Andragogi: Jurnal Ilmiah Pendidikan Agama Islam
https://riset.unisma.ac.id/index.php/ja/index

Volume 7 Nomor 2 Tahun 2025
e-ISSN: 2655-948X

Implementation of the Blended Learning Model in Islamic Religious Learning Studies to Improve Students' Critical Thinking Skills in the Digital Era

Febrianto Hakeu, Universitas Ichsan Gorontalo Utara
Arten Mobonggi, Institut Agama Islam Negeri Sultan Amai Gorontalo
Fitriyanti Suleman, Universitas Ichsan Gorontalo Utara
Mahfud Harim, Universitas Muhammadiyah Gorontalo

Corresponding Author: Febrianto Hakeu
Submissed: July 14, 2025 / Revised: December 08, 2025 / Published: December 29, 2025

Abstract

This study aims to analyze the implementation of the blended learning model in Islamic Religious Education (PAI) learning to improve students' critical thinking skills in the digital era. The research method uses a mixed-methods approach with a sequential explanatory design, carried out at the MA level. Miftahul Huda Kwandang. The research subjects consisted of 25 grade XI students and PAI teachers, selected through purposive sampling. Data was collected through critical thinking ability tests, questionnaires, interviews, and observations, then analyzed statistically and thematically. The study found a significant increase in students' critical thinking skills (p = 0.001), with the analysis indicators increasing significantly across both evaluation and inference. The blended learning model is effective with students who respond very positively to learning. The main supporting factors include technology infrastructure support, teacher commitment, and student collaboration, while the main obstacles are the gap in technology capabilities and increased teacher workload. The findings confirm that the blended learning model is effective in creating a contextual PAI learning environment and in fostering students' critical thinking skills, but it requires adequate infrastructure and sustainable teacher capacity development. This study recommends a blended learning model in Islamic religious learning studies to improve students' critical thinking skills.

Keywords

Blended learning model; Islamic religious learning; Critical thinking; Digital era

Email: febrianto.hakeu@pgsd.uigu.ac.id, arten_m@iaingorontalo.ac.id, fitriyantisuleman85@gmail.com, mahfudharim03@gmail.com

Introduction

The digital era has fundamentally transformed the educational landscape, bringing both challenges and opportunities to the learning process (Pratama et al., 2025). In an environment filled with massive information flows, the ability to evaluate, analyze, and filter information is an absolute must. Critical *thinking skills are* a fundamental competency every student needs to navigate the complexities of the modern world (Hidayatullah et al., 2021). This ability is not just about having a strong argument; it also includes the capacity to question, investigate, and understand information in depth. This context is the starting point for educators to reconstruct learning methods, including in Islamic Religious Education (PAI), in harmony with the demands of the times (Fathullah et al., 2025).

Furthermore, the demands of the 21st century emphasize mastery of digital literacy and high-level thinking skills. Students are no longer required to merely memorize facts; they must be able to construct their own knowledge from various digital sources (Sulianta, 2020). This shift in the educational paradigm demands a more dynamic, interactive, and *student-centered* approach to learning (Jusman & Parisu, 2025). Islamic religious education, as an integral part of the education system, cannot ignore this reality and must adapt by utilizing technology to achieve the goal of forming critical and noble human beings (Suwadji et al., 2024). As in the domain of Islamic Religious Education, the development of critical thinking is actually a means to deepen substantive religious understanding, not just memorizing rituals and doctrines. Students are encouraged not only to accept religious texts dogmatically but also to analyze the values they contain, contextualize them in the life of the digital age, and build logical, grounded arguments. This kind of approach is very important in forming a Muslim person who can address the challenges of the times without losing their religious identity.

