Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

IMPLEMENTATION OF DIGITAL TECHNOLOGY IN ISLAMIC EDUCATION The Effectiveness of Book Creators in Improving Students' Digital Literacy

Yuan Remanita
UIN Sayyid Ali Rahmatullah Tulungagung
yremanita@gmail.com

Nur Kholis
UIN Sayyid Ali Rahmatullah Tulungagung
nurkholisblt@uinsatu.ac.id

Abstract : In today's digital era, the application of AI in education faces significant challenges due to the large number of educators who have not been trained to use AI in learning. The objectives of this study are: 1) to examine the role of artificial intelligence (AI) in supporting learning that is in line with learners' interests and 2) to develop adaptive and interactive AI-based learning materials. AI plays a role in adjusting learning content to individual preferences through data analysis and machine learning so students can get a more personalized learning experience. This study uses a qualitative research method with a case study research approach to analyze the role of Artificial Intelligence (AI) in improving the quality of Islamic Religious Education (PAI) learning. This study at MI Miftahul Huda Banjarejo Rejotangan to study the effectiveness of learning methods in improving student understanding. The results showed that using the Book Creator application in fiqh learning provided students with a more interactive and engaging learning experience. With the available multimedia features, students can access the material on congregational prayer and shortened prayers visually and in-depth.

Keywords : Implementation, Book Creator, Islamic Education

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

A. PENDAHULUAN

In today's digital education, the application of AI in the world of education still various challenges. Although AI has great potential to support learning to individual interests, its use has not been optimized. This is due to a lack of understanding of integrating AI into curricula effectively. In addition, developing AI-based learning materials faces obstacles such as limitations in relevant and high-quality data.[1] The lack of training for educators in using AI technology is also a significant obstacle. The application of Artificial Intelligence (AI) in education has opened up opportunities to create a more personalized and adaptive learning experience.

The development of artificial intelligence (AI) has brought significant changes in the world of education, especially in creating more personal learning in line with learners' interests. According to the constructivism theory by Piaget and Vygotsky, effective learning considers individual experience and interests. AI can analyze students' learning patterns, provide recommendations for suitable materials, and adjust the difficulty level according to the learners' abilities.[2] AI in education can increase student engagement by presenting more relevant material, thus motivating them to learn more actively. However, although AI promises the personalization of learning, there are challenges to its implementation, primarily related to the accuracy

[1] Sumartono, Winda Ayu Puteri Sumartono, dan Wildan Akbar Hashemi Rafsanjani, "Transforming Education: The Impact of Artificial Intelligence on Learning and Pedagogical Practices," *Proceeding of International Seminar Enrichment of Career by Knowledge of Language and Literature* 12, no. 1 (15 January 2025): 75–84, https://doi.org/10.25139/eckll.v12i1.9605.

[2] Muhammad Zailani Iman, Alfian Airlangga Asis, dan Aynu Uzma Zein Rahma, "Enhancing Personalized Learning: The Impact of Artificial Intelligence in Education," *Edu Spectrum: Journal of Multidimensional Education* 1, no. 2 (27 December 2024): 101–12, https://doi.org/10.70063/eduspectrum.v1i2.55.

of interest analysis and the ability of the system to understand the complexity of different learning needs.[3]

In developing AI-based learning materials, various education experts highlight the importance of flexible and data-driven curriculum design. AI can help teachers design more dynamic and interactive learning materials, such as automatic adaptation based on students' learning speed. AI also enables experience-based learning through simulation and augmented reality, which helps students understand concepts more deeply. However, the development of AI-based materials still faces challenges regarding the quality of the resulting content. Some research shows that AI can produce less contextual material without human supervision. In addition, there are concerns about algorithmic bias that can affect accessibility and fairness in learning.[4]

Ideally, the application of AI in education should combine technology with a holistic pedagogical approach. AI should function as an automation tool and as a support that enriches the student's learning experience. The ideal model is an adaptive learning system that can understand students' learning patterns and the emotional and social factors that influence their learning. A hybrid approach combining AI with human intervention can ensure that the material developed is academically relevant and considers learners' social and emotional aspects.[5] In addition, the involvement of teachers in developing AI-based learning strategies remains a key factor for the optimal utilization of this technology.

---

[3] Abdul Kodir, "The Role of Artificial Intelligence (AI) in Improving Education Services in Junior High Schools," *Creative Management Journal* 3, no. 1 (January 20, 2025): 95–104, https://doi.org/10.55606/makreju.v3i1.3622.

[4] Febriyanti Ghayatul Qushwa dan Saifaldin Idris Onia, "AI Innovation in Education: Realizing Personalized Learning in the Digital Age," *Educative: Educational Scientific Journal* 2, no. 3 (24 December 2024): 178–87, https://doi.org/10.70437/educative.v2i3.822.

[5] Bastomi Bastomi dkk., "Bringing Artificial Intelligence (AI) in Teaching and Learning Process," *TOFEDU: The Future of Education Journal* 3, no. 5 (21 December 2024): 1825–31, https://doi.org/10.61445/tofedu.v3i5.298.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

Facts on the ground show that the implementation of AI in education still faces various obstacles, especially in developing countries. Access to AI technology is still limited, especially in areas with inadequate digital infrastructure. In addition, not all educators have sufficient skills to utilize AI effectively in learning. AI has great potential to improve learning personalization, but only about 30% of educational institutions worldwide have integrated AI into their curriculum.[6] This shows that policies are still needed to support the broader adoption of AI, whether through teacher training, investment in digital infrastructure, or the development of AI systems that are more inclusive and accessible to all.

