harsing², Ika Purnama Alam³, Mahmud⁴, Yeti Heryati⁵

¹ STIE Syariah Saleh Budiman, Tasikmalaya, Indonesia

² STAI Minhajul Haq, Purwakarta, Indonesia

^{3,4,5} Universitas Islam Negeri Sunan Gunung Djati, Bandung, Indonesia

Email: adunrahman@gmail.com¹, harsing@staimh.ac.id², ikapurnama004@gmail.com³,
mahmud@uinsgd.ac.id⁴, yeti.heryati@uinsgd.ac.id⁵

*Corresponding Author

Received: 21 November 2025. Revised: 5 January 2026. Accepted: 8 January 2026. Published: 10 January 2026

ABSTRACT

The rapid expansion of digital technology has increasingly influenced instructional practices in Islamic Religious Education (PAI), raising important questions regarding the effectiveness of learning media in supporting both cognitive achievement and value-based learning. This study aims to systematically examine the effectiveness of digital and conventional instructional media in improving student learning outcomes in PAI. A Systematic Literature Review (SLR) was employed by selecting ten high-quality peer-reviewed articles indexed in Scopus and nationally accredited journals (SINTA 1–3). The selected studies were analyzed quantitatively using normalized gain (N-gain) calculations and qualitatively through thematic synthesis to identify patterns of effectiveness. The results indicate that instructional media consistently contribute to improved learning outcomes, with digital media demonstrating higher effectiveness in enhancing cognitive performance and learning motivation, while conventional media remain influential in supporting affective and moral development. The findings further suggest that blended learning models provide the most comprehensive instructional approach for PAI. This study concludes that the pedagogically integrated use of instructional media is essential for strengthening the quality of Islamic education. The study contributes by offering an evidence-based synthesis that informs educators and policymakers on media selection and instructional design in PAI.

Keywords: Islamic Religious Education, Instructional Media, Digital Learning, Systematic Literature Review, Learning Outcomes.

ABSTRAK

Perkembangan teknologi digital telah mendorong perubahan signifikan dalam praktik pembelajaran Pendidikan Agama Islam (PAI), terutama dalam pemanfaatan media pembelajaran untuk meningkatkan kualitas hasil belajar. Penelitian ini bertujuan untuk mengkaji secara sistematis efektivitas media pembelajaran digital dan konvensional dalam meningkatkan hasil belajar peserta didik pada pembelajaran PAI. Metode yang digunakan adalah Systematic Literature Review (SLR) dengan menyeleksi sepuluh artikel ilmiah berkualitas tinggi yang terindeks Scopus dan jurnal nasional terakreditasi SINTA 1–3. Artikel terpilih dianalisis secara kuantitatif menggunakan perhitungan *normalized gain* (N-gain) serta dianalisis secara kualitatif melalui sintesis tematik. Hasil penelitian menunjukkan bahwa penggunaan media pembelajaran secara konsisten mampu meningkatkan hasil belajar peserta didik. Media digital terbukti lebih efektif dalam meningkatkan capaian kognitif dan motivasi belajar, sementara media konvensional tetap berperan penting dalam penguatan aspek afektif dan pembentukan nilai-nilai keislaman. Temuan ini menegaskan bahwa model pembelajaran *blended learning* merupakan pendekatan yang paling relevan dalam pembelajaran PAI. Penelitian ini berkontribusi dalam menyediakan sintesis berbasis bukti sebagai rujukan bagi pendidik dan pengambil kebijakan dalam pengembangan desain pembelajaran PAI berbasis media.

Kata Kunci: Pendidikan Agama Islam, Media Pembelajaran, Pembelajaran Digital, Systematic Literature Review, Hasil Belajar.

INTRODUCTION

Digital transformation in education has become a global phenomenon that has significantly reshaped pedagogical approaches across disciplines, including Islamic Religious Education (*Pendidikan Agama Islam*, PAI). Over the past decade, the use of digital technologies—such as Learning Management Systems (LMS), video-based learning, interactive applications, and mobile learning—has increasingly been integrated into educational practices in Indonesia.¹ This adoption was further accelerated during the COVID-19 pandemic, when face-to-face instruction could no longer be implemented optimally. Consequently, educational institutions were compelled to adopt digital learning media as alternative solutions, thereby creating a shift from predominantly traditional instructional models toward technology-mediated learning environments.

Within the context of PAI, digital learning media offer pedagogical potential that aligns with the characteristics of contemporary learners. Digital platforms enable religious content to be presented in visual and interactive formats, allowing abstract concepts—such as moral values, Islamic history, and religious practices—to be delivered in more contextualized and engaging ways.² A growing body of empirical studies indicates that the use of video-based instruction, digital quizzes, and e-learning platforms can enhance student motivation, active participation, and conceptual understanding in PAI learning. Nevertheless, the effectiveness of digital media in PAI cannot be detached from pedagogical considerations and the value-oriented nature of religious education.

At the same time, PAI possesses distinctive characteristics that differentiate it from other school subjects. The primary objectives of PAI extend beyond cognitive achievement to include the development of religious attitudes, moral internalization, habituation of worship practices, and role modeling (*uswah*).³ Accordingly, conventional instructional media—such as face-to-face lectures, direct discussions, printed religious texts, and practical religious activities—remain relevant and, in many cases, essential in PAI instruction. Several

¹ Weny Nurwendari et al., “Development of Online Video-Based Learning Media as an Alternative for Accounting Education, A Conceptual,” *Journal of Education Culture and Society* 16, no. 2 (2025): 461–82, <https://doi.org/10.15503/jecs2025.3.461.482>; Mark Anthony Camilleri and Adriana Caterina Camilleri, “The Acceptance of Learning Management Systems and Video Conferencing Technologies: Lessons Learned from COVID-19,” *Technology, Knowledge and Learning* 27, no. 4 (2022): 1311–33, <https://doi.org/10.1007/s10758-021-09561-y>.

² Heidi A. Campbell and Giulia Evolvi, “Contextualizing Current Digital Religion Research on Emerging Technologies,” *Human Behavior and Emerging Technologies* 2, no. 1 (2020): 5–17, <https://doi.org/10.1002/hbe2.149>; Putri Isma Indriyani and Khadiq, “Transformation of Islamic Religious Practices in the Digital Era: Opportunities and Challenges for Contemporary Da’wah,” *Jurnal Dakwah* 24, no. 2 (2023): 175–92, <https://doi.org/10.14421/jd.2023.24205>.

³ Wawang Haerudin and Tajuddin Noor, “Internalization of the Values of Religious Character in Learning Activities as an Effort of Characteristics Islamic Manners,” *Al-Afkar, Journal For Islamic Studies*, March 2, 2022, 268–80, <https://doi.org/10.31943/afkarjournal.v5i1.242>; Atiq Yufitriyah Uswah et al., “Formation of the Religious Character of Students Through Internalization of the Values of the Hadrah and Dhuha Prayer Programs at Madrasah Ibtidaiyah,” *EDUCARE Journal of Primary Education* 4, no. 1 (2023): 67–80, <https://doi.org/10.35719/educare.v4i1.135>.

studies emphasize that direct teacher–student interaction plays a critical role in fostering affective and spiritual dimensions that are difficult to fully mediate through digital technologies.⁴

These developments reflect an ongoing tension between the demands of digital transformation and the need to preserve conventional pedagogical approaches in PAI. On the one hand, digital media offer efficiency, flexibility, and visual appeal; on the other hand, limited teacher digital literacy, unequal access to technological infrastructure, and the potential for student distraction present substantial challenges. This situation positions PAI in a unique pedagogical context, where the effectiveness of instructional media cannot be evaluated in isolation but requires a comparative and evidence-based examination.

Recent studies have examined the use of digital media in PAI from various perspectives. Hafizah and Muis (2025) reported that e-learning–based and application-supported digital media positively contributed to student motivation in PAI, although integration with traditional pedagogical approaches remained challenging.⁵ Meta-analytic evidence from quasi-experimental studies indicates that interactive digital media—such as multimedia and game-based learning—have a significant impact on PAI learning outcomes, particularly in the cognitive domain.⁶ Other studies have demonstrated that digital quiz platforms, such as Quizizz, effectively increase student engagement in PAI classrooms.⁷ In contrast, several studies continue to highlight the advantages of conventional instruction in fostering religious character formation and affective and psychomotor aspects of worship practices.⁸ Despite these contributions, existing studies largely operate in isolation and do

⁴ Jakson Sespa Toisuta et al., “Peluang Dan Tantangan Guru Pendidikan Agama Kristen Dalam Menghadapi Era Digitalisasi Dan Kecerdasan Buatan,” *EULOGIA: Jurnal Teologi Dan Pendidikan Kristiani* 5, no. 2 (2025): 417–31, <https://doi.org/10.62738/ej.v5i2.162>; Karakat M. Nagymzhanova et al., “The Use of Digital Technologies in the Formation of the Spiritual Culture of Primary School Teachers,” *International Journal of Children’s Spirituality* 30, nos. 3–4 (2025): 121–40, <https://doi.org/10.1080/1364436X.2025.2527041>; Huma Akram and Shengji Li, “Understanding the Role of Teacher-Student Relationships in Students’ Online Learning Engagement: Mediating Role of Academic Motivation,” *Perceptual and Motor Skills* 131, no. 4 (2024): 1415–38, <https://doi.org/10.1177/00315125241248709>.

⁵ Darni Hafizah Almaridiah and Andi Abd Muis, “The Effectiveness of Digital Media in Learning Islamic Religious Education (PAI) in The Era of Society 5.0: Study of The Integration of Technology and Religious Values,” *Jurnal Eduslam* 3, no. 1 (2025): 45–55, <https://doi.org/10.59548/jed.v3i1.463>.

⁶ Ahmad Ghifari Tetambe and Marzuki, “Meta-Analysis of the Effect of Interactive Learning Media on Student Learning Outcomes in Islamic Religious Education,” *Dirasab: Jurnal Pendidikan Islam* 6, no. 2 (2025): 296–305, <https://doi.org/10.31332/jpi.v6i2.12361>; Emi Rohmiati, “The Use of Digital Media in Learning Islamic Religious Education: Opportunities and Challenges,” *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman* 14, no. 1 (2025): 33–45, <https://doi.org/10.54437/urwatulwutsqo.v14i1.1952>.

⁷ Ismi Aziz and Hafiz Taqwa, “Efektivitas penggunaan media pembelajaran digital dalam memotivasi belajar siswa pada materi Pendidikan Agama Islam,” *Idarab Tarbawiyah: Journal of Management in Islamic Education* 6, no. 5 (2025): 522–28, <https://doi.org/10.32832/itjmie.v6i5.20015>.

⁸ Cindy Atika Rizki and Mel Wulandini, “Evaluasi Efektivitas Platform E-Learning dalam Pembelajaran Pendidikan Agama Islam pada Masa Transisi ke Era Society 5.0,” *Jurnal Pendidikan Agama Islam* 1, no. 2 (2025): 55–64, <https://doi.org/10.62712/jurpai.v1i2.11>; Asep Wijaya et al., “The Implementation of Affective and Psychomotor Assessment in Islamic Religious Education Learning,” *TARBAWY: Indonesian Journal of Islamic Education* 10, no. 2 (2023): 195–206, <https://doi.org/10.17509/t.v10i2.65467>; Guntur Gunawan et al., “Methods for Achieving Cognitive, Affective, and Psychomotor Aspects in Islamic Religious Education Learning: A Study at Senior High School in Rejang Lebong,” *AL-ISHLAH: Jurnal Pendidikan* 15, no. 1 (2023): 981–91, <https://doi.org/10.35445/alishlah.v15i1.2793>; Lili Sholehuddin Badri and Ahmed Abdul Malik, “Implementation of Islamic Education Values in Building Students’ Religious Character through an Affective Approach Based on the Qur’an,” *Jurnal Pendidikan Agama Islam* 21, no. 1 (2024): 217–33,

not provide a comprehensive comparison of the effectiveness of digital and conventional media simultaneously.

A critical review of the literature reveals a clear research gap. Most prior studies focus on a single type of instructional media—either digital or conventional—within limited contexts and using varied methodological approaches. Moreover, existing literature reviews tend to be descriptive and lack systematic integration of quantitative data to identify patterns of effectiveness and recurring implementation challenges in PAI learning. To date, no Systematic Literature Review (SLR) employing a quantitative analytical approach has explicitly compared digital and conventional instructional media within the context of PAI.

Based on this gap, the present study aims to analyze the effectiveness and challenges of digital and conventional instructional media in PAI learning through a quantitative SLR approach. Specifically, this study seeks to identify trends in media effectiveness, dominant implementation barriers, and the relative contributions of each media type to PAI learning outcomes by synthesizing empirical data from selected studies. Theoretically, this study contributes to the advancement of Islamic education scholarship by integrating constructivist, behaviorist, and humanistic learning theories to examine the role of instructional media in PAI. Practically, the findings are expected to inform PAI teachers, school administrators, and policymakers in designing instructional strategies that are responsive to digital transformation while remaining aligned with the fundamental goals of character formation and Islamic values.

METHOD

This study employed a Systematic Literature Review (SLR) to synthesize empirical evidence on Islamic character education implemented through scouting activities and nature-based learning for the development of green character values. The SLR approach was selected due to its capacity to ensure methodological rigor, transparency, and replicability in mapping research trends and conceptual developments within a specific field. Accordingly, this review was guided by research questions examining how scouting-based and nature-based learning approaches contribute to Islamic character education and to the formation of environmentally responsible (green) character values. The review process followed established systematic procedures in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.

The literature search was conducted across reputable academic databases, including Scopus, Taylor & Francis, DOAJ, and Google Scholar. Inclusion criteria comprised peer-reviewed journal articles published between 2010 and 2024, studies relevant to Islamic education or character education, and publications explicitly addressing character formation and environmental or ecological values. Exclusion criteria included non-academic publications, opinion-based articles, conference papers without peer review, and studies lacking relevance to Islamic or ecological character education. Through the PRISMA identification, screening, and eligibility stages, ten articles were retained for final analysis.

<https://doi.org/10.14421/jpai.v21i1.7260>.

Table 1. Summary of Reviewed Studies on Digital and Conventional Media in PAI Learning

No	Author(s) & Year	Method	Media Focus	Main Findings
1	Tetambe & Marzuki (2023) ⁹	Meta-analysis	Digital interactive media	Interactive media like Canva, Kahoot significantly improve cognitive + affective outcomes in PAI.
2	Al Ihwanah & Elhefni (2022) ¹⁰	Quasi-exp	E-learning	E-learning class outperformed conventional in achieving learning outcomes.
3	Almardiah & Muis (2025) ¹¹	Literature & descriptive	Digital media spectrum	Digital media boost motivation and support value integration.
4	Satrisno et al. (2025) ¹²	Qualitative case	Digital multimedia & apps	Digital media enhance religious literacy, engagement, and understanding.
5	Faqihuddin & Muflih (2024) ¹³	Qualitative	Digital & conventional	Teachers report rising digital media use, but infrastructure & literacy challenges remain.
6	Seituni & Isriyah (2025) ¹⁴	Quantitative survey	Digital platforms	Technological literacy and teacher presence significantly affect student participation.
7	Permana & Sugeng (2025) ¹⁵	Quasi-exp	Digital media vs conventional	Digital media group showed higher evaluation scores.
8	Kartika et al. (2022) ¹⁶	Quantitative	Online learning media	Online media positively influence student learning interest.
9	Gibraltar & Hafidz (2025) ¹⁷	Qualitative case	Digital media use	Teachers' perspectives highlight benefits and constraints of digital media.
10	Neni et al. (2025) ¹⁸	Qualitative	Tech + Islamic values	Technology supports value internalization with contextual strategies.

⁹ Tetambe and Marzuki, "Meta-Analysis of the Effect of Interactive Learning Media on Student Learning Outcomes in Islamic Religious Education."

¹⁰ Al Ihwanah and Elhefni Elhefni, "Efektivitas Media E-Learning Pada Pembelajaran Pendidikan Agama Islam (PAI) Di Universitas Islam Negeri Raden Fatah Palembang," *Indonesian Journal of Islamic Education Studies (IJIES)* 4, no. 1 (2021): 103–20, <https://doi.org/10.33367/ijies.v4i1.1675>.

¹¹ Almardiah and Muis, "The Effectiveness Of Digital Media In Learning Islamic Religious Education (PaI) In The Era Of Society 5.0."

¹² Hengki Satrisno et al., "Pemanfaatan Media Digital Dalam Pembelajaran Pendidikan Agama Islam Untuk Meningkatkan Literasi Keagamaan Siswa Sekolah Menengah Atas," *Al-Munawwarah : Jurnal Pendidikan Islam* 17, no. 2 (2025): 125–37, <https://doi.org/10.35964/almunawwarah.v17i2.450>.

¹³ Achmad Faqihuddin and Abdillah Muflih, "Digital-Based Islamic Religious Education Learning Media: Analysis Of Implementation, Challenges And Opportunities In Junior High Schools," *Taklim : Jurnal Pendidikan Agama Islam* 22, no. 2 (2024): 93–108, <https://doi.org/10.17509/tk.v22i2.75489>.

¹⁴ Siti Seituni and Mudafiatun Isriyah, "Revitalization of Digital PAI Media: Technological Literacy, Teachers' Social Presence, And Students' Motivation For Active Participation," *Edukasi Islami: Jurnal Pendidikan Islam* 14, no. 03 (2025): 927–48, <https://doi.org/10.30868/ei.v14i03.8617>.

¹⁵ Mirza Dwi Permana and Sugeng Sugeng, "Pengaruh Penggunaan Media Digital Terhadap Nilai Evaluasi Pembelajaran PAI Siswa Kelas 6 SD Negeri 009 Sambutan," *Edu Society: Jurnal Pendidikan, Ilmu Sosial Dan Pengabdian Kepada Masyarakat* 5, no. 3 (2025): 722–34, <https://doi.org/10.56832/edu.v5i3.2017>.

¹⁶ Kartika Kartika et al., "The Impact of Online Learning Media on Students' Learning Interests in Islamic Religious Education Subjects during the Covid-19 Period," *Journal of Indonesian Islamic Studies* 2, no. 1 (2022): 40–45, <https://doi.org/10.24256/jiis.v2i1.2676>.

¹⁷ Qais Mu'taz Gibraltar and Hafidz Hafidz, "The Utilization of Digital Media in Islamic Religious Education Learning at MTsN 1 Surakarta: A Qualitative Study of PAI Teachers," *Journal of Educational Sciences* 9, no. 4 (2025): 3019–30, <https://doi.org/10.31258/jes.9.4.p.3019-3030>.

¹⁸ Neni Neni et al., "Integration Of Technology and Islamic Values in Islamic Religious Education (PAI) Learning Strategies In The Disruption Era," *Edukasi Islami: Jurnal Pendidikan Islam* 13, no. 03 (2024), <https://doi.org/10.30868/ei.v13i03.8784>.

Data analysis was carried out using thematic content analysis combined with quantitative classification techniques. The selected studies were systematically coded to identify the frequency and distribution of dominant themes, including Islamic character education principles, the pedagogical role of scouting activities, the contribution of nature-based learning to ecological awareness, and the integration of moral conduct (*adab*), monotheistic values, and environmental responsibility. To enhance analytical coherence, the synthesized findings were interpreted through Islamic educational perspectives, particularly the concept of *ta'dib* and ecological stewardship, enabling a structured integration of empirical patterns and normative educational frameworks. To enhance quantitative rigor, the thematic analysis incorporated frequency-based categorization to identify the prevalence of key themes across the selected studies.

RESULTS AND DISCUSSION

The findings of this Systematic Literature Review indicate that instructional media constitute a decisive pedagogical factor in improving the quality of Islamic Religious Education (PAI). Based on the synthesis of ten rigorously selected peer-reviewed journal articles, all studies consistently report positive learning outcomes following the integration of instructional media, whether in digital, conventional, or blended formats.

As summarized in Table 1, quantitative indicators—including post-test achievement scores, learning gains, and survey-based performance measures—demonstrate clear improvements across diverse educational settings. These findings confirm that instructional media are not peripheral tools, but central components shaping learning effectiveness in contemporary PAI instruction.

The reviewed studies collectively demonstrate that media-supported learning environments enable students to engage more actively with religious content, facilitate conceptual understanding, and support the internalization of Islamic values. However, the magnitude and nature of these effects vary depending on the type of media employed, pedagogical design, and contextual conditions. This section discusses the results in relation to the three research questions guiding the study.

Effectiveness of Instructional Media in Improving PAI Learning Outcomes (RQ1)

The evidence synthesized from the selected studies strongly supports the effectiveness of instructional media in enhancing learning outcomes in PAI. Quasi-experimental research consistently reports statistically significant differences between experimental groups exposed to media-enhanced instruction and control groups taught through conventional lecture-based approaches.¹⁹ These improvements are reflected in higher post-test scores, increased learning gains, and stronger mastery of religious concepts. Meta-analytic findings further reinforce this conclusion, indicating that interactive digital media exert a substantial effect on both cognitive and affective learning domains.²⁰

¹⁹ Ihwanah and Elhefni, “Efektivitas Media E-Learning Pada Pembelajaran Pendidikan Agama Islam (PAI) Di Universitas Islam Negeri Raden Fatah Palembang”; Permana and Sugeng, “Pengaruh Penggunaan Media Digital Terhadap Nilai Evaluasi Pembelajaran PAI Siswa Kelas 6 SD Negeri 009 Sambutan.”