A literature study conducted by Dwi Wulan Sari et al. revealed that the era of globalization has had a significant impact on Islamic education, including: first, as technology becomes increasingly sophisticated, it is easier to obtain various types of information, even information that is often detrimental. The task of national education in the era of globalization strongly emphasizes value systems and philosophy. Second, the pressure of globalization requires a qualified, educated, and skilled workforce. Third, collaboration in schools is very important. Another aspect of globalization's influence is international cooperation in education (Sari et al., 2023). Diana Fitriah also said that in her research, entitled *The Relationship between Textbook Reading Ability and Critical Thinking Skills with Islamic Religious Education Learning Outcomes, she found that* reading ability was good, at 73.61%. Second,

students' critical thinking skills are high, at 67.77%. Third, the level of learning outcomes is high and satisfactory, reaching 73.55%. Fourth, there is a positive and significant relationship between the ability to read textbooks and the learning outcomes of PAI subjects. Fifth, there is a positive and significant relationship between critical thinking skills and PAI subject learning outcomes. Sixth, there is a positive and significant relationship between the ability to read textbooks and critical thinking skills, as well as between PAI lesson outcomes and critical thinking skills (Fitriah, 2017). This then indicates that literacy, which in the context of PAI includes religious and digital literacy, plays a significant role in improving critical thinking skills. The higher students' literacy skills, the more critical they are in evaluating and building arguments. This emphasizes that the PAI learning approach must facilitate the simultaneous improvement of both aspects. In other words, integrating strengthening religious understanding with the development of digital skills within a critical learning framework is essential to contemporary Islamic education.

The conventional learning method in Islamic Religious Education, which tends to be one-way (lectures), has often failed to foster students' critical thinking skills (Alotaibi, 2025). This approach risks making students passive recipients who receive information without being encouraged to conduct in-depth analysis or evaluation of the material. As a result, PAI learning is often considered less relevant to students' lives, which are already heavily exposed to technology, potentially reducing their interest and involvement in the learning process (Dalimunthe, 2024). On the other hand, while digital technology offers broad access to information to enrich religious perspectives, it also carries the threat of disinformation that can affect students' judgments if it is not accompanied by adequate critical thinking skills. This condition creates an urgent dilemma: how to leverage technological advantages while fortifying students with strong analytical skills (Syukrin & Salahudin, 2024). Therefore, a learning model is needed that bridges the gap between traditional methods and digital demands while actively training students' critical thinking skills.

Therefore, in responding to these challenges, *the Blended Learning model i*s a strategic solution considered able to address the complexity of learning in the digital era (Dziuban et al., 2018). This model, which integrates the advantages of offline and online learning, is believed to create a more dynamic and *student-centered learning ecosystem* (Kumar et al., 2021). Through *blended learning*, teachers can design diverse learning experiences that combine the depth of face-to-face social interaction with the flexibility and richness *of online* learning resources. Research on PAI subjects at the elementary school level shows that the implementation of

Blended Learning is carried out through three main stages: planning (preparing learning tools such as syllabus and lesson plans), implementation (a combination of online and offline), and evaluation, which includes assessment of attitudes, knowledge, and skills. This framework provides a structured foundation for integrating PAI's pedagogical goals with the strengthening of thinking skills. The flexibility of this model allows educators to tailor strategies to the material's characteristics and students' needs, making learning more contextual and meaningful (Kharismawati & Kaltsum, 2022).

The *Blended Learning Model* opens space for a learning process that fosters critical thinking through a clear division of roles between the online and offline phases (Soumokil, 2025). In the *online phase*, students can access diverse digital learning resources, such as online journals, *e-books*, and video *tutorials*, to gather information from multiple perspectives. This ease of access trains students to compare and evaluate the credibility of sources, an essential part of critical thinking (Soumokil, 2025). This process of self-exploration lays a rich foundation of knowledge before students enter deeper discussions. Meanwhile, in face-to-face sessions, teachers can focus activities on in-depth discussions, clarification of complex concepts, and guide students in building solid arguments based on the information they have explored independently. In the context of PAI, this phase is particularly important for guiding students in analyzing religious values across the various sources they encounter in the digital world (Diplan et al., 2025). Direct interaction allows teachers to provide feedback on students' thought processes, encourages them to reflect on assumptions, and tests the validity of their arguments, guided by Islamic values (Jalinus et al., 2020).

One of the positive impacts of technology that can be optimized in Blended Learning is the ability for collaborative learning that transcends space and time. Digital platforms, such as discussion forums and social media groups, allow students to engage in discussions, share ideas, and solve problems together outside the classroom (Arifin et al., 2025). Interactions with peers who hold different viewpoints force students to consider evidence and reasons from both sides, ultimately nurturing their analytical and evaluative skills. More than that, digital collaboration in PAI learning can facilitate discussion of contemporary issues from a religious perspective. For example, students can discuss social media ethics, environmental responsibility, or social justice by referring to Islamic principles. Through structured discussions, students can be trained not to take information for granted but to critique it and form informed opinions (Warsah et al., 2021). This kind of activity not only trains critical thinking but also fosters an open attitude,

respects differences of opinion, and communicates politely, all of which are important values in Islam (Widodo, 2025).