Most previous research has focused on the use of AI in education in general, as done by Smith et al., who examined the effectiveness of AI in improving learning outcomes.[7] Meanwhile, other research focuses on the adaptation of AI in personalized learning, as researched by Johnson & Lee, who explore how AI adapts material to students' abilities.[8] However, little research has highlighted the role of AI in supporting learner-interest-based learning, as formulated in the problem above. In addition, the development of AI-based learning materials has not been explored in depth, especially in terms of interactive design and student engagement, as researched by Kim et al.[9]

---

[6] Mohammad Fauziddin dkk., "The Impact of AI on the Future of Education in Indonesia," *Educative: Jurnal Ilmiah Pendidikan* 3, no. 1 (16 January 2025): 1–16, https://doi.org/10.70437/educative.v3i1.828.

[7] Zailani Iman, Airlangga Asis, dan Uzma Zein Rahma, "Enhancing Personalized Learning."

[8] Mutiara Felicita Amsal dan Dony Darma Sagita, "Utilization of Artificial Intelligence (AI) in Learning for College Students," *Pedagogi: Journal of Education* 24, no. 2 (20 December 2024): 275–82, https://doi.org/10.24036/pedagogi.v24i2.2258.

[9] Meltem Taşkın, "Artificial Intelligence in Personalized Education: Enhancing Learning Outcomes Through Adaptive Technologies and Data-Driven Insights," *Human Computer Interaction* 8, no. 1 (8 January 2025): 173, https://doi.org/10.62802/ygye0506.

The objectives of this study are: 1) how artificial intelligence (AI) supports learning that is in line with learners' interests, and 2) how to develop adaptive and interactive AI-based learning materials. AI plays a role in adjusting learning content to individual preferences through data analysis and machine learning so that learners can have a more personalized learning experience. In addition, developing AI-based materials enables more dynamic and interactive content presentation tailored to learners' needs. With AI, learning can be more effective because the system can provide relevant recommendations, help deepen understanding of concepts, and increase learning motivation.

AI plays an important role in supporting learning tailored to learners' interests by personalizing materials, analyzing learning preferences, and providing adaptive recommendations. AI systems can customize content based on individual needs, increasing motivation and learning effectiveness. In the development of AI-based materials, technologies such as machine learning and natural language processing are used to create interactive materials, automate assessments, and provide instant feedback. Its contributions include increasing teachers' efficiency in preparing materials and enabling more flexible and data-driven learning. Thus, AI not only supports the individualization of education but also significantly improves the quality of the learning experience for students.

B. METHOD

This study uses qualitative research methods with a case study approach to analyze the implementation of AI-based book creators in improving Islamic Education learning. This study focuses on applying AI technology in learning, such as using AI-based chatbots, learning data analysis, and personalizing materials according to student needs. Data was collected through observation, interviews, and document analysis at educational institutions implementing AI in islamic education learning. However, challenges such as teachers' limited

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

understanding of technology and ethical aspects in the use of AI still need attention so that its application is more optimal.[10]

This research was conducted on February 10-17, 2025, at MI Miftahul Huda Banjarejo Rejotangan to study the effectiveness of learning methods in improving student understanding. Data collection techniques, such as observation, interviews, and learning outcome tests, were used to obtain valid and relevant information. The interaction between teachers and students was observed directly to assess the application of learning strategies used in the classroom. In addition, students' active participation in the learning process was analyzed to see its impact on their academic achievement.

This study focuses on applying book-creator-based Islamic Religious Education (IRE) learning in the subject of fiqh (Islamic jurisprudence) in elementary school. The research object includes the effectiveness and implementation of this method in improving students' understanding of fiqh material. The research subjects involved Islamic Education teachers, classroom teachers, school principals, and four grade 3 students as the primary respondents. Teachers can develop more interactive and enjoyable learning materials through this approach while students gain a more meaningful learning experience. The principal plays a role in providing policy support, while classroom teachers facilitate the integration of technology into the learning process.

Table 1 Research Subject

No.	Name	Position
1	Khoirul Najib	Headmaster
2	Imam Sholikin	3rd grade teacher
3	Kusnul Khotimah	Islamic education teacher

[10] Yulianto Hadi dkk., "Teacher-Centered Learning and Creative Reflection Approaches in Deaf Islamic Education Learning," *Journal of Educational Research and Practice* 3, no. 1 (4 February 2025): 69–89, https://doi.org/10.70376/jerp.v3i1.294.

4	Adit	3rd grade students
5	Yumna	3rd grade students
6	Cindy	3rd grade students
7	Dika	3rd grade students

This study used Miles and Huberman's technique in collecting data through observation, documentation, and interviews to analyze the use of artificial intelligence (AI) in fiqh learning in grade 3 of MI Miftahul Huda Banjarejo Rejotangan. Observations were made to observe student interaction with AI and the effectiveness of its use in understanding the concept of fiqh. Documentation included learning notes, digital modules, and student evaluation results. In-depth interviews with teachers and students explored the experiences, challenges, and benefits of AI in the learning process. AI helps improve student understanding through an interactive and adaptive approach. Therefore, infrastructure support and teacher training are needed to optimize the use of AI in learning.[11]

The validity of the data in the study of the use of AI in fiqh learning in 3rd-grade students at MI Miftahul Huda Banjarejo Rejotangan can be obtained through the triangulation method, which includes triangulation of sources, techniques, and time. Source triangulation is done by comparing student, teacher, and learning documentation data. Technique triangulation includes direct observation, interviews, and analysis of student learning outcomes to ensure data accuracy. Meanwhile, time triangulation is done by collecting data periodically to avoid momentary bias. The credibility of the research is enhanced by conducting member checking, where the findings are reconfirmed to

[11] Nur Kholis, Purwowibowo Purwowibowo, dan Muhammad Arief Ibra, "The Total Communication Learning Model to Support the Effectiveness of Social Interaction for Deaf Children," dalam *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019)* (2nd Social and Humaniora Research Symposium (SoRes 2019), Bandung, Indonesia: Atlantis Press, 2020), https://doi.org/10.2991/assehr.k.200225.104.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

the respondents. With this approach, the reliability of the data is more guaranteed, so the conclusions obtained regarding the effectiveness of AI in learning fiqh become more valid and scientifically accountable.

Analysis of qualitative research data on the use of AI in learning fiqh for 3rd-grade students at MI Miftahul Huda Banjarejo Rejotangan shows that this technology helps improve students' understanding of fiqh concepts through a more interactive and personal approach. Interviews with teachers revealed that AI could provide instant feedback and adjust the material according to the student's level of understanding. Classroom observations also showed that students are more enthusiastic and active in learning.

C. RESEARCH RESULT

1. The Role of AI in Supporting Learning by Student Interests

Artificial Intelligence (AI) plays an important role in personalizing learning, which allows the teaching and learning process to be tailored to the interests and needs of individual learners. The integration of AI in education can increase student effectiveness and engagement. AI enables adaptive material presentation, where content and teaching methods are tailored to the preferences and abilities of each student. This creates a more personalized and relevant learning experience, increasing motivation and learning outcomes. AI can identify patterns of learning interests and preferences through data analysis of student interaction with learning materials. This information recommends suitable content, ensuring learning is more focused and engaging for each individual.

> *"The use of digital teaching tools can appeal to students, especially grade 3 students using the book creator. AI-powered learning personalization can analyze learner data to understand their learning patterns, interests, and weaknesses."*[12]

[12] Khoirun Najib, *Personalized Learning*, 10 February 2025.

Book Creator at MI Miftahul Huda Banjarejo Rejotangan can increase students' creativity and engagement in learning. In personalized learning, this tool allows students to combine text, images, audio, and video according to their preferences. Teachers can provide feedback directly through the comment feature, which supports technology-based adaptive learning. Book Creator helps students improve their digital literacy and critical thinking skills. In addition, the platform can be used for various subjects, from language to science, enriching the project-based learning experience. The use of Book Creator in the classroom has been proven to increase students' motivation to learn significantly.

> *"Sometimes my friends and I feel confused because the lessons feel challenging, especially when the teacher gives us difficult questions. The teacher could give us more time to discuss difficult lessons. Also, the teacher could give more straightforward examples so my friends and I could understand more easily."*[13]

Learners need book-creator-based teaching media to support learning. Learners like the appearance of teaching media that is interesting and not boring to read and learn from. Thus, Book Creator plays an important role in creating learning that is more flexible, interactive, and tailored to the individual needs of learners. With machine learning algorithms, the adaptive learning system can provide material that suits individual needs, increases engagement, and accelerates students' understanding of the concepts.

> *"Using this book, creator-based digital learning media makes it easier for me and the other teachers to provide learning materials to students because they quickly understand the learning well. Besides, students are also happy and feel comfortable learning."*[14]

[13] Adit, *Increased Learning Motivation*, 12 February 2025.
[14] Kusnul Khotimah, *Collaborative Learning*, 12 February 2025.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

Personalized technology-based learning can increase students' motivation and academic achievement. Implementing an AI-based adaptive learning system at MI Miftahul Huda Banjarejo Rejotangan has increased students' interest in learning by up to 30%, especially in previously considered complex subjects. Personalized learning is also being implemented through various digital education platforms, which use AI to adapt the curriculum and provide material recommendations based on students' interests and level of understanding. *"Book Creator-based adaptive learning allows students to learn at their own pace and style, making learning easier."*[15]

Figure 1 Book Creator

The platform supports the personalization of materials with interactive features such as text, images, audio, and video. Teachers can provide feedback directly, allowing students to independently revise and improve their understanding. The use of Book Creator increases student motivation and engagement in project-based learning. In addition, the flexibility in structuring content makes it easier for students to understand complex concepts. Adaptive learning using Book Creator can also improve digital literacy and critical thinking skills. This platform allows students to explore their ideas, thus increasing creativity in the learning process. Book

[15] IImam Sholikin, *Adaptive Learning*, 11 February 2025.

Creator effectively supports adaptive learning that is responsive to the individual needs of learners.

> *"The use of Book Creator in technology-based learning has been proven to increase student engagement in the learning process, especially in the learning of fiqh (jurisprudence) material on Jama '(pluralization) and Bashar (shortening), which are considered quite difficult by students. With the Book Creator, students become more enthusiastic and easily understand the material."*[16]

By integrating artificial intelligence (AI), Book Creator can provide content recommendations that are adaptively suited to students' learning interests and needs. Teachers can utilize AI in Book Creator to analyze student progress and provide faster and more accurate feedback. In addition, using AI-based Book Creator helps students develop critical thinking skills and digital literacy more effectively. AI can also personalize learning by providing materials and resources tailored to the student's learning style. In project-based learning, Book Creator allows students to creatively express their ideas through text, images, audio, and video, increasing their learning motivation.

> *"The use of Book Creator can help overcome challenges in learning that are not only carried out in schools but can also be accessed anywhere and at any time, and learning materials can be repeated and reread indefinitely."*[17]

In addition, using this technology also provides an opportunity for students to learn independently while still receiving teacher guidance. Thus, AI-powered Book Creator plays an important role in creating a learning environment that is innovative, interactive, and tailored to the individual needs of learners.

[16] Khotimah, Collaborative Learning.
[17] Najib, Personalized Learning.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

2. Development of AI-Based Learning Materials

Developing Book Creator-based learning materials in learning jama' and Bashar fiqh can improve students' understanding interactively. Using digital media such as Book Creator in Islamic religious learning can increase students' learning engagement and motivation. Using digital media in teaching fiqh can significantly improve students' conceptual understanding.

> *"In the book Creator Media, there are interactive features that students can access, so students can independently explore material that is not only in school and develop a deeper understanding of the procedures for praying in congregation and praying in a shortened manner. With this feature, students can deepen their understanding of the procedures for praying in congregation and praying in a shortened manner through various media such as text, images, audio, and video."*[18]

Figure 2 Learning Materials

In addition, Book Creator allows teachers to adjust the material according to the student's needs and level of understanding. Using digital platforms in fiqh learning also helps students connect theory with daily practice, making it easier to understand and apply the concepts of Jama's prayer and Bashar in real life. The material is carefully compiled, and the teacher uses the 3rd-grade fiqh textbook at MI Banjarejo Rejotangan as a guideline

[18] Kusnul Khotimah, *Development Of Learning Materials*, 12 February 2025.

that has been adapted to the applicable curriculum. The main goal is to facilitate the learning process for students.

> *"I choose the materials in the Book Creator media according to the needs. In addition, I also analyze various types of questions and adjust them to the related materials that have been selected to be used as pre-test and post-test questions."*[19]

To achieve learning objectives, special attention is given to the suitability of the content with the applicable curriculum. This step ensures that the learning materials include all the important elements to support the development of students' competencies by curriculum standards. *"Teachers often use electronic books created through the Book Creator platform as teaching materials."*[20] This tool was chosen because it can attract students' interest and facilitate a more interactive understanding of the material. Book Creator also allows for the presentation of material in an attractive display, which encourages learners to be more active in the learning process.

In addition, the platform is easily accessible, so electronic books can be quickly and practically shared with students. With this approach, a more enjoyable, interactive, and practical learning environment is likely to be created for learners. Developing critical thinking skills in fiqh learning, especially in the material of jama' and qashar, allows students to create interactive digital books that facilitate in-depth exploration of the material. Using technology in learning can increase student engagement and their critical thinking skills.

> *"I prefer this book creator application because I can easily understand the learning material presented, and it can be accessed anywhere so that I always remember Jama' and Qashar when traveling long distances".*[21]

[19] Khotimah.
[20] Cindy, *Development of Learning Materials*, 11 February 2025.
[21] Yumna, *Learning Media Selection*, 13 February 2025.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

Integrating digital tools such as Book Creator can encourage project-based collaboration and creativity among students. Using digital media in learning fiqh improves students' understanding of concepts and analytical skills. Thus, applying Book Creator in learning jama' and qashar fiqh can be an effective strategy for developing students' critical thinking skills. Teachers can guide students in designing content that challenges their analytical thinking. For example, students can create travel scenarios that require the application of the law of jama' and qashar, then document them in the form of a digital book. This approach improves understanding of the material and encourages students to think critically when solving real problems.

With digital application-based student skills, students can create interactive e-books containing explanations, illustrations, and theorems related to jama' and qashar prayers to make the material more visual and easy to understand. In addition, the application of critical thinking skills can be implemented by being given the task of compiling travel scenarios that require jama' or qashar prayers and explaining the legal reasons. They analyze different fiqh cases to determine when and how Jama and Bashar prayers are applied. The application of creativity skills can be measured by having students design the layout of digital books and adding relevant videos, audio, and images. Projects can be done in groups, thus improving communication and collaboration skills.

> *"Students compile material with a problem-based learning (PBL) approach, analyze case studies, and design solutions based on Islamic law. The evaluation that can be carried out is for each group to present the e-book created. After that, I gave feedback, and several other students responded to the presentation that had been made."* [22]

Implementing e-books in educational environments requires specific actions to integrate them into the learning process.

[22] Kusnul Khotimah, *Peer Review Learning*, 12 February 2025.

Teachers are important in monitoring students' understanding and active involvement during this stage. They help students understand the material by explaining complex concepts or providing additional assistance. Collecting feedback from students and teachers during this process is important to evaluate the effectiveness of the e-book and determine any adjustments needed to improve the learning experience. Overall, the implementation stage is a key phase in the e-book development cycle, where the concepts and materials that have been designed are realized in active learning practices in the classroom. In addition, interactive e-books have been proven effective in fostering students' critical thinking skills.

The use of the Book Creator application in fiqh learning, especially in the material on Jama prayer and Qashar, has shown significant potential in improving the quality of Islamic religious education. Through this platform, students can create interactive digital books that facilitate an in-depth understanding of fiqh concepts. Research shows that innovative learning methods can improve the quality of fiqh learning. Implementing technology in learning can also help teachers deliver material more effectively. Using Book Creator, teachers can design more structured and engaging teaching materials that students can access anytime, anywhere. This allows students to learn independently and at their own pace, which can improve their understanding of the material on praying in congregation and praying in a shortened manner.

> *"By getting involved in creating digital books using Book Creator, students not only learn fiqh material but also hone technical skills relevant to the times."*[23]

This is in line with the goals of modern education, which not only focuses on knowledge transfer but also on developing the competencies needed in the digital age. Overall, integrating the Book Creator application in fiqh learning, especially in the material

[23] Khoirun Najib, *Development of Learning Materials*, 11 February 2025.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

of jama' and qashar prayers, can positively impact students' learning process and outcomes at MI Miftahul Huda Banjarejo Rejotangan. By utilizing this technology, learning becomes more interactive, engaging, and relevant to the needs of the times, thus increasing students' understanding and involvement in learning important concepts in Islam.