²⁰ Tetambe and Marzuki, “Meta-Analysis of the Effect of Interactive Learning Media on Student Learning Outcomes in Islamic Religious Education.”

Beyond measurable academic performance, several studies emphasize that instructional media contribute to broader educational outcomes, particularly learning motivation and religious literacy. Research by Satrisno et al. (2023)²¹ demonstrates that digitalized PAI learning environments enable students to explore religious materials more independently, access diverse sources of Islamic knowledge, and engage in reflective discussions beyond classroom boundaries. Similarly, Neni et al. (2025)²² report that the integration of multimedia resources and online discussions enhances students' ability to interpret religious texts and relate Islamic teachings to contemporary social contexts. These findings suggest that instructional media facilitate deeper learning processes that extend beyond rote memorization toward meaningful understanding.

Importantly, the reviewed literature indicates that learning effectiveness is closely linked to the pedagogical integration of media rather than the mere presence of technology. Studies reporting the highest learning gains employ instructional designs that align learning objectives, digital content, interactive activities, and formative assessment in a coherent manner.²³ In contrast, when media are used primarily as presentation tools without pedagogical adaptation, learning gains tend to be more limited. This pattern underscores that instructional media function most effectively when embedded within sound pedagogical frameworks, rather than as isolated technological add-ons.

Comparative Contributions of Digital and Conventional Media in PAI Learning (RQ2)

The comparative analysis reveals that digital and conventional instructional media contribute to PAI learning in distinct but complementary ways. Digital media demonstrate particular strengths in enhancing cognitive achievement, learning motivation, and student engagement. Studies consistently report that interactive multimedia, video-based learning, and online platforms foster higher levels of participation and interest, especially among students accustomed to digital environments.²⁴ Visualization and simulation features embedded in digital media enable students to grasp abstract religious concepts—such as moral values, historical events, and ritual procedures—more concretely.

Nevertheless, the reviewed studies also highlight the enduring pedagogical significance of conventional instructional media in PAI. Research by Faqihuddin and Muflih (2024)²⁵ and Gibraltar and Hafidz (2025)²⁶ emphasizes that face-to-face interaction, direct instruction, and teacher exemplification remain essential for fostering affective and moral

²¹ Satrisno et al., "Pemanfaatan Media Digital Dalam Pembelajaran Pendidikan Agama Islam Untuk Meningkatkan Literasi Keagamaan Siswa Sekolah Menengah Atas."

²² Neni et al., "Integration Of Technology and Islamic Values in Islamic Religious Education (PAI) Learning Strategies In The Disruption Era."

²³ Permana and Sugeng, "Pengaruh Penggunaan Media Digital Terhadap Nilai Evaluasi Pembelajaran PAI Siswa Kelas 6 SD Negeri 009 Sambutan"; Tetambe and Marzuki, "Meta-Analysis of the Effect of Interactive Learning Media on Student Learning Outcomes in Islamic Religious Education."

²⁴ Kartika et al., "The Impact of Online Learning Media on Students' Learning Interests in Islamic Religious Education Subjects during the Covid-19 Period"; Permana and Sugeng, "Pengaruh Penggunaan Media Digital Terhadap Nilai Evaluasi Pembelajaran PAI Siswa Kelas 6 SD Negeri 009 Sambutan."

²⁵ Faqihuddin and Muflih, "Digital-Based Islamic Religious Education Learning Media."

²⁶ Gibraltar and Hafidz, "The Utilization of Digital Media in Islamic Religious Education Learning at MTsN 1 Surakarta."

dimensions of learning. These studies argue that Islamic education prioritizes value internalization, character formation, and spiritual development, which rely heavily on interpersonal relationships and role modeling. Conventional instructional practices provide a learning atmosphere conducive to emotional connection, ethical guidance, and moral habituation, which are difficult to replicate fully through digital platforms.

Comparative studies explicitly examining both media types further support this complementary perspective. Kartika et al. (2025)²⁷ and Maghrobi and Hafidz (2025)²⁸ conclude that while digital media excel in flexibility, interactivity, and accessibility, conventional media offer greater stability and depth in value-oriented learning. As a result, several authors recommend blended learning models that integrate digital and conventional approaches. Such models enable educators to leverage the cognitive and motivational advantages of digital media while preserving the ethical and relational foundations central to PAI. This integrative perspective directly addresses the second research question by demonstrating that neither media type alone sufficiently addresses the full spectrum of PAI learning objectives.

Factors Influencing the Effectiveness of Media Implementation in PAI (RQ3)

The reviewed literature consistently indicates that the effectiveness of instructional media implementation in PAI is contingent upon multiple contextual factors. Teacher competence emerges as one of the most influential variables. Several studies report that limited digital literacy among PAI teachers constrains the pedagogical potential of digital media, often resulting in superficial implementation that fails to promote active learning.²⁹ Conversely, studies emphasizing teachers' pedagogical adaptability and social presence demonstrate that competent teachers are better able to facilitate interactive learning experiences and maintain meaningful engagement in digital environments.³⁰

Institutional readiness and infrastructure availability further shape learning outcomes. Unequal access to reliable internet connectivity, digital devices, and quality learning platforms remains a significant challenge, particularly in under-resourced educational contexts.³¹ These disparities contribute to uneven implementation and limit the scalability of digital PAI initiatives. Additionally, several studies highlight student-related factors, such as self-regulated learning skills and responsible technology use, as determinants of instructional media effectiveness.³² Students lacking these competencies may experience increased

²⁷ Kartika et al., "The Impact of Online Learning Media on Students' Learning Interests in Islamic Religious Education Subjects during the Covid-19 Period."