Based on the gap above, this study offers a novelty, namely, a shift in focus from knowledge acquisition to critical thinking cultivation: The main novelty of this research is to position Blended Learning not just as a tool to deliver material (delivery mechanism), but rather as a learning environment specifically designed to nurture students' critical thinking competencies in the field of religion. This study explicitly investigates the link between the design of activities (exploration of multi-perspective digital sources, structured discussions, and reflection) and the enhancement of the ability to analyze, evaluate, and construct logical religious arguments. Furthermore, Ontextualization of Models in the PAI Domain with an Integrative Approach: This research makes a new contribution by designing and analyzing Blended Learning models specifically contextualized for the PAI domain. Thus, the position of this research is very clear: It continues and deepens the findings of previous research on the effectiveness of Blended Learning and the importance of critical thinking, by filling in the gaps through specific investigations of *how* and *to what extent* the model can be developed into a learning environment that deliberately hones students' critical thinking skills in the field of Islamic Religious Education in the digital age.

Although promising, the implementation of *Blended Learning* in PAI subjects is inseparable from various obstacles that need to be anticipated. The research in the field identified several inhibiting factors, including unstable internet connectivity, students' difficulty understanding the material independently during the online phase, and limited time for parents' assistance at home. These operational challenges can hinder the development of critical thinking if not anticipated through careful planning and adequate infrastructure support. In addition to technical challenges, the pedagogical aspect is also an important concern (Firmansyah et al., 2024). Not all PAI teachers have adequate technological, pedagogical, and content knowledge (TPACK) to design an effective blended learning eSimilarly, developing PAI materials in an interactive digital format, rather than simply converting textbooks to PDFs, requires greater creativity and effort.and effort. Therefore, the approach to implementing this model should consider the real conditions in schools and among students and be accompanied by continuous training and mentoring for teachers (Setiawan, 2019).

This is then what happened at Madrasah Aliyah Miftahul Huda Kwandang North Gorontalo that, adequate madrasah or school facilities make the learning process can run well and efficiently, besides that in the face of technological advances teachers can increase their knowledge about technology so that they can

make learning media in the digital field even more interesting, because with this the application of the blended learning model in Islamic Religious Education subjects can be implemented well, and also students can access more information through online media such as using Yotube, articles and other e-book media.

Several previous studies have proven the effectiveness of Blended Learning in improving cognitive learning outcomes in various subjects, including PAI. However, the focus of these studies tends to be on knowledge acquisition and touches less on high-level thinking skills, such as critical thinking. Meanwhile, research specifically examining the relationship between Blended Learning and critical thinking skills in the context of PAI remains limited, offering opportunities for deeper exploration. This gap is the academic justification for this research. This study aims to fill this gap by investigating not only the *how* of implementing Blended Learning in PAI, but also the *extent* to which the model contributes to honing students' critical thinking skills. With a focus on the affective and cognitive domains at high levels, the findings of this study are expected to provide a more holistic perspective on the effectiveness of Blended Learning in religious education in the digital era, beyond simply measuring academic scores, especially at Madrasah Aliyah Miftahul Huda, Kwandang, North Gorontalo Regency.

Method

This study uses a mixed methods approach with *a sequential explanatory* design to obtain comprehensive data both quantitatively and qualitatively (Sofyan, 2024). A quantitative approach is used to measure the effectiveness of the blended learning model in improving students' critical thinking skills, while a qualitative approach is used to delve into the implementation process and the factors that influence it. The purpose of this study is to analyze the implementation of the blended learning model and measure its impact on students' critical thinking skills. The research subjects consisted of 25 grade XI students selected through purposive sampling who had participated in PAI learning using a blended learning model for at least one semester. Participants also include PAI teachers and deputy heads of curriculum madrasas who are directly involved in the planning and implementation of the learning model, enabling them to provide in-depth information from different perspectives.

