DEVELOPING KISAH BADAR FLIPBOOK ONLINE AS INTERACTIVE LEARNING MEDIA FOR 3RD GRADE STUDENTS ON THE BATTLE OF BADR

Revy Trisely Rahmawati

Universitas Pendidikan Indonesia, Indonesia revytriselyrahmawati@upi.edu

Alfia Nur Fitri

Universitas Pendidikan Indonesia, Indonesia alfia15@upi.edu

Nova Mariska

Universitas Pendidikan Indonesia, Indonesia nova.mariska2@upi.edu

Ani Nur Aeni

Universitas Pendidikan Indonesia, Indonesia aninuraeni@upi.edu

Abstract

Many teachers still rely on conventional teaching methods, which often make learning less engaging, especially in Islamic Religious Education (IRE). As a result, students find it difficult to understand historical and moral content such as the Battle of Badr, which contains lessons on courage, leadership, and justice. This study aims to address this issue by developing an interactive digital flipbook titled "KIBAFLO" (Kisah Badar Flipbook Online) for third-grade elementary students. The flipbook was designed using Canva and Book Creator to make learning more interactive and enjoyable. The research applied a Design and Development (D&D) method using the ADDIE model, consisting of analysis, design, development, implementation, and evaluation stages. Validation by material and media experts rated the flipbook as "Very Good," with feasibility scores of 95% for design and interactivity and 90% for content quality. Student responses also indicated high interest, motivation, and comprehension when using the media. These results suggest that KIBAFLO is feasible and effective as a learning tool that enhances engagement and understanding. The study implies that digital flipbooks can strengthen technology integration in IRE and serve as an innovative model for future digital learning media development.

Keywords: Digital Flipbook, Interactive Media, Islamic Religious Education, ADDIE Model, KIBAFLO.

INTRODUCTION

Education in the twenty-first century has undergone significant transformation due to the rapid development of technology, globalization, and the demands of the digital economy. Teaching and learning processes are now expected to not only focus on knowledge transmission but also prepare students with essential skills such as critical thinking, problem-

solving, collaboration, creativity, and adaptability ¹. Within this framework, digital education and innovative pedagogical approaches are increasingly considered crucial for ensuring that learners are equipped to thrive in a world characterized by fast-paced change and global competition. In Indonesia, this demand is further amplified by the national education reform agenda and the commitment to integrating technology into learning practices at all levels of schooling.

Islamic Religious Education (IRE), as a compulsory subject in Indonesian schools, plays a unique role in shaping students' character, values, and spiritual growth. However, the implementation of IRE is still largely dominated by conventional lecture-based methods that are teacher-centered and often monotonous. Such approaches tