

Integration of Digital Qur'anic Learning in Islamic Religious Education Learning

Received: 10/05/2026 ¹Akhmad Khoiri, ²Angger Putri Mahardini, ³Sri Romadona, ⁴Rohid Haidar

Accepted: 26/06/2026 Institut Agama Islam Darul Fattah Lampung, Indonesia

Published: 30/06/2026 ¹achmadchoiry@gmail.com *Corresponding author

²anggerputri05@gmail.com

³sriramadona435@gmail.com

⁴rohidahidar554@gmail.com

How to cite :

Khoiri, A., Mahardini, A. P., Romadona, S., & Haidar, R. (2026). Integration of Digital Qur'anic Learning in PAI Learning at Ibnu Katsir Quran Elementary School. *Jurnal Ilmu Pendidikan Dasar Indonesia*, 5(2), 296-308. <https://doi.org/10.51574/judikdas.v5i2.5693>

Abstract

The development of digital technology demands that Islamic Religious Education learning develop innovative approaches without eliminating the values of the Qur'an as the primary source of Islamic teachings. This study aims to analyze the integration of Digital Qur'anic Learning in Islamic Religious Education learning at Ibnu Kathir Quran Elementary School, Lampung. The study used a qualitative approach with a descriptive design. Subjects included Islamic Religious Education teachers and students, while the school served as supporting informants. Data were obtained through observation, semi-structured interviews, and documentation. Then, they were analyzed through data condensation, data presentation, and drawing and verifying conclusions. The results show that Digital Qur'anic Learning integrates Islamic Religious Education materials, Qur'anic verses, digital technology, and teachers' pedagogical strategies. The Qur'an is utilized as a contextual learning resource to connect the material to students' lives. The use of digital text, audio, video, and interactive activities increases student engagement, while teachers act as designers, facilitators, and mediators of learning. This approach has the potential to strengthen interactive, contextual, and Qur'anic-based Islamic Religious Education learning in the digital era.

Keywords: Digital Qur'anic Learning, Digital Technology Islamic, Islamic Religious Education

Abstrak

Perkembangan teknologi digital menuntut pembelajaran Pendidikan Agama Islam (PAI) untuk mengembangkan pendekatan-pendekatan inovatif tanpa mengesampingkan nilai-nilai Al-Qur'an sebagai sumber utama ajaran Islam. Penelitian ini bertujuan untuk menganalisis integrasi Pembelajaran Al-Qur'an Digital dalam pembelajaran Pendidikan Agama Islam di Sekolah Dasar (SD) Ibnu Kathir Quran, Lampung. Penelitian ini menggunakan pendekatan kualitatif dengan rancangan deskriptif. Subjek penelitian meliputi guru Pendidikan Agama Islam dan siswa, sedangkan pihak sekolah bertindak sebagai informan pendukung. Data diperoleh melalui observasi, wawancara semi-terstruktur, dan dokumentasi. Selanjutnya, data dianalisis melalui tahapan kondensasi data, penyajian data, serta penarikan dan verifikasi kesimpulan. Hasil penelitian menunjukkan bahwa Pembelajaran Al-Qur'an Digital mengintegrasikan materi Pendidikan Agama Islam, ayat-ayat Al-Qur'an, teknologi digital, dan strategi pedagogis guru. Al-Qur'an dimanfaatkan sebagai sumber belajar kontekstual untuk menghubungkan materi dengan kehidupan siswa. Penggunaan teks digital, audio, video, dan aktivitas interaktif meningkatkan keterlibatan siswa, sementara guru berperan sebagai perancang, fasilitator, dan

mediator pembelajaran. Pendekatan ini berpotensi memperkuat pembelajaran Pendidikan Agama Islam yang interaktif, kontekstual, dan berbasis Al-Qur'an di era digital.

Kata Kunci: Pembelajaran Al-Qur'an Digital, Teknologi Digital, Pendidikan Agama Islam

Introduction

Digital transformation has brought significant changes to the world of education and encouraged educational institutions to develop learning that adapts to technological developments without losing the core values that underpin education ([Hakimi et al., 2024](#)). The development of digital technology allows learning resources to be presented in the form of text, audio, video, animation, and various interactive media, which can broaden students' learning experiences. However, the use of technology in Islamic education cannot be solely focused on media innovation; it must also be directed towards strengthening the process of developing students' Islamic knowledge, attitudes, and values ([Susanti et al., 2024](#)).

This urgency is even stronger in Islamic Religious Education (PAI) learning, as PAI has distinct characteristics from learning that focuses solely on knowledge acquisition. PAI learning is expected to develop religious understanding while shaping students' attitudes and behavior based on Islamic values ([Firdaus et al., 2023](#)). In this context, the Qur'an holds a crucial position as the primary source of Islamic teachings, which can be used to provide a foundation for various PAI materials. Therefore, the development of digital technology needs to be directed towards expanding students' access and interaction with the Qur'an, not simply replacing books or blackboards with digital devices ([Nasaruddin et al., 2023](#)).

Changing student characteristics in the digital era are also a key reason for developing more innovative Islamic Religious Education (PAI) learning ([Munawaroh & Khoiri, 2025](#)). Today's students are increasingly familiar with digital devices, audiovisual information sources, and interactive learning patterns ([Khoiri et al., 2024](#)). This situation provides opportunities for teachers to present Qur'an and Islamic Religious Education learning through more varied approaches, for example through digital texts, audio recitations, learning videos, digital translations, interactive quizzes, and technology-based learning resources ([Nkomo et al., 2021](#)).

However, the use of technology without appropriate pedagogical design has the potential to cause students to become solely interested in the media without understanding the substance of the learning ([Bergdahl et al., 2020](#)). Therefore, technology integration requires teacher strategies that can guide students from simply accessing information to understanding, interpreting, and applying the values they learn. In the context of Islamic education, the Quran should not only be viewed as an object of memorization, but also as a source of knowledge and values that can be linked to students' various life experiences ([Qurrotu'ain et al., 2024](#)). Islamic Religious Education (PAI) learning that connects Quranic verses to real-life materials and contexts can help students understand that Islamic values are relevant to the problems they face daily ([Hermanto & Sari, 2022](#)). With the support of digital technology, Quranic verses can be presented more interactively through text, audio, translation, visuals, and relevant explanatory sources. This pattern opens up opportunities for learning that is not only informative but also contextual and reflective ([Akem et al., 2025](#)).

However, the use of digital technology in Islamic Religious Education (PAI) learning still faces challenges in the integration of technology, materials, and Islamic values ([Siregar](#)

et al., 2025). The use of digital media in learning often emphasizes technical aspects and visual appeal, while the relationship between digital resources and Islamic Religious Education (PAI) learning objectives has not always been systematically designed (Mintasih et al., 2024). Furthermore, studies on Qur'an-based digital learning primarily discuss the use of technology for reading, memorizing, or accessing the Qur'an, while studies specifically examining how digital technology is used to integrate the Qur'an as an authentic source into contextual Islamic Religious Education (PAI) learning still need to be developed (Neni et al., 2024).

This gap highlights the need for research that examines not only the use of technology but also how technology, the Qur'an, Islamic religious, teacher pedagogy, and student experiences can be integrated into a single learning process. The concept of Digital Qur'anic Learning in this study is offered as an approach that connects four main elements: digital technology, the Qur'an as an authentic source, Islamic Religious Education materials, and teacher pedagogical strategies. This approach is not intended simply to digitize Qur'anic learning, but to use technology as a means to strengthen students' interaction with the Qur'an and connect the content of the verses with the material and their life experiences (Rahmaati & Munawaroh, 2024). Thus, the novelty of this research lies in the effort to understand Digital Qur'anic Learning as an integrative process that positions technology not as an end in itself but as a facilitator to build Islamic Religious Education learning that is more contextual, interactive, and oriented towards the meaning of values (Waroh et al., 2023).

Ibnu Kathir Quran Elementary School, Lampung is a relevant context for studying this phenomenon due to its institutional characteristics, which prioritize Quranic education and Islamic studies. This environment provides a space to examine how Quranic sources can be integrated with digital technology developments in Islamic Religious Education (PAI) learning at the elementary school level. Research into learning practices in this environment is expected to provide an empirical overview of the integration of technology and the Quran, the role of teachers in designing learning, student involvement, and factors that support and hinder its implementation.

Based on this description, this study is crucial for analyzing the integration of digital Quranic learning in Islamic Religious Education (PAI) at Ibnu Kathir Quran Elementary School, Lampung. This research aims to identify the integration of digital technology with Quranic sources in Islamic Religious Education (PAI), analyze the role of teachers and student involvement in the learning process, and identify factors that support and hinder its implementation. The results are expected to provide conceptual and practical contributions to the development of technology-based Islamic Religious Education (PAI) learning that remains grounded in Quranic values.

Research Method

This study used a qualitative approach with a descriptive design. The aim was to describe and analyze the integration of Digital Quranic Learning into Islamic Religious Education (PAI) at Ibnu Kathir Quran Elementary School, Lampung. This design was chosen because the research focused on the learning process, teacher strategies, the use of digital technology, and in-depth student engagement. The research subjects consisted of 1 PAI teachers and 10 students involved in the learning process, with the principal or curriculum coordinator serving as supporting informants. Data were collected through observation, semi-structured interviews, and documentation to obtain information regarding learning

implementation, digital media use, student responses, and supporting and inhibiting factors in the implementation of Digital Quranic Learning.

Data were analyzed using the Miles, Huberman, and Saldaña model, which includes data condensation, data presentation, and drawing and verifying conclusions (Miles et al., 2018). Data validity was ensured through triangulation of sources and techniques by comparing information from teachers, students, and documents, as well as the results of observations, interviews, and documentation. The analysis focuses on the form of integration of the Qur'an and digital technology, strategies for implementing Islamic Religious Education learning, student involvement, and supporting and inhibiting factors in the implementation of Digital Qur'anic Learning.

Results

Integration of Digital Quranic Learning in Islamic Religious Education

Research results show that the integration of Digital Quranic Learning in Islamic Religious Education at Ibnu Kathir Quran Elementary School, Lampung is achieved through the connection between Islamic Religious Education material, relevant Quranic verses, and digital technology. This integration is evident from the learning preparation stage, when teachers determine the Islamic Religious Education material and then select Quranic verses that have a substantive relationship to the material. The selected verses are then presented through digital media, such as Quranic text displays, audio recitations, translations, and visual materials. This allows students not only to receive the teacher's explanation but also to have the opportunity to read, listen, observe, and understand the verses' messages in a more diverse way. This is reinforced by the following statement:

"When delivering Islamic Religious Education material, I try to find Quranic verses related to the material. So the students not only hear the explanation from the book, but also see the verses, listen to the recitation, and then we discuss the message of the verses." (GPAI, 2026).

This quote demonstrates that the integration of Digital Qur'anic Learning does not stop at using the Quran as a supplement to the material or using technology as a presentation medium. Both are combined in a single learning flow: teachers connect Islamic Religious Education competencies with Quranic verses, present the verses through digital media, and then guide students to understand their content and relevance to the material being studied (Waroh, 2022). This approach directs students from reading and listening to verses to understanding their meaning and connecting the verses' values to the context of Islamic Religious Education learning.

These findings also demonstrate a shift in the function of the Quran in Islamic Religious Education learning. The Quran is no longer merely viewed as a learning object to be read or memorized, but rather serves as an authentic resource to strengthen understanding of Islamic concepts and values. For example, when teachers discuss material on morals, worship, or commendable behavior, relevant verses are used as a basis for clarifying the values being studied (Achruh et al., 2024). In this way, students gain a learning experience that connects Islamic Religious Education (PAI) material, Quranic texts, understanding their meanings, and applying values to everyday life.

This integration also demonstrates that digital technology's role in learning extends beyond simply presenting material. Technology serves as a bridge that expands students' access to and interaction with Quranic sources (Maulana et al., 2024). Through digital text,

audio, visuals, and interactive activities, teachers can present a wider variety of learning resources while providing opportunities for students to interact directly with the material (Abubakari et al., 2023). However, research also shows that the effectiveness of technology depends heavily on teachers' ability to select content, determine activities, and guide students so that technology use remains oriented toward learning objectives.

Based on the overall findings, the integration pattern of Digital Qur'anic Learning found can be formulated in four interconnected procedural stages, namely: (1) mapping PAI material with relevant Qur'anic verses, (2) presenting verses through digital sources and media, (3) exploring the meaning of verses through learning activities, and (4) linking Qur'anic values to the material and the lives of students. These four stages describe the empirical flow of learning implementation, starting from selecting sources to internalizing and applying values. This is explained in the conceptual framework shown in Figure 1.

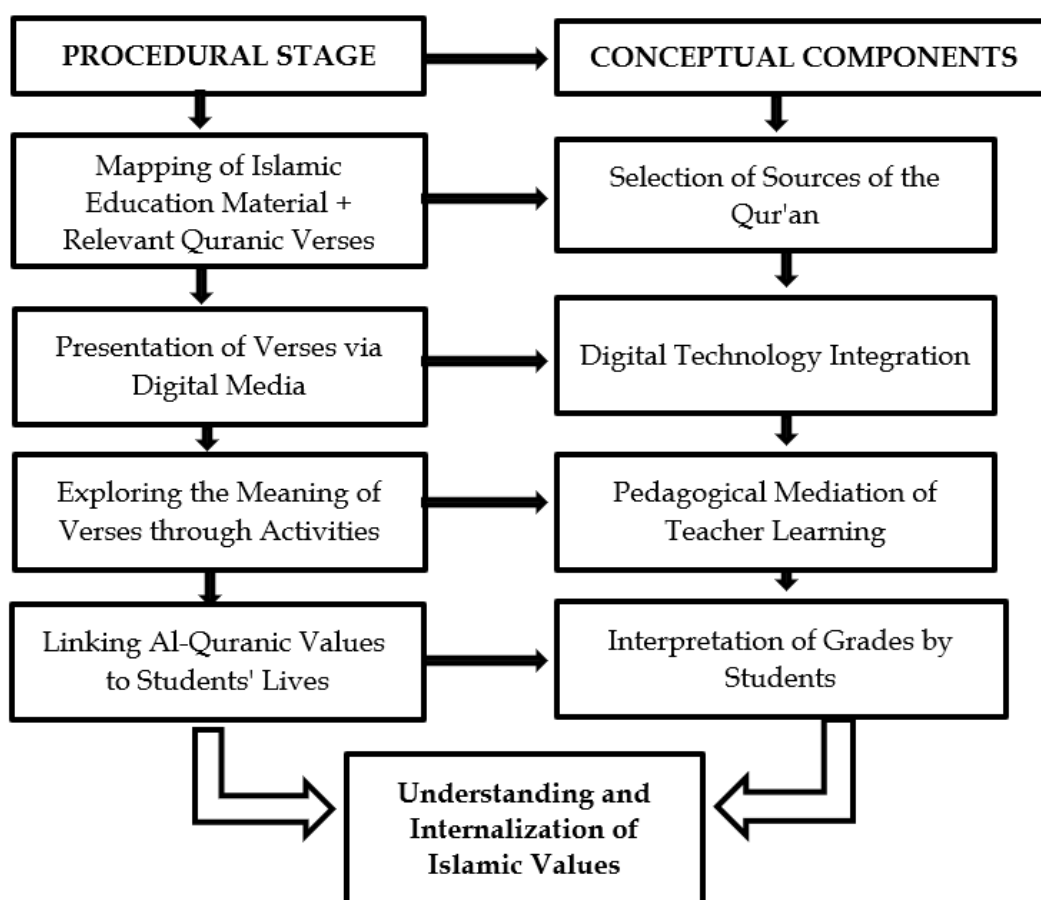


Figure 1 Conceptual Framework of Digital Qur'Anic Learning Integration in Islamic Religious Education

This four-stage pattern then serves as the basis for understanding the conceptual structure of Digital Qur'anic Learning, discussed in the Discussion section. In other words, the four procedural stages in the Results do not constitute a different framework from the four conceptual components in the Discussion, but rather the same formulation at different levels of abstraction. The material and verse mapping stage represents the selection of Qur'anic sources; the verse presentation stage through digital media represents the integration of digital technology; the meaning exploration stage demonstrates the teacher's

pedagogical mediation; while the value association stage with students' lives represents the students' interpretation of values. These relationships indicate that the empirical findings of the study not only describe learning procedures but also form a conceptual structure that explains how Digital Qur'anic Learning works in Islamic Religious Education (PAI) learning.

The Quran as a Contextual Learning Resource

Furthermore, the study also showed that the use of the Quran in Islamic Religious Education (PAI) learning helps students understand the material through sources closely related to their religious lives. Teachers connect the verses to the material being studied and then guide students to find messages that can be applied to their daily lives.

"I don't want children to just memorize the verses. After reading the verses, I usually ask them how they relate to the material we are studying and how they can apply them to their lives." (GPAI, 2026).

A similar sentiment emerged from the students' experiences:

"If there's a verse, it's easier for me to understand because I can read it and see its meaning. After that, the teacher explains how it relates to the material." (PD, 2026).

These two statements demonstrate that the Quran serves as both a learning resource and a source of values in Islamic Religious Education (PAI) learning. Students are not only guided to understand the content but also to understand the fundamental values contained in Islamic teachings.

This is crucial in Islamic Religious Education (PAI) learning because the goals of religious education extend beyond cognitive aspects. The material students acquire needs to be connected to attitudes and behavior. Therefore, the contextual use of Quranic verses can help build connections between religious knowledge and students' everyday practices (Afif et al., 2024).

Digital Technology Encourages Student Engagement

Research shows that the use of digital technology in Digital Quranic Learning changes student interaction patterns during Islamic Religious Education (PAI) learning. Technology is used not only to display material but also to present Quranic texts, audio recitations, translations, videos, images, and interactive activities that enable students to receive information in various formats (Masbur, 2024). This variation creates more multisensory learning, because students not only listen to the teacher's explanation, but also read texts, listen to verses, observe visual displays, answer questions, and provide responses to the material being studied.

"Children are usually more engaged when verses are displayed on a screen and accompanied by audio. They can follow along with the reading, and then I ask questions about the verse." (GPAI, 2026).

This statement demonstrates that student engagement is built through a series of structured activities, not solely through the presence of digital devices. The teacher first presents the verse in visual and audio form, then guides students to follow along with the reading and understand the verse's content through questions. Thus, technology serves as an initial trigger for attention, while the teacher's questions and interactions transform that attention into learning activities (Apriyansyah, 2023). Furthermore, this finding is reinforced by the following statement:

"I prefer learning using videos or displays on a screen because I don't just listen to the teacher. We can see the verse and hear the reading." (PD, 2026).

The data above indicates that students perceive a difference in their learning experience when material is presented through digital media. Students have the opportunity to access material through more than one form of representation, namely visual and audio (Viati, 2025). This condition is important in learning the Qur'an because students can see the written form of the verses and at the same time hear the pronunciation, then connect the two with the meaning explained by the teacher.

Furthermore, observations indicate that student engagement is evident not only in their attention to the media but also in their responses to learning activities. After the verses are displayed and listened to, the teacher poses questions regarding the verses' meaning, content, and relationship to Islamic Religious Education (PAI) material (Abror & Noviani, 2025). Students are then guided to answer, express their opinions, and provide examples of applying the verses' values in everyday life. This pattern indicates that digital technology is used as a gateway to cognitive and reflective activities, not as a learning goal in itself.