The research procedure is divided into three main stages, which are carried out sequentially. The preparation stage includes initial observation, preparation of research instruments, and expert validation. The implementation stage consists of the *blended learning model across 8 meetings,* with a pattern of 4 face-to-face and 4

integrated online meetings. The evaluation stage includes simultaneous quantitative and qualitative data collection, followed by data analysis and interpretation. The research instruments used included a structured essay test to measure critical thinking skills, a Likert-scale questionnaire to measure student perceptions, semi-structured interview guidelines for teachers and students, and observation sheets to record the learning process. The data collection technique was carried out through several methods, namely critical thinking ability tests carried out at the beginning and end of the research, questionnaires at the end of the research, in-depth interviews with teachers and students as key informants, and participatory observation during the learning process, both in the classroom and in online discussion forums. Quantitative data were analyzed using descriptive statistics and a paired-samples t-test with SPSS 25.0, while qualitative data were analyzed using thematic analysis according to Braun & Clarke. The ethical aspects of the research are considered through informed consent procedures, ensuring the confidentiality of respondents' identities, and giving participants the right to resign at any time (Sulianta, 2020). This study uses several instruments that have been tested for validity and reliability. To measure critical thinking skills quantitatively, a structured essay test designed based on the Facione (1990) indicator was used. This instrument has undergone a content validity test using expert judgment (Aiken's V > 0.80) and has been shown to be reliable, with a Cronbach's alpha of 0.87. Student perception data were collected using a Likert-scale questionnaire, which also met the criteria for construct validity and reliability (α = 0.78-0.85). To explore the process and meaning qualitatively, semi-structured interview guidelines for teachers and students, as well as participatory observation sheets, are used. The data collection procedure is carried out sequentially and integratively: (1) providing a pre-test of critical thinking skills; (2) observation during eight meetings on the implementation of the blended learning model (integrated pattern of 4 online and 4 offline); (3) the provision of post-tests and questionnaires at the end of the intervention; and (4) conducting in-depth interviews with teachers, curriculum representatives, and student samples to explore experiences, challenges, and explanations of quantitative findings.

Results

Based on the results of the research, it can be concluded that the Implementation of the Blended Learning Model in Islamic Religious Learning Studies to Improve Students' Critical Thinking Skills in the Digital Era at the MA. Miftahul Huda Kwandang can be described as follows:

1. Implementation of the Blended Learning Model in PAI Learning

The implementation of the blended learning model in Islamic Religious Education learning involves a systematic integration of online and offline phases. The online phase is facilitated through Google Classroom and a WhatsApp group for distributing materials, facilitating asynchronous discussions, and assigning self-study. Analysis of digital interaction data from 8 meetings showed that the average student participation was 85%, with substantive contributions in the forum discussing contemporary issues from an Islamic perspective. Observations of interaction patterns reveal that students actively respond to classmates' posts and ask critical questions related to the application of Islamic values in the contemporary context. In the face-to-face phase, teachers act as facilitators, guiding in-depth analysis of issues arising from online discussions. Participatory observation reveals a shift in the teacher's role from instructor to moderator, encouraging students to construct knowledge independently. The technical constraints identified are mainly related to the instability of the internet connection, which affects 25% of students' ability to access online materials on time. However, the flexibility of the blended learning model allows adaptation through the provision of offline materials and adjustments to consultation schedules.

2. Improving Students' Critical Thinking Skills

This study quantitatively analyzed pre- and post-test results, demonstrating a significant increase in students' overall critical thinking skills. The average pre-test score of 65.3 increased to 82.1 in the post-test, with a p-value of 0.001 (< 0.05) in the paired-samples t-test. The most notable increase was in the indicator of analytical ability, which reached 45%, followed by evaluation ability at 38% and inference ability at 32%. This statistical data confirms the effectiveness of the blended learning model in developing students' critical thinking skills. Meanwhile, the qualitative findings from in-depth interviews and observations strengthen the quantitative results. Students show rapid progress in identifying biases in digital information sources, formulating evidence-based arguments, and considering alternative perspectives in discussions of religious issues. Analysis of learning products shows that 80% of students can produce analytical writing that integrates multiple perspectives in response to contemporary ethical dilemmas. Teachers reported improvements in the quality of critical questions and depth of analysis during face-to-face sessions. This can be seen in the following table:

Table 1

Improving Students' Critical Thinking Skills

Indicator	Pre-test	Post-test	Increased
Analysis	55%	80%	45%

Evaluation	58%	80%	38%
Inference	60%	79%	32%
Average	65,3%	82,1%	25,8%

Meanwhile, the study found that both inhibiting and supporting factors are involved in implementing it, namely, institutional commitment to providing adequate technological infrastructure and sustainable technical support. Teachers demonstrate strong dedication to developing digital content that is engaging and relevant to students' lives. Collaboration between students in digital platforms has been proven to enrich perspectives and deepen understanding of religious materials. Observations reveal that the variety of digital learning resources allows for a more contextual approach to PAI materials. Meanwhile, several significant obstacles were identified during implementation. The gap in technological ability among students is a major challenge, as 15% of students need extra assistance with digital platforms. Teachers' workload has increased significantly due to preparing digital materials and monitoring online interactions. Interviews with students revealed that 20% of participants had difficulty with time management in self-paced learning and with adapting to hybrid learning systems.

3. Students' Perceptions and Responses to Learning

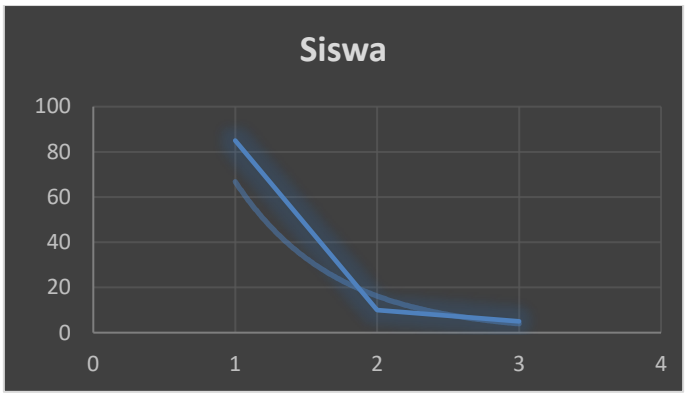
The results of the student perception questionnaire on the implementation of the blended learning model showed a positive response, with an average score of 4.2 out of 5. As many as 85% of students stated that this model makes PAI learning more relevant to their daily digital lives. Thematic analysis of interview transcripts revealed students' appreciation for the flexibility of study time and for access to varied, context-specific learning resources. However, about 30% of students expressed a need for clearer guidance in navigating digital materials and learning expectations. Students also reported increased motivation to learn and a sense of ownership of the learning process. The blended learning model is considered capable of bridging the gap between formal learning in schools and daily religious experiences in the digital era. Student recommendations for improvement include increasing synchronous interaction during the online phase and enriching multimedia content to support understanding of complex concepts.

Table 2

Student Participation and Perception

Aspects	**Percentage**
Online Participation	85%
Students Respond Positively	88%
Guide Needs	30%

Technical Constraints	25%
Adaptation Difficulties	20%



Graphic. 1 Student Perception

Based on the visualization of the data, it shows that: 1) There is a significant increase in all critical thinking indicators, 2) Most students respond positively to the implementation of blended learning, 3) The results of statistical tests confirm the significance of the improvement, and 4) Supporting factors are more dominant than inhibitors.

Based on the above, this study's findings indicate that the blended learning model is effective in creating a contextual PAI learning environment and encouraging critical thinking. The pedagogical implications that emerge emphasize the importance of developing technological pedagogical content knowledge for PAI teachers through continuous training programs. Educational institutions need to develop guidelines for implementing blended learning that are specific to the context of religious education, taking into account the subject's characteristics and students' needs. Development recommendations include integrating digital literacy into the PAI curriculum and providing adequate supporting infrastructure. For further research, it is recommended to explore the specific factors that influence the successful implementation of blended learning across diverse socio-cultural contexts. The development of more comprehensive assessment tools to measure the dimensions of critical thinking in the context of religious education is also an urgent need for the field's future development.