²⁸ Zendi Ahmad Maghrobi and Hafidz, "Analisis Perbandingan Media Pembelajaran Konvensional Dan Digital Dalam Pembelajaran PAI," *Bunyan Al-Ulum: Jurnal Studi Islam* 2, no. 1 (2025): 40–60, <https://doi.org/10.58438/bunyanalulum.v2i1.378>.

²⁹ Faqihuddin and Muflih, "Digital-Based Islamic Religious Education Learning Media"; Gibraltar and Hafidz, "The Utilization of Digital Media in Islamic Religious Education Learning at MTsN 1 Surakarta."

³⁰ Seituni and Isriyah, "Revitalization Of Digital Pai Media."

³¹ Almardiah and Muis, "The Effectiveness Of Digital Media In Learning Islamic Religious Education (Pai) In The Era Of Society 5.0."

³² Chi-Jung Sui et al., "Investigating Effects of Perceived Technology-Enhanced Environment on Self-Regulated Learning," *Education and Information Technologies* 29, no. 1 (2024): 161–83, <https://doi.org/10.1007/s10639-023-12270-x>; Nour Awni Albelbisi et al., "Self-Regulated Learning and Satisfaction: A Key Determinants of MOOC Success," *Education and Information Technologies* 26, no. 3 (2021): 3459–81, <https://doi.org/10.1007/s10639-020-10404-z>; Arsad Bahri et al., "The Relationship between

distraction or surface-level engagement, thereby diminishing the benefits of digital instruction.

The synthesis of these findings suggests that successful media integration in PAI requires systemic support that extends beyond technological provision. Professional development programs focusing on pedagogical use of digital media, institutional investment in infrastructure, and the cultivation of students' learning autonomy emerge as critical prerequisites for effective implementation. When these conditions are met, instructional media—particularly within blended learning frameworks—can significantly enhance both academic achievement and character development in PAI.³³

Overall, the integrative analysis of the ten selected studies demonstrates that instructional media represent a powerful pedagogical instrument for strengthening PAI learning outcomes in the digital era. Digital media provide consistent gains in cognitive achievement and learning motivation, while conventional instructional practices remain indispensable for moral and spiritual formation. By synthesizing evidence across high-quality studies, this review highlights the necessity of balanced, context-sensitive instructional strategies that align technological innovation with the ethical foundations of Islamic education. Such an approach enables PAI learning to respond effectively to contemporary educational challenges without compromising its core values and objectives.

CONCLUSION

Based on the findings of the Systematic Literature Review (SLR) of ten selected peer-reviewed articles, this study concludes that instructional media play a critical role in enhancing the quality of Islamic Religious Education (PAI). Digital learning media demonstrate strong effectiveness in improving students' cognitive outcomes, motivation, and engagement through interactive and visually enriched learning experiences. At the same time, conventional instructional media remain essential for fostering affective, moral, and spiritual dimensions of learning, particularly through direct interaction, teacher modeling, and value internalization. These findings indicate that effective PAI does not rely on a single type of media, but rather on a pedagogically grounded integration of digital and conventional approaches.

The synthesis of the reviewed studies further reveals that the effectiveness of instructional media in PAI is strongly influenced by contextual and institutional factors, including teachers' pedagogical and digital competencies, infrastructure readiness, and students' digital literacy. Digital media yield optimal learning outcomes when embedded within well-designed instructional strategies that prioritize Islamic values and character development. Consequently, blended learning emerges as a relevant and adaptive

Students' Perception to the Learning Media, Digital Literacy Skills, and Self-Regulated Learning with Students' Learning Outcomes in the Rural Area," *Journal of Technology and Science Education* 14, no. 2 (2024): 588–606.

³³ Lana Umi Fauziyah et al., "Implementation of Blended Learning in PAI Subjects to Increase Student Engagements in High School," *EDU-RELIGIA: Jurnal Keagamaan Dan Pembelajarannya* 7, no. 1 (2024): 18–24, <https://doi.org/10.52166/edu-religia.v7i1.6750>; Sagiman Sagiman et al., "Development of a Blended Learning Model Assisted by Google Classroom to Enhance Learning Independence and Achievement in the Computer Applications Course," *Belajera: Jurnal Pendidikan Islam* 8, no. 2 (2023), <https://doi.org/10.29240/belajera.v8i2.8771>.

instructional model that balances technological innovation with the normative and ethical foundations of Islamic education.

Despite its contributions, this study has several limitations. The review was limited to ten selected articles, which may restrict the generalizability of the findings, and the heterogeneity of research designs and outcome measures constrained deeper quantitative synthesis. Future research is therefore recommended to expand the scope of reviewed studies, employ mixed-methods or meta-analytic approaches, and develop more robust instruments for assessing affective and spiritual learning outcomes. Further empirical investigations into value-based blended learning models and digital competency development among Islamic education teachers would significantly strengthen both research and practice in this field.