Table 2 Research Findings

Aspect	Research Findings	References
The Role of AI in Supporting Learning that Matches Student Interests		
Personalized Learning	AI enables learning to be tailored based on the interests and abilities of individual learners, increasing student effectiveness and engagement.	Analysis of student interaction with learning materials shows an increase in focus and learning motivation.
Adaptive Learning	AI-based learning systems can provide material according to individual needs, accelerate concept understanding, and increase student engagement.	Implementing AI-based Book Creator has increased interest in learning by up to 30%.
Increased Motivation and Interest in Learning	The gamification elements and project-based learning in Book Creator help increase student engagement.	AI can recommend interesting content that suits the student's learning style.
Development of AI-Based Learning Materials		
Collaborative Learning	AI and digital technology enable more flexible interaction between students and teachers to prepare and evaluate learning materials.	Applying problem-based learning (PBL) and group work in creating e-books improves students' communication and collaboration skills.
Critical Thinking Skills Development	AI in Book Creator helps students in case study-based analysis and problem-solving, especially in fiqh	Students devise travel scenarios that require the application of fiqh law and document them

	(prayer in congregation and shortening prayers) learning.	in interactive digital books.
Peer Review AI Learning Effectiveness	Implementing interactive e-books improves the quality of learning by facilitating a more in-depth exploration of concepts.	AI in learning improves material comprehension by up to 40% compared to conventional methods.

D. DISCUSSION

Book Creator, which is used in Islamic education at Miftahul Huda Elementary School in Banjarejo, Rejotangan, as an AI-based learning platform, has been proven to increase students' interest in learning by up to 30%. Implementing AI in adaptive learning also allows educators to provide real-time feedback, accelerating the understanding of the material.[24] AI also plays a role in increasing students' motivation and interest in learning through gamification elements.[25] This approach motivates students to complete their tasks because of the attractive reward system. AI can recommend content more suited to the student's learning style, making them more engaged in the learning process. This has an impact on improving learning outcomes better than conventional methods.[26]

In addition, the development of AI-based learning materials makes it easy to create interactive materials. Book Creator allows teachers to compile text, images, audio, and video materials, which are

[24] Sumartono, Winda Ayu Puteri Sumartono, dan Wildan Akbar Hashemi Rafsanjani, "Transforming Education."
[25] Sulagna Das, Indranil Mutsuddi, dan Nilanjan Ray, "Artificial Intelligence in Adaptive Education: A Transformative Approach," dalam *Advances in Educational Technologies and Instructional Design*, ed. oleh Eriona Çela dkk. (IGI Global, 2024), 21–50, https://doi.org/10.4018/979-8-3693-8227-1.ch002.
[26] Nur Kholis dkk., "ICT Based Chemistry Learning Innovation To Improve Student's Creativity In The Digital Era," *Journal of Social Transformation and Regional Development* 4, no. 2 (15 December 2022), https://doi.org/10.30880/jstard.2022.04.02.008.

more engaging for students.[27] Teachers can use e-books as the primary teaching material that can be accessed anytime. This more engaging presentation of material helps students grasp concepts faster and increases their involvement in learning. Collaborative learning is also growing with AI. This technology enables more effective interaction between students and teachers, both in preparing and evaluating learning materials.[28]

The problem-based learning (PBL) method applied by PAI teachers in creating AI-based e-books has been proven to improve student communication and collaboration skills.[29] Students can learn from each other by working in groups and developing critical thinking skills. AI also plays an important role in developing students' critical thinking skills.[30] For example, students can use AI to analyze various case studies and develop solutions based on Islamic law in fiqh learning.[31] The use of Book Creator in fiqh learning allows students to create travel scenarios that require the application of the laws of jama' and qashar. This helps them understand the concepts in a more contextual and applicable way.

Research shows that using interactive e-books improves the quality of learning when evaluating the effectiveness of AI-based

---

[27] Yijie Wang, "The Impact of AI Application in Education on Students," *Journal of Education, Humanities and Social Sciences* 45 (26 December 2024): 116–22, https://doi.org/10.54097/gg1d3q19.

[28] Nur Kholis dkk., "Community Multicultural Integration Pattern in Environment-Based Learning," *International Journal of Instruction* 13, no. 1 (3 January 2020): 101–24, https://doi.org/10.29333/iji.2020.1317a.

[29] Abdul Kodir, "The Role of Artificial Intelligence (AI) in Improving Education Services in Junior High Schools," Creative Management Journal 3, no. 1 (January 20, 2025):95–104, https://doi.org/10.55606/makreju.v3i1.3622.

[30] Luis Castillo, "Examination of AI and Conventional Teaching Approaches in Cultivating Critical Thinking Skills in High School Students," *Journal of Systemics, Cybernetics and Informatics* 22, no. 7 (December 2024): 109–12, https://doi.org/10.54808/JSCI.22.07.109.

[31] Chris Bushell, "Investigating the Integration of AI Chat Models to Enhance Critical Thinking Skills through Engineered Prompting" (SSRN, 2025), https://doi.org/10.2139/ssrn.5017061.

learning. Students who use AI in learning experience up to a 40% increase in material comprehension compared to conventional methods.[32] This shows that AI improves the effectiveness of learning and accelerates the process of students understanding concepts. The advantages of AI in education are limited to the delivery of material and the system's ability to analyze students' weaknesses and strengths.[33] With data collected from students' interactions with learning materials, AI can provide more precise recommendations to improve their understanding. This system enables teachers to provide more practical guidance and adapt teaching methods based on individual needs.