The results of this study demonstrate the effectiveness of the blended learning model in improving students' critical thinking skills in Islamic Religious Education. The significant improvements seen in all critical thinking indicators–analysis (45%), evaluation (38%), and inference (32%)–suggest that the integration of online and offline phases successfully creates an optimal learning ecosystem. The online phase

through digital platforms allows students to access a variety of perspectives and learning resources, while the face-to-face phase provides a space for teachers to facilitate in-depth discussions and practice analytical skills. The synergy between these two phases encourages the comprehensive development of students' critical thinking skills. The high student participation (85%) and the positive response to the blended learning model indicate its success in fostering greater learning engagement than conventional methods. The flexibility of material access and asynchronous interaction on digital platforms provides students with an opportunity to craft more structured arguments before discussing them in class. However, the findings regarding the difficulties of adaptation experienced by 20% of students and the need for guidance are clearer for 30% of students, reminding us that digital transformation in learning needs to be accompanied by adequate scaffolding, especially in the context of religious education, which has special characteristics. The successful implementation of the blended learning model in this study is inseparable from teachers' roles as facilitators who can design meaningful learning experiences. The teacher's dedication to preparing engaging digital materials and their capacity to guide critical discussions are the main determining factors. However, a significant increase in teacher workload needs to be a serious concern for educational institutions. Continuous technical support and professional development for teachers are important prerequisites for the long-term sustainability of blended learning.

The findings of this study are consistent with recent studies that state that blended learning is effective in creating learning that is contextual and relevant to the needs of the digital age. The technical constraints and technological capability gaps identified in this study underscore the importance of a holistic approach to implementing educational technology. In the future, the development of blended learning models should be accompanied by strengthening infrastructure, increasing teacher capacity, and improving learning designs that take into account the unique characteristics of religious education, so as to empower students to become critical thinkers able to face the complexities of the times.

Discussion

This phenomenon confirms that blended learning goes beyond mere digitization; rather, it creates a transformative learning ecosystem that integrates asynchronous flexibility with synchronous depth, as emphasized in the Conceptual Blended Learning (Dziuban et al., 2018). This improvement in analysis and evaluation capabilities aligns with findings, which highlight that structured

pedagogical interventions in religious education are crucial for triggering Higher Order Thinking Skills (HOTS) (Alotaibi, 2025). Dalimunthe (2024) adds that integrative strategies in Islamic Religious Education (PAI) are key to unlocking students' critical potential (Dalimunthe, 2024), while emphasizes that learning reform in the 4.0 era must be based on a mature blended concept (Setiawan, 2019). Furthermore, the students' success in achieving a post-test score of 82.1 proves the effectiveness of the "pause space" in online learning, which allows for deep reflection prior to face-to-face discussions, a cognitive mechanism supported by study on the relationship between literacy and critical thinking (Fitriah, 2017).

Participatory observation reveals a transformation in the teacher's role from a sole information transmitter to a facilitator guiding knowledge construction, a shift vital for creating a Community of Inquiry (CoI). This interaction pattern, in which students actively respond to and critique their peers' arguments in digital forums, validates thesis on the importance of collaborative management in enhancing students' competence (Widodo, 2025). Raya (2025) reinforces this by stating that student interactivity is the heart of creativity and deep understanding in modern Islamic education (Diplan et al., 2025). This approach is also relevant to the Flipped Blended Learning model described (Jalinus et al., 2020), where face-to-face time is maximized for dialectics rather than one-way lectures. Specifically found that such collaborative environments have a direct impact on the sharpness of critical thinking, with structured social interaction as the key to intellectual development (Warsah et al., 2021). In the context of Islamic Religious Education (PAI), students' collaboration on digital platforms has been proven to enrich their theological and ethical perspectives. When students actively respond to classmates' posts and formulate evidence-based arguments, they are practicing social constructivism. Teachers are no longer the sole source of truth but rather facilitators who guide students in navigating the diversity of views within the corridor of Islamic values, a crucial aspect of the modern educational curriculum.

Then, the ability to identify biases in digital information sources indicates the successful integration of digital literacy into the PAI curriculum. As explained about digital literacy in education is the foundation of learning transformation in this era (Pratama et al., 2025). Blended learning makes PAI learning more relevant to the daily lives of digital natives, bridging the gap between formal religious texts and the reality of their religious experiences in cyberspace. This proves that the technology-adaptive PAI curriculum produces students who are not only ritually pious but also critical in filtering the flow of global information.