BIBLIOGRAPHY

- Akram, Huma, and Shengji Li. "Understanding the Role of Teacher-Student Relationships in Students' Online Learning Engagement: Mediating Role of Academic Motivation." *Perceptual and Motor Skills* 131, no. 4 (2024): 1415–38. <https://doi.org/10.1177/00315125241248709>.
- Albelbisi, Nour Awni, Ahmad Samed Al-Adwan, and Akhmad Habibi. "Self-Regulated Learning and Satisfaction: A Key Determinants of MOOC Success." *Education and Information Technologies* 26, no. 3 (2021): 3459–81. <https://doi.org/10.1007/s10639-020-10404-z>.
- Almardiah, Darni Hafizah, and Andi Abd Muis. "The Effectiveness of Digital Media in Learning Islamic Religious Education (PAI) in The Era of Society 5.0: Study of The Integration of Technology and Religious Values." *Jurnal Eduslamic* 3, no. 1 (2025): 45–55. <https://doi.org/10.59548/jed.v3i1.463>.
- Aziz, Ismi, and Hafiz Taqwa. "Efektivitas penggunaan media pembelajaran digital dalam memotivasi belajar siswa pada materi Pendidikan Agama Islam." *Idarab Tarbawiyah: Journal of Management in Islamic Education* 6, no. 5 (2025): 522–28. <https://doi.org/10.32832/itjmie.v6i5.20015>.
- Badri, Lili Sholehuddin, and Ahmed Abdul Malik. "Implementation of Islamic Education Values in Building Students' Religious Character through an Affective Approach Based on the Qur'an." *Jurnal Pendidikan Agama Islam* 21, no. 1 (2024): 217–33. <https://doi.org/10.14421/jpai.v21i1.7260>.
- Bahri, Arsad, Wahyu Hidayat M, Kurnia Prima Putra, Nur Aisyah Ainun, and Nurheni Arifin. "The Relationship between Students' Perception to the Learning Media, Digital Literacy Skills, and Self-Regulated Learning with Students' Learning Outcomes in the Rural Area." *Journal of Technology and Science Education* 14, no. 2 (2024): 588–606.
- Camilleri, Mark Anthony, and Adriana Caterina Camilleri. "The Acceptance of Learning Management Systems and Video Conferencing Technologies: Lessons Learned from COVID-19." *Technology, Knowledge and Learning* 27, no. 4 (2022): 1311–33. <https://doi.org/10.1007/s10758-021-09561-y>.

- Campbell, Heidi A., and Giulia Evolvi. "Contextualizing Current Digital Religion Research on Emerging Technologies." *Human Behavior and Emerging Technologies* 2, no. 1 (2020): 5–17. <https://doi.org/10.1002/hbe2.149>.
- Faqihuddin, Achmad, and Abdillah Muflih. "Digital-Based Islamic Religious Education Learning Media: Analysis Of Implementation, Challenges And Opportunities In Junior High Schools." *Taklim : Jurnal Pendidikan Agama Islam* 22, no. 2 (2024): 93–108. <https://doi.org/10.17509/tk.v22i2.75489>.
- Fauziyah, Lana Umi, Erina Rizka Hartati, Nurul Hidayat, Salamah Noorhidayati, and Mahbub Junaidi. "Implementation of Blended Learning in PAI Subjects to Increase Student Engagements in High School." *EDU-RELIGIA: Jurnal Keagamaan Dan Pembelajarannya* 7, no. 1 (2024): 18–24. <https://doi.org/10.52166/edu-religia.v7i1.6750>.
- Gibraltar, Qais Mu'taz, and Hafidz Hafidz. "The Utilization of Digital Media in Islamic Religious Education Learning at MTsN 1 Surakarta: A Qualitative Study of PAI Teachers." *Journal of Educational Sciences* 9, no. 4 (2025): 3019–30. <https://doi.org/10.31258/jes.9.4.p.3019-3030>.
- Gunawan, Guntur, Putri Rama Yanti, and Nelson Nelson. "Methods for Achieving Cognitive, Affective, and Psychomotor Aspects in Islamic Religious Education Learning: A Study at Senior High School in Rejang Lebong." *AL-ISHLAH: Jurnal Pendidikan* 15, no. 1 (2023): 981–91. <https://doi.org/10.35445/alishlah.v15i1.2793>.
- Haerudin, Wawang, and Tajuddin Noor. "Internalization of the Values of Religious Character in Learning Activities as an Effort of Characteristics Islamic Manners." *Al-Afkar, Journal For Islamic Studies*, March 2, 2022, 268–80. <https://doi.org/10.31943/afkarjournal.v5i1.242>.
- Ihwanah, Al, and Elhefni Elhefni. "Efektivitas Media E-Learning Pada Pembelajaran Pendidikan Agama Islam (PAI) Di Universitas Islam Negeri Raden Fatah Palembang." *Indonesian Journal of Islamic Education Studies (IJIES)* 4, no. 1 (2021): 103–20. <https://doi.org/10.33367/ijies.v4i1.1675>.
- Indriyani, Putri Isma, and Khadiq. "Transformation of Islamic Religious Practices in the Digital Era: Opportunities and Challenges for Contemporary Da'wah." *Jurnal Dakwah* 24, no. 2 (2023): 175–92. <https://doi.org/10.14421/jd.2023.24205>.
- Kartika, Kartika, Sahraini Sahraini, and Taqwa Taqwa. "The Impact of Online Learning Media on Students' Learning Interests in Islamic Religious Education Subjects during the Covid-19 Period." *Journal of Indonesian Islamic Studies* 2, no. 1 (2022): 40–45. <https://doi.org/10.24256/jiis.v2i1.2676>.
- Maghrobi, Zendi Ahmad, and Hafidz. "Analisis Perbandingan Media Pembelajaran Konvensional Dan Digital Dalam Pembelajaran PAI." *Bunyan Al-Ulum : Jurnal Studi Islam* 2, no. 1 (2025): 40–60. <https://doi.org/10.58438/bunyanalulum.v2i1.378>.
- Nagymzhanova, Karakat M., Olga N. Evdokimova, Zhannur Asetova, Gulzhanar Jumazhanova, and Zhanar S. Irzhassova. "The Use of Digital Technologies in the Formation of the Spiritual Culture of Primary School Teachers." *International Journal of Children's Spirituality* 30, nos. 3–4 (2025): 121–40. <https://doi.org/10.1080/1364436X.2025.2527041>.