These data reinforce that digital technology is not the sole factor determining learning success. Technology provides a wider range of interaction possibilities, but the teacher remains the primary actor in determining how these possibilities translate into meaningful learning experiences. In the context of Digital Qur'anic Learning, the success of technology integration lies in the teacher's ability to connect digital media with Quranic verses, Islamic Religious Education (PAI) learning objectives, student activities, and the process of reflecting on values.

Thus, the contribution of digital technology in this research is not merely to make Islamic Religious Education (PAI) learning more engaging, but also to expand the ways in which students interact with the Quran and Islamic Religious Education (PAI) materials (Hermanto & Sari, 2022). Technology functions as a facilitator, enabling the integrated presentation of text, audio, visuals, and learning activities, while the teacher acts as the designer of the learning experience (Laurillard et al., 2018). This pattern is one of the important characteristics of Digital Qur'anic Learning: technology is used to enhance the quality of students' interactions with Quranic sources, rather than replacing the teacher's pedagogical role.

The Changing Role of Teachers in Digital Learning

Research shows that the implementation of Digital Quranic Learning shifts the teacher's role from simply delivering material to designing, facilitating, and directing digital learning experiences (Sutopo et al., 2024). This change is evident from the planning stage, when teachers not only determine Islamic Religious Education (PAI) material but also map relevant Quranic verses, select appropriate digital resources, determine the media formats to be used, and design activities that enable students to interact with the material. Thus, technology integration requires teachers to make a series of pedagogical decisions to ensure the use of digital resources remains aligned with the competencies and characteristics of elementary school students.

"Using technology is actually helpful, but teachers still have to prepare everything. Not all videos or materials from the internet can be used immediately. I have to choose those that are relevant to the Islamic Religious Education (PAI) material and age-appropriate." (GPAI, 2026).

This statement demonstrates that access to digital resources does not automatically

guarantee quality learning. Teachers select available materials by considering the suitability of the content to Islamic Religious Education (PAI) material, the age of the students, the language used, the values conveyed, and the learning objectives (Khoiri et al., 2023). In the context of Digital Qur'anic Learning, the selection process becomes increasingly important because the resources used must not only be pedagogically sound but also appropriate in presenting verses, translations, audio readings, and explanations of the contents of the Qur'an.

The teacher's role as a curator of digital resources is also evident in their efforts to avoid accepting digital information directly. Teachers need to check the relevance and appropriateness of materials before using them in learning. This demonstrates a filtering process between available digital resources and those suitable for use in Islamic Religious Education (PAI) learning (Sardi et al., 2025). Thus, teachers' digital competence relates not only to the ability to operate devices but also to the ability to evaluate the quality of information and determine the sources that best meet students' needs.

Beyond being a curator, teachers also play a role as designers of learning experiences. The selected digital media are not presented to students passively but are placed within a series of learning activities (Ardiansyah et al., 2025). Teachers can begin by displaying a verse, inviting students to listen to the reading, explaining the meaning, asking provocative questions, and then guiding students to connect the verse's content to Islamic Religious Education material and everyday life. This pattern demonstrates that technology gains pedagogical significance when placed within a purposeful learning design.

The teacher's role also changes during the learning process. Teachers do not completely hand over the learning process to digital media but continue to provide guidance and supervision. When students interact with videos, audio, digital texts, or Quranic sources, teachers provide additional explanations, clarify understanding, ask questions, and guide discussions (Basri et al., 2021). Thus, teachers remain the central guides of learning despite the increasing diversity of learning resources and activities.

These findings indicate that digital transformation in Islamic Religious Education (PAI) learning does not diminish the role of teachers, but rather shifts their role from transmitter to learning designer and facilitator. Teachers are no longer solely responsible for conveying information contained in textbooks, but must be able to identify relevant digital information, integrate it with Quranic sources, and create activities that enable students to actively construct understanding.

In the context of Digital Quranic Learning, this shift in role has a more specific meaning. Teachers serve as a bridge between digital technology, the Quran, Islamic Religious Education (PAI) materials, and students' experiences. Teachers determine appropriate verses for the material, choose digital presentation methods, provide context for the verses, and guide students so that the values learned from the Quran can be understood and applied in their lives. The teacher's role thus becomes crucial because technology cannot determine by itself how a verse should be understood and connected to educational goals.

Discussion

This research demonstrates that Digital Qur'anic Learning has a broader meaning than simply the use of technology in Islamic Religious Education (Emawati et al., 2025). This integration demonstrates a shift in the learning paradigm from using digital media as a tool to utilizing technology as part of a pedagogical design that connects Islamic teachings with

students' learning experiences ([Mintasih et al., 2024](#)). In this context, the primary value of this approach lies in teachers' ability to integrate technology with the substance of the Qur'an and Islamic Religious Education (PAI) learning objectives in a focused manner.