Although effective, implementing this model faces structural obstacles, including the technological skills gap affecting 15% of students and constraints on

internet stability. These findings are consistent with analysis of the challenges of blended learning practices, which found that infrastructure readiness and technical literacy are the determinants of success (Kumar et al., 2021). In addition, the increased workload of teachers in monitoring online interactions highlights the need for stronger institutional support, as also noted in the study on the challenges of PAI in Indonesia (Firmansyah et al., 2024). The success of a blended curriculum depends not only on sound instructional design, but also on the institution's commitment to providing technical "scaffolding" and ongoing training for educators.

This study confirms that blended learning in PAI is an effective catalyst for accelerating students' critical thinking skills through the integration of flexible online and in-depth face-to-face phases. The key to its success lies in a paradigm shift from passive instruction to active collaboration, empowering students to evaluate, analyze, and infer religious information in complex digital contexts. Significant improvements across all critical thinking indicators (analysis, evaluation, inference) validate that this model meets the demands of 21st-century competencies without losing the essence of religious values.

However, the implication for the design of higher education and secondary education curricula is the need for a holistic approach that focuses not only on technology adoption alone, but also on the readiness of supporting ecosystems. The future curriculum must integrate the development of Technological Pedagogical Content Knowledge (TPACK) for teachers and ensure equitable access to infrastructure to minimize the digital divide. Without systemic support—from teacher training to adequate bandwidth provision—the transformative potential of blended learning will not be optimal and can instead create disparities in learning quality.

Conclusion

Based on the research results and discussions described, it can be concluded that implementing the blended learning model in Islamic Religious Education has proven effective in improving students' critical thinking skills. This is shown by a significant increase in all critical thinking indicators, especially analytical (45%), evaluation (38%), and inference (32%), as supported by statistical tests ($p = 0.001$). This model successfully creates a dynamic learning environment by optimally integrating flexible online learning with in-depth face-to-face learning. The success of the blended learning model is supported by several key factors, namely high student participation (85%), positive responses to learning, and teachers' roles as facilitators who can design meaningful learning experiences. However,

implementing this model still faces challenges, including technology skills gaps, the need for clearer guidance for some students, and increased teachers' workloads. These findings underscore the importance of a holistic approach that considers pedagogical, technological, and institutional support aspects in the implementation of blended learning for religious education in the digital age.

References

Alotaibi, S. K. G. (2025). The role of Islamic education teachers in enhancing higher-order thinking: a systematic review. *British Journal of Religious Education*, *47*(3), 400–409. https://doi.org/10.1080/01416200.2024.2436921

Arifin, N. M., Islam, U., Hasan, Z., Ainol, G., Herwati, G., & Corresponding, G. (2025). *Exploring the Influence of Artificial Intelligence (AI) on Islamic Thinking Among Students at Universitas Zainul Hasan Genggong Probolinggo*. *7*.

Dalimunthe, M. A. (2024). Integrative Learning Strategies for Enhancing Critical Thinking in Islamic Religious Education. *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies*, *5*(2), 101–111. https://doi.org/10.58764/j.im.2024.5.76

Diplan, D., Rini, R., & Ningsih, S. H. (2025). Enhancing Student Interactivity And Creativity Through PAIKEM On Learning Islamic Education In The Digital Age. *Andragogi : Jurnal Ilmiah Pendidikan Agama Islam*, *7*(1), 58–70. https://doi.org/10.33474/JA.V7I1.22866

Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, *15*(1), 3. https://doi.org/10.1186/s41239-017-0087-5

Fathullah, A., Caroline, C., & Diana, D. (2025). Menavigasi Tantangan dan Peluang Pendidikan Multisektoral di Era Digital: Kajian Literatur Terkini. *Jurnal Ilmiah Edukatif*, *11*(1), 122–132. https://doi.org/https://doi.org/10.37567/jie.v11i1.3627

Firmansyah, F., Ferianto, F., & Pehlić, I. (2024). Challenges to the Implementation of Blended Learning in Islamic Religious Education Learning in Indonesia. *AL-TARBIYAH: Jurnal Pendidikan (The Educational Journal)*, *34*(1), 51. https://doi.org/10.24235/ath.v34i1.18270

Fitriah, D. (2017). Hubungan kemampuan membaca buku teks dan keterampilan berpikir kritis dengan hasil belajar pendidikan agama islam. *Studia Didaktika: Jurnal Ilmiah Bidang Pendidikan*, *11*(01), 91–110.