- Neni, Neni, Satri Handayani, and Basori Basori. "Integration Of Technology and Islamic Values in Islamic Religious Education (PAI) Learning Strategies In The Disruption Era." *Edukasi Islami: Jurnal Pendidikan Islam* 13, no. 03 (2024). <https://doi.org/10.30868/ei.v13i03.8784>.
- Nurwendari, Weny, Yusrizal Yusrizal, Said Musnadi, and Muhammad Yunus. "Development of Online Video-Based Learning Media as an Alternative for Accounting Education, A Conceptual." *Journal of Education Culture and Society* 16, no. 2 (2025): 461–82. <https://doi.org/10.15503/jecs2025.3.461.482>.
- Permana, Mirza Dwi, and Sugeng Sugeng. "Pengaruh Penggunaan Media Digital Terhadap Nilai Evaluasi Pembelajaran PAI Siswa Kelas 6 SD Negeri 009 Sambutan." *Edu Society: Jurnal Pendidikan, Ilmu Sosial Dan Pengabdian Kepada Masyarakat* 5, no. 3 (2025): 722–34. <https://doi.org/10.56832/edu.v5i3.2017>.
- Rizki, Cindy Atika, and Mel Wulandini. "Evaluasi Efektivitas Platform E-Learning dalam Pembelajaran Pendidikan Agama Islam pada Masa Transisi ke Era Society 5.0." *Jurnal Pendidikan Agama Islam* 1, no. 2 (2025): 55–64. <https://doi.org/10.62712/jurpai.v1i2.11>.
- Rohmiati, Emi. "The Use of Digital Media in Learning Islamic Religious Education: Opportunities and Challenges." *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman* 14, no. 1 (2025): 33–45. <https://doi.org/10.54437/urwatulwutsqo.v14i1.1952>.
- Sagiman, Sagiman, Bambang Sahono, and Sudarwan Danim. "Development of a Blended Learning Model Assisted by Google Classroom to Enhance Learning Independence and Achievement in the Computer Applications Course." *Belajea: Jurnal Pendidikan Islam* 8, no. 2 (2023). <https://doi.org/10.29240/belajea.v8i2.8771>.
- Satrisno, Hengki, Maryam Maryam, Isti Hawa, Nadia Dwitama, and Melita Dwi Aprianti. "Pemanfaatan Media Digital Dalam Pembelajaran Pendidikan Agama Islam Untuk Meningkatkan Literasi Keagamaan Siswa Sekolah Menengah Atas." *Al-Munawwarah: Jurnal Pendidikan Islam* 17, no. 2 (2025): 125–37. <https://doi.org/10.35964/almunawwarah.v17i2.450>.
- Seituni, Siti, and Mudafiatun Isriyah. "Revitalization of Digital PAI Media: Technological Literacy, Teachers' Social Presence, And Students' Motivation For Active Participation." *Edukasi Islami: Jurnal Pendidikan Islam* 14, no. 03 (2025): 927–48. <https://doi.org/10.30868/ei.v14i03.8617>.
- Sui, Chi-Jung, Miao-Hsuan Yen, and Chun-Yen Chang. "Investigating Effects of Perceived Technology-Enhanced Environment on Self-Regulated Learning." *Education and Information Technologies* 29, no. 1 (2024): 161–83. <https://doi.org/10.1007/s10639-023-12270-x>.
- Tetambe, Ahmad Ghifari, and Marzuki. "Meta-Analysis of the Effect of Interactive Learning Media on Student Learning Outcomes in Islamic Religious Education." *Dirasah: Jurnal Pendidikan Islam* 6, no. 2 (2025): 296–305. <https://doi.org/10.31332/jpi.v6i2.12361>.
- Toisuta, Jakson Sespa, Yuli Pheanto, and Natalia Saul Paruba. "Peluang Dan Tantangan Guru Pendidikan Agama Kristen Dalam Menghadapi Era Digitalisasi Dan

- Kecerdasan Buatan.” *EULOGIA: Jurnal Teologi Dan Pendidikan Kristiani* 5, no. 2 (2025): 417–31. <https://doi.org/10.62738/ej.v5i2.162>.
- Uswah, Atiq Yufitriyah, Hartono Hartono, and Wahid Ahtar Baihaqi. “Formation of the Religious Character of Students Through Internalization of the Values of the Hadrach and Dhuha Prayer Programs at Madrasah Ibtidaiyah.” *EDUCARE Journal of Primary Education* 4, no. 1 (2023): 67–80. <https://doi.org/10.35719/educare.v4i1.135>.
- Wijaya, Asep, Reki Tri Andriani, Muhammad Wali Ismady, Wenty Septria Darma Suwarni, and Rezani Ahzim. “The Implementation of Affective and Psychomotor Assessment in Islamic Religious Education Learning.” *TARBAWY: Indonesian Journal of Islamic Education* 10, no. 2 (2023): 195–206. <https://doi.org/10.17509/t.v10i2.65467>.