Technological integration also provides opportunities for more multimodal learning. Quranic material can be presented in text, audio, visuals, translations, and interactive activities, providing students with more than one pathway to understanding the material ([Alfian et al., 2022](#)). However, research findings indicate that this multimodality does not automatically result in meaningful learning. The quality of learning remains dependent on how teachers guide students in processing digital information into understanding, reflection, and action. This demonstrates that pedagogical aspects remain central to technology utilization.

The findings regarding student engagement also have important implications. Interest in digital media is a starting point, but it cannot yet be positioned as an indicator of learning success. More substantive engagement emerges when students are guided to read, understand, question, discuss, and connect the messages of the Quran with Islamic Religious Education (PAI) materials ([Waroh et al., 2025](#)). Thus, Digital Quranic Learning has the potential to foster engagement that is not only behavioral, but also cognitive and reflective.

In this context, the role of teachers becomes even more crucial. Digitalization does not reduce the need for teachers, but rather changes the nature of the competencies required. Teachers need to be able to select credible digital sources, adapt content to the age of students, integrate verses with Islamic Religious Education (PAI) materials, and design activities that encourage meaning ([Mistiawati et al., 2025](#)). Teachers thus function as mediators between technology, the Quran, Islamic Religious Education (PAI) materials, and students. This perspective demonstrates that digital transformation in Islamic education should not be directed at replacing the role of teachers, but rather at strengthening teachers' capacity as designers of learning experiences ([Alfian et al., 2022](#)).

From an Islamic education perspective, this research finding also demonstrates the importance of maintaining a balance between technological innovation and value orientation. The use of technology solely focused on visual appeal has the potential to render Islamic Religious Education (PAI) learning technical and superficial. Conversely, when technology is used to strengthen students' interaction with the Quran and help them understand the relevance of Islamic values in their lives, digitalization can be a means to strengthen the goals of religious education.

Based on these findings, the novelty of this research lies in the conceptualization of Digital Qur'anic Learning as a three-dimensional integration: digital technology, authentic Qur'anic sources, and Islamic Religious Education (PAI) pedagogy. This integration differs from digital learning approaches that simply transfer conventional materials into electronic format. Digital Qur'anic Learning positions technology as a link between the Qur'anic text, the learning process, and the students' life experiences. Thus, the research's contribution lies not only in the use of digital technology, but also in the model of integrating technology and Qur'anic values in Islamic Religious Education (PAI) learning.

Conceptually, this research yields an understanding that Digital Qur'anic Learning can be viewed through four main components: (1) selecting relevant Qur'anic sources, (2) integrating digital technology, (3) teacher pedagogical mediation, and (4) students' interpretation of values. These four components are interconnected and form a learning process that is oriented not only toward mastering Islamic Religious Education (PAI) material but also toward understanding and internalizing Qur'anic values. These findings

contribute to the development of Islamic Religious Education (PAI) learning that is responsive to digital transformation without losing the character and foundation of Islamic educational values.

Conclusion

The integration of Digital Qur'anic Learning in Islamic Religious Education (PAI) learning at Ibnu Kathir Quran Elementary School, Lampung shows that the combination of the Qur'an, digital technology, Islamic Religious Education materials, and teacher pedagogical strategies can create more contextual and interactive learning and encourage understanding and interpretation of the values of the Qur'an in the lives of students. Technology functions as a facilitator, while the teacher remains a mediator in selecting resources, designing activities, directing interactions, and maintaining the alignment of learning with the goals of Islamic education. This study contributes to the meaning of Digital Qur'anic Learning as an integrative approach that connects digital technology, the Qur'an as an authentic source, Islamic Religious Education pedagogy, and student learning experiences. The limitations of this study lie in the qualitative approach and the context of one school, so the results cannot be generalized. Further research is recommended to involve more schools with a quantitative or mixed methods approach to test its effectiveness on Qur'anic literacy, Islamic Religious Education understanding, learning engagement, and internalization of religious values.

References

- Abror, M. Q., & Noviani, D. (2025). The role of Islamic education in building digital wellbeing and social media ethics among Muslim youth. *West Science Islamic Studies*, 3(4), 257–269. <https://doi.org/10.58812/wsiss.v3i04.2303>
- Abubakari, M. S., Zakaria, G. A. N., Priyanto, P., & Triantini, D. (2023). Analysing technology acceptance for digital learning in Islamic education: The role of religious perspective on ICT. *Journal of Computing Research and Innovation*, 8(1), 1–16. <https://doi.org/10.24191/jcrinn.v8i1.344>
- Achruh, A., Rapi, M., Rusdi, M., & Idris, R. (2024). Challenges and opportunities of artificial intelligence adoption in Islamic education in Indonesian higher education institutions. *International Journal of Learning, Teaching and Educational Research*, 23(11), 406–428. <https://doi.org/10.26803/ijlter.23.11.22>
- Afif, N., Aziz, A., Mukhtarom, A., Mubin, F., & Lubis, M. R. (2024). Integrating Islamic values in online learning: A comparative study of Western and Islamic education philosophies. *TARBIYA: Journal of Education in Muslim Society*, 11(1), 27–36. <https://doi.org/10.15408/tjems.v11i1.40392>
- Akem, U., Hamdan, N. M., Iskandar, M. Y., Efendi, E., & Halimahturrafiah, N. (2025). Digital technology in Quranic learning: Opportunities and challenges. *Journal of Quranic Teaching and Learning*, 1(2), 49–64. <https://doi.org/10.67055/wbhjrr59>
- Alfian, A., Yusuf, M., & Nafiah, U. (2022). Integrating Islamic values in teaching English: Lessons learned from an integrated Islamic school. *Elsya: Journal of English Language Studies*, 4(1), 1–11. <https://doi.org/10.31849/elsya.v4i1.7322>
- Apriyansyah, N. (2023). Peningkatan moderasi beragama dalam masyarakat di MAS Al Hikmah Bandar Lampung. *ISLAM EDU: Jurnal Ilmiah Pendidikan Agama Islam*, 1(1), 1–9. <https://doi.org/10.61132/hikmah.v1i3.94>
- Ardiansyah, A., Degeng, I. N. S., Kuswandi, D., & Praherdhiono, H. (2025). A new model for