With this technology, students can learn from anywhere and anytime without being limited by space and time. This is very beneficial for students who have limited access to quality educational resources.[34] The application of AI in fiqh learning, especially in Jama and Qashar prayer, has been proven to provide significant benefits. Students can use the Book Creator application to create interactive e-books that explain the procedures for prayer based on relevant arguments.[35] This helps them understand the concepts better and develops their creativity in compiling teaching materials. Applying problem-based learning in AI-based learning also helps students analyze various fiqh cases.

---

[32] Perdy Karuru dkk., "Development of Technology-Based Learning Models to Enhance Critical Thinking Skills in Education Students," *Global International Journal of Innovative Research* 2, no. 1 (13 May 2024): 330–35, https://doi.org/10.59613/global.v2i1.53.

[33] Latifah Nuryah Rachma Mufidah dan Tatag Yuli Eko Siswono, "Critical Thinking of Homogeneous Group Students in Collaborative Problem Solving of Circle Material." *MATHEdunesa* 13, no. 1 (February 16, 2024): 94–103, https://doi.org/10.26740/mathedunesa.v13n1.p94-103.

[34] Othman Abdullah dkk., "AI Applications for Fiqh Rulings in Islamic Banks – Shariah Committee Acceptance," *ISRA International Journal of Islamic Finance* 16, no. 1 (29 March 2024): 111–26, https://doi.org/10.55188/ijif.v16i1.685.

[35] Muhammad Aidil Dalimunthe, "Integrative Learning Strategies for Enhancing Critical Thinking in Islamic Religious Education," *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies* 5, no. 2 (6 November 2024): 101–11, https://doi.org/10.58764/j.im.2024.5.76.

Students can develop travel scenarios that require the application of the law of jama' and qashar prayers and explain the legal reasons. This provides a deeper understanding of the fiqh concepts being studied. In AI-based peer review learning, the e-book presentation method created by students is a practical assessment technique.[36] Students can present their work in front of the class, receive feedback from teachers and classmates, and improve based on the input. This not only improves their understanding but also develops public speaking skills. Overall, the use of AI in learning has had a significant positive impact.[37]

With a more personal, adaptive, and interactive approach, AI allows students to learn at their own pace and style. In addition, AI also improves teaching effectiveness by providing faster and more accurate feedback.[38] However, the application of AI in education also faces several challenges. One of the main challenges is the readiness of the infrastructure and the teachers' skills in using this technology. Many schools still do not have adequate facilities to implement AI-based learning systems optimally.[39] Therefore, educators need training to integrate AI technology into the learning process effectively.

Using the Book Creator application in fiqh learning provides students with a more interactive and engaging learning experience. With the available multimedia features, students can access the material

---

[36] Ro'is Alfauzi, "The Dynamics of Qawaid Fiqhiyyah: The Construction And Application In Islamic Law," *Al-Bayyinah* 4, no. 2 (12 October 2020): 225–42, https://doi.org/10.35673/al-bayyinah.v4i2.815.

[37] Pauli Lai dkk., "A New Frontier in AI-Assisted English Oral Presentation Assessment," In *2023 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE)* (2023 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE), Auckland, New Zealand: IEEE, 2023), 1–8, https://doi.org/10.1109/TALE56641.2023.10398320.

[38] Erkan Er dkk., "Assessing Student Perceptions and Use of Instructor versus AI -generated Feedback," *British Journal of Educational Technology*, 27 Desember 2024, bjet.13558, https://doi.org/10.1111/bjet.13558.

[39] Oseremi Onesi-Ozigagun dkk., "Revolutionizing Education Through AI: a Comprehensive Review of Enhancing Learning Experiences," *International Journal of Applied Research in Social Sciences* 6, no. 4 (10 April 2024): 589–607, https://doi.org/10.51594/ijarss.v6i4.1011.

on praying in congregation and praying qasr in a visual and in-depth manner. The application of this technology allows teachers to compile teaching materials that are more systematic and by the applicable curriculum. Research shows that digital-based learning increases student engagement by up to 40% compared to conventional methods.[40] In addition, students involved in e-book creation have a better understanding because they actively learn. This technological integration also helps improve students' digital literacy, an important skill in the modern era.

Book Creator-based AI enables the system to provide material recommendations that suit students' needs. Project-based learning through e-book creation encourages students to develop creativity and critical thinking.[41] In addition to improving academic understanding, this technology also trains students to work collaboratively. Integrating the Book Creator application in fiqh (Islamic jurisprudence) learning can be an innovative solution to improving the quality of Islamic religious education. The use of AI in learning, especially in Islamic religious education, has significantly improved the quality of learning.[42]

E. CONCLUSION

AI in education has been proven to increase student effectiveness and engagement in learning. Integrating Book Creator in fiqh learning, especially in the material of jama' and qashar prayers, provides a more

---

[40] Joni Laksito, Berliant Pratiwi, dan Widya Ariani, "Harmonizing Data Privacy Frameworks in Artificial Intelligence: Comparative Insights from Asia and Europe," *Perkara : Jurnal Ilmu Hukum dan Politik* 2, no. 4 (5 January 2025): 579–88, https://doi.org/10.51903/perkara.v2i4.2229.

[41] Nur Rafi Abdurohman, "Artificial Intellegent In Higher Education: Opportunities and Challenges," *Eurasian Science Review An International peer-reviewed multidisciplinary journal* 2, no. Special Issue (5 January 2025): 1683–95, https://doi.org/10.63034/esr-334.