Hidayatullah, M. F., Firdausi, M. A., & Hanief, M. (2021). Curriculum design for special conditions based on Islamic values: Study at senior high school al-hikmah

boarding school batu. *ULUL ALBAB Jurnal Studi Islam*, *22*(2), 313–337. https://doi.org/10.18860/UA.V22I2.14054

Jalinus, N., Verawardina, U., & Krismadinata, P. D. (2020). *Buku model flipped blended learning*. Penerbit CV. Sarnu Untung.

Jusman, J., & Parisu, C. Z. L. (2025). Dari Kelas Konvensional ke Pembelajaran Berbasis Digital. *Journal of Humanities, Social Sciences, and Education*, *1*(2), 103–111. https://doi.org/10.64690/jhuse.v1i2.39

Kharismawati, A., & Kaltsum, H. U. (2022). Implementasi Metode Pembelajaran Blended Learning dengan Bantuan Platform Liveworksheet Oleh Guru pada Siswa Sekolah Dasar. *Jurnal Basicedu*, *6*(3), 4531–4538. https://doi.org/10.31004/basicedu.v6i3.2870

Kumar, A., Krishnamurthi, R., Bhatia, S., Kaushik, K., Ahuja, N. J., Nayyar, A., & Masud, M. (2021). Blended Learning Tools and Practices: A Comprehensive Analysis. *IEEE Access*, *9*, 85151–85197. https://doi.org/10.1109/ACCESS.2021.3085844

Pratama, S., Ashari, M., Zulkarnain, S. A. B., & Sabrina, E. (2025). Pentingnya Literasi Digital dalam Dunia Pendidikan: Transformasi Pembelajaran di Era Digital. *Jurnal Kajian Ilmu Pendidikan (JKIP)*, *6*(2), 554–561. https://doi.org/https://doi.org/10.55583/jkip.v6i2.1388

Sari, D. W., Putri, M. S., & Nurlaili, N. (2023). Relevansi Pendidikan Islam Di Era Digital Dalam Menavigasi Tantangan Modern. *Science and Education Journal (SICEDU)*, *2*(2), 372–380. https://doi.org/10.31004/sicedu.v2i2.129

Setiawan, A. (2019). Conceptual of Blended Learning as Islamic Education Study Program Learning Reform Action in Digital Era 4.0. *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)*, *7*(2), 119–129. https://doi.org/10.21093/sy.v7i2.1827

Sofyan, A. (2024). Metode Penelitian Kombinasi. *Metode Penelitian Kombinasi (Mixed Method)*, *34*.

Soumokil, P. (2025). Model Pembelajaran Berbasis Blended. *Model Pembelajaran Inovatif*, 69.

Sulianta, F. (2020). *Literasi digital, riset dan perkembangannya dalam perspektif social studies*. Universitas Widyatama.

Suwadji, S., Hamid, I. R., & Rofik, A. (2024). Transformasi Kebijakan Pendidikan Agama Islam Dalam Menyongsong Indonesia Emas; Sebuah Refleksi Kurikulum Merdeka. *RAHMATAN LIL ALAMIN: Journal of Peace Education and Islamic Studies*, *7*(2), 55–65.

Syukrin, S., & Salahudin, S. (2024). Integration of Religious Values in Character Education in the Digital Era. *Council: Education Journal of Social Studies*, *3*(1), 13–19. https://doi.org/10.59923/council.v3i1.284

Warsah, I., Morganna, R., Uyun, M., Hamengkubuwono, H., & Afandi, M. (2021). The Impact of Collaborative Learning on Learners' Critical Thinking Skills. *International Journal of Instruction*, *14*(2), 443–460. https://doi.org/10.29333/iji.2021.14225a

Widodo, W. (2025). Collaborative Management Of Islamic Education and Technology For Improving The Competence Of Students In The Digital Era. *Darul Ilmi: Jurnal Ilmu Kependidikan Dan Keislaman*, *12*(2), 229–243. https://doi.org/10.24952/di.v12i2.14927