- blended learning in Islamic higher education: Integrating peer instruction with just-in-time teaching. *Turkish Online Journal of Distance Education*, 26(3), 192–216. <https://doi.org/10.17718/tojde.1533067>
- Basri, R. U., K, A. R., & Busrah, Z. (2021). Youtube sebagai media pembelajaran PAI di masa pandemi Covid-19. *Al-Ishlah: Jurnal Pendidikan Islam*, 19(1), 1–12. <https://doi.org/10.35905/alishlah.v19i1.1692>
- Bergdahl, N., Nouri, J., & Fors, U. (2020). Disengagement, engagement and digital skills in technology-enhanced learning. *Education and Information Technologies*, 25(2), 957–983. <https://doi.org/10.1007/s10639-019-09998-w>
- Emawati, E., Zulfikar, T., Karim, C. F. A., Ikhlas, S., & Fitria, L. (2025). Exploring teachers' voices: Conceptualization and integration of TPACK in Islamic education. *FITRAH: International Islamic Education Journal*, 7(2), 145–164. <https://doi.org/10.22373/fitrah.v7i2.9057>
- Firdaus, A., Amrullah, A., Adawiyah, L. R., Zakiah, Q. Y., & Supiana, S. (2023). Enhancing learning quality and student engagement: Utilizing digital technology in Islamic education. *International Journal of Nusantara Islam*, 11(2), 206–218. <https://doi.org/10.15575/ijni.v11i2.29960>
- Hakimi, M., Akrami, M., Ahrari, M., Akrami, K., & Akrami, F. (2024). The impact of mobile applications on Quran education: A survey of student performance and satisfaction. *Journal of Digital Learning and Distance Education*, 2(9), 722–736. <https://doi.org/10.56778/jdlde.v2i8.220>
- Hermanto, H., & Sari, F. (2022). Learning technology in the perspective of the Al-Quran and Hadith. *Journal of Islamic Education Research*, 3(2), 117–128. <https://doi.org/10.35719/jier.v3i2.265>
- Khoiri, A., Jaya, H., S, A. B., Apriyansyah, N., & Usman, U. (2023). Penerapan moderasi beragama dalam masyarakat di Madrasah Aliyah Swasta Al-Hikmah Way Halim Bandar Lampung. *Al Mufid: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 4(1), 1–8. <https://ejurnal.darulfattah.ac.id/almufid/article/view/172>
- Khoiri, A., Samsudi, W., Munawaroh, M., & Shaleh, M. (2024). Multiculturalism: The importance of religious moderation education in Indonesia. *Edupedia: Jurnal Studi Pendidikan dan Pedagogi Islam*, 8(2), 147–158. <https://doi.org/10.35316/edupedia.v8i2.3832>
- Laurillard, D., Kennedy, E., Charlton, P., Wild, J., & Dimakopoulos, D. (2018). Using technology to develop teachers as designers of TEL: Evaluating the learning designer. *British Journal of Educational Technology*, 49(6), 1044–1058. <https://doi.org/10.1111/bjet.12697>
- Masbur, M. (2024). Strengthening the moral beliefs students of Islamic basic education in the era of digitalization. *Pionir: Jurnal Pendidikan*, 13(1), 125–133. <https://doi.org/10.22373/pjp.v13i1.22062>
- Maulana, L., Ardiyansyah, S. M., Pratama, J. P., & Romli, U. (2024). Digital Al-Quran: A medium to assist students in practicing religious rituals. *Atthulab: Islamic Religion Teaching and Learning Journal*, 9(2), 245–257. <https://doi.org/10.15575/ath.v9i2.33024>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2018). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE Publications.
- Mintasih, D., Sukiman, S., & Purnama, S. (2024). Integration of digital technology in Islamic religious education learning: A qualitative study on teachers' competence and implementation models in secondary schools. *Jurnal Pendidikan Islam*, 13(1), 85–96.