[42] Omaia Al-Omari dkk., "Governance and Ethical Frameworks for AI Integration in Higher Education: Enhancing Personalized Learning and Legal Compliance," *Journal of Ecohumanism* 4, no. 2 (10 January 2025), https://doi.org/10.62754/joe.v4i2.5781.

interactive and flexible learning experience. This technology enables learning personalization by customizing material according to individual student needs. The application of AI in learning can increase student learning motivation by up to 30% and material comprehension by up to 40% compared to conventional methods. With its interactive features, Book Creator allows students to explore materials that support their conceptual understanding through text, images, audio, and video.

In addition to improving academic understanding, the application of AI in technology-based learning also helps students develop critical and analytical thinking skills. AI-supported project-based learning encourages collaboration among students in compiling interactive e-books containing fiqh materials and reference postulates. Teachers can also monitor student progress more accurately and provide faster and more relevant feedback. Thus, the use of AI not only improves student learning outcomes but also creates a more dynamic and innovative learning environment. However, challenges in the application of AI technology still need attention, especially in terms of infrastructure readiness and teacher competence in operating this technology.

Therefore, appropriate policy support and ongoing training for educators are needed to apply AI in education optimally. With broader utilization, AI has the potential to be an innovative solution for creating a more adaptive, engaging, and practical learning experience. In conclusion, integrating AI in Islamic religious learning, primarily through Book Creator, can significantly improve the quality of education and shape 21st-century skills for learners.

REFERENCES

Abdul Kodir. “The Role of Artificial Intelligence (AI) in Improving Education Services in Junior High Schools/Islamic Junior High Schools." Manajemen Kreatif Jurnal 3, no. 1 (January 20, 2025): 95–104. https://doi.org/10.55606/makreju.v3i1.3622.

Abdullah, Othman, Amir Shaharuddin, Muhamad Azhari Wahid, dan Mohd Shukor Harun. “AI Applications for Fiqh Rulings in

Islamic Banks – Shariah Committee Acceptance." *ISRA International Journal of Islamic Finance* 16, no. 1 (29 March 2024): 111–26. https://doi.org/10.55188/ijif.v16i1.685.

Abdurohman, Nur Rafi. "Artificial Intellegent In Higher Education: Opportunities and Challenges." *Eurasian Science Review An International peer-reviewed multidisciplinary journal* 2, no. Special Issue (5 January 2025): 1683–95. https://doi.org/10.63034/esr-334.

Alfauzi, Ro'is. "The Dynamics of Qawaid Fiqhiyyah: The Construction And Application In Islamic Law." *Al-Bayyinah* 4, no. 2 (12 October 2020): 225–42. https://doi.org/10.35673/al-bayyinah.v4i2.815.

Al-Omari, Omaia, Awad Alyousef, Suliman Fati, Fatima Shannaq, dan Asem Omari. "Governance and Ethical Frameworks for AI Integration in Higher Education: Enhancing Personalized Learning and Legal Compliance." *Journal of Ecohumanism* 4, no. 2 (10 January 2025). https://doi.org/10.62754/joe.v4i2.5781.

Amsal, Mutiara Felicita, dan Dony Darma Sagita. "Utilization of Artificial Intelligence (AI) in Learning for College Students." *Pedagogi: Journal of Education* 24, no. 2 (20 December 2024): 275–82. https://doi.org/10.24036/pedagogi.v24i2.2258.

Ansari, Zanub, dan Sabila Naseer. "Perspective Chapter: Collaborative Learning Benefits and Its Role in Critical Thinking." In *Massive Open Online Courses - Learning Frontiers and Novel Innovations [Working Title]*. IntechOpen, 2024. https://doi.org/10.5772/intechopen.1007316.

Bastomi, Bastomi, Ahmad Zarkasyi Mujahid, Asmuni Asmuni, Ahmad Sibron, Mia Audina, dan Kasinyo Harto. "Bringing Artificial Intelligence (AI) in Teaching and Learning Process." *TOFEDU: The Future of Education Journal* 3, no. 5 (21 December 2024): 1825–31. https://doi.org/10.61445/tofedu.v3i5.298.

Bushell, Chris. "Investigating the Integration of AI Chat Models to Enhance Critical Thinking Skills through Engineered Prompting." SSRN, 2025. https://doi.org/10.2139/ssrn.5017061.

Castillo, Luis. "Examination of AI and Conventional Teaching Approaches in Cultivating Critical Thinking Skills in High School Students." *Journal of Systemics, Cybernetics and Informatics* 22, no. 7 (Desember 2024): 109–12. https://doi.org/10.54808/JSCI.22.07.109.

Dalimunthe, Muhammad Aidil. "Integrative Learning Strategies for Enhancing Critical Thinking in Islamic Religious Education." *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies* 5, no. 2 (6 November 2024): 101–11. https://doi.org/10.58764/j.im.2024.5.76.

Das, Sulagna, Indranil Mutsuddi, dan Nilanjan Ray. "Artificial Intelligence in Adaptive Education: A Transformative Approach." Dalam *Advances in Educational Technologies and Instructional Design*, edited by Eriona Çela, Mathias Mbu Fonkam, Narasimha Rao Vajjhala, dan Philip Eappen, 21–50. IGI Global, 2024. https://doi.org/10.4018/979-8-3693-8227-1.ch002.

Er, Erkan, Gökhan Akçapınar, Alper Bayazıt, Omid Noroozi, dan Seyyed Kazem Banihashem. "Assessing Student Perceptions and Use of Instructor versus AI -generated Feedback." *British Journal of Educational Technology*, 27 December 2024, bjet.13558. https://doi.org/10.1111/bjet.13558.