<https://doi.org/10.14421/jpi.2024.131.85-96>

- Mistiawati, E. N., Inayati, N. L., Valarthodi, M. I., & Irshad, I. (2025). Teacher competency in applying assessment for Islamic education learning in the digitalisation. *Suhuf: International Journal of Islamic Studies*, 37(1), 151–160. <https://doi.org/10.23917/suhuf.v37i1.8644>
- Munawaroh, M., & Khoiri, A. (2025). How's student character in digital era? A comprehensive study of PAI teachers role in shaping students' religious character. *Edupeia: Jurnal Studi Pendidikan dan Pedagogi Islam*, 9(2), 127–141. <https://doi.org/10.35316/edupedia.v9i2.6071>
- Nasaruddin, A. H., Das, S. W. H., & Ladiqi, S. (2023). Digital-based Islamic Religious Education (IRE) learning model at senior high school. *Indonesian Journal of Islamic Education Studies (IJIES)*, 6(1), 79–92. <https://doi.org/10.33367/ijies.v6i1.3525>
- Neni, N., Handayani, S., & Basori, B. (2024). Integration of technology and Islamic values in Islamic Religious Education (PAI) learning strategies in the disruption era. *Edukasi Islami: Jurnal Pendidikan Islam*, 13(3), 1123–1134. <https://doi.org/10.30868/ei.v13i03.8784>
- Nkomo, L. M., Daniel, B. K., & Butson, R. J. (2021). Synthesis of student engagement with digital technologies: A systematic review of the literature. *International Journal of Educational Technology in Higher Education*, 18(1), Article 34. <https://doi.org/10.1186/s41239-021-00270-1>
- Qurrotu'ain, S., Shohib, M. W., & Nubail, A. (2024). The effectiveness of using e-modules as digital learning media in the learning of Islamic education. *Iseedu: Journal of Islamic Educational Thoughts and Practices*, 8(2), 185–196. <https://doi.org/10.23917/iseedu.v8i2.8999>
- Rahmaati, R. A., & Munawaroh, M. (2024). Sosialisasi media pembelajaran interaktif berbasis digital dalam pembelajaran Bahasa Arab dan Pendidikan Agama Islam di SDN 02 Perumnas Way Kandis. *Al Mufid: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 5(2), 57–67. <https://doi.org/10.51701/becksak52>
- Sardi, J., Darmansyah, D., Candra, O., Yuliana, D. F., Habibullah, H., Yanto, D. T. P., & Eliza, F. (2025). How generative AI influences students' self-regulated learning and critical thinking skills? A systematic review. *International Journal of Engineering Pedagogy (ijEP)*, 15(1), 94–108. <https://doi.org/10.3991/ijep.v15i1.53379>
- Siregar, H. S., Nurhamzah, N., Munir, M., & Fikri, M. (2025). Enhancing Islamic education through technology integration: A study of teaching practices in Indonesia. *Jurnal Ilmiah Peuradeun*, 13(2), 959–986. <https://doi.org/10.26811/peuradeun.v13i2.1875>
- Susanti, S. S., Nursafitri, L., Hamzah, I., Zunarti, R., Darmanto, D., Fitriyah, F., Asy'arie, B. F., & As'ad, M. S. (2024). Innovative digital media in Islamic Religious Education learning. *Jurnal Pendidikan Agama Islam*, 21(1), 40–59. <https://doi.org/10.14421/jpai.v21i1.7553>
- Sutopo, L., Munawaroh, M., & Sari, T. M. (2024). Penggunaan Youtube sebagai media pembelajaran Al-Qur'an dan Hadits pada peserta didik kelas V Madrasah Ibtidaiyah. *Al Banin: Jurnal Ilmiah Pendidikan Dasar*, 2(2), 94–104. <https://ejurnal.darulfattah.ac.id/albanin/article/view/557>
- Viati, N. (2025). The use of audio visual media to improve learning outcomes of Asmaul Husana material at Jeumpa 3 Public Elementary School. *Journal of Indonesian Primary School*, 2(2), 67–76. <https://doi.org/10.62945/jips.v2i2.779>
- Waroh, M. (2022). Moderasi beragama pada masa pandemi Covid 19. *An Naba*, 5(1), 63–74.

<https://doi.org/10.51614/annaba.v5i1.117>

- Waroh, M., Sutopo, L., Azzahra, M., & Ramadhan, M. F. (2025). Strategi guru PAI dalam menanamkan nilai-nilai Islami di sekolah dasar. *ISLAM EDU: Jurnal Ilmiah Pendidikan Agama Islam*, 3(2), 69–76. <https://doi.org/10.51614/4yfhg32>
- Waroh, M., Yamin, S., Rudiansyah, F., Rosyd, M., & Ramadhan, M. A. (2023). Moderasi beragama dalam penggunaan media sosial di MAS Al Hikmah Bandar Lampung. *Al Mufid: Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 4(1), 1–8. <https://ejurnal.darulfattah.ac.id/almufid/article/view/196>