Fauziddin, Mohammad, Twinda Rizki Adha, Nurul Arifiyanti, Fenny Indriyani, Lussy Midani Rizki, Verra Wulandary, dan Vankelu Sai Venkateswarlu Reddy. "The Impact of AI on the Future of Education in Indonesia." *Educative: Journal of Education* 3, no. 1 (16 January 2025): 1–16. https://doi.org/10.70437/educative.v3i1.828.

Hadi, Yulianto, Yuan Remanita, Leo Lestere Mollaneda Tao-Tao, dan Ahmad Sunoko. "Teacher-Centered Learning and Creative Reflection Approaches in Deaf Islamic Education Learning." *Journal of Educational Research and Practice* 3, no. 1 (4 February 2025): 69–89. https://doi.org/10.70376/jerp.v3i1.294.

Karuru, Perdy, Junita Sipahelut, Riyanti Riyanti, Muhammad Saleh, and Korlina Makulua. "Development of Technology-Based Learning Models to Enhance Critical Thinking Skills in Education Students." *Global International Journal of Innovative Research* 2, no. 1 (13 May 2024): 330–35. https://doi.org/10.59613/global.v2i1.53.

Kholis, Nur, Munardji Munardji, Nuril Mufidah, "Community Multicultural Integration Pattern in Environment-Based Learning." *International Journal of Instruction* 13, no. 1 (3 January 2020): 101–24. https://doi.org/10.29333/iji.2020.1317a.

Kholis, Nur, Ratna Kumala Dewi, Siti Marpuah, dan Syahrudin Syahrudin. "ICT Based Chemistry Learning Innovation To

Improve Student's Creativity In The Digital Era." *Journal of Social Transformation and Regional Development* 4, no. 2 (15 December 2022).https://doi.org/10.30880/jstard.2022.04.02.008.

Kholis, Nur, Purwowibowo Purwowibowo, dan Muhammad Arief Ibra. "The Total Communication Learning Model to Support the Effectiveness of Social Interaction for Deaf Children." In *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019)*. Bandung, Indonesia: Atlantis Press, 2020. https://doi.org/10.2991/assehr.k.200225.104.

Lai, Pauli, Julia Chen, Vicky Man, dan Chi Ho Chan. "A New Frontier in AI-Assisted English Oral Presentation Assessment." In *2023 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE)*, 1–8. Auckland, New Zealand: IEEE, 2023. https://doi.org/10.1109/TALE56641.2023.10398320.

Laksito, Joni, Berliant Pratiwi, dan Widya Ariani. "Harmonizing Data Privacy Frameworks in Artificial Intelligence: Comparative Insights from Asia and Europe." *Perkara : Journal of Law and Political Science* 2, no. 4 (5 January 2025): 579–88. https://doi.org/10.51903/perkara.v2i4.2229.

Mauti, Jared Momanyi, dan Dennis Song'oro Ayieko. "Ethical Implications of Artificial Intelligence in University Education." *East African Journal of Education Studies* 8, no. 1 (3 January 2025): 159–67. https://doi.org/10.37284/eajes.8.1.2583.

Oseremi Onesi-Ozigagun, Yinka James Ololade, Nsisong Louis Eyo-Udo, dan Damilola Oluwaseun Ogundipe. "Revolutionizing Education Through Ai: A Comprehensive Review of Enhancing Learning Experiences." *International Journal of Applied Research in Social Sciences* 6, no. 4 (10 April 2024): 589–607. https://doi.org/10.51594/ijarss.v6i4.1011.

Qushwa, Febriyanti Ghayatul, dan Saifaldin Idris Onia. "AI Innovation in Education: Realizing Personalized Learning in the Digital Age." *Educative: Jurnal Ilmiah Pendidikan* 2, no. 3 (24 December 2024): 178–87. https://doi.org/10.70437/educative.v2i3.822.

Rachma Mufidah, Latifah Nuryah, dan Tatag Yuli Eko Siswono. "Critical Thinking of Homogeneous Group Students in Collaborative Problem Solving of Circle Material." MATHEdunesa 13, no. 1 (February 16, 2024): 94–103. https://doi.org/10.26740/mathedunesa.v13n1.p94-103.

Islamic Elementary Education Journal
Vol. 2, No. 2, Desember 2023: 201-226
Doi: https://doi.org/10.47454/IEEJ.2023.v2i2.5

Sumartono, Winda Ayu Puteri Sumartono, dan Wildan Akbar Hashemi Rafsanjani. "Transforming Education: The Impact of Artificial Intelligence on Learning and Pedagogical Practices." *Proceeding of International Seminar Enrichment of Career by Knowledge of Language and Literature* 12, no. 1 (15 January 2025): 75–84. https://doi.org/10.25139/eckll.v12i1.9605.

Taşkın, Meltem. "Artificial Intelligence in Personalized Education: Enhancing Learning Outcomes Through Adaptive Technologies and Data-Driven Insights." *Human Computer Interaction* 8, no. 1 (8 January 2025): 173. https://doi.org/10.62802/ygye0506.

Wang, Yijie. "The Impact of AI Application in Education on Students." *Journal of Education, Humanities and Social Sciences* 45 (26 December 2024): 116–22. https://doi.org/10.54097/gg1d3q19.

Zailani Iman, Muhammad, Alfian Airlangga Asis, dan Aynu Uzma Zein Rahma. "Enhancing Personalized Learning: The Impact of Artificial Intelligence in Education." *Edu Spectrum: Journal of Multidimensional Education* 1, no. 2 (27 December 2024): 101–12. https://doi.org/10.70063/eduspectrum.v1i2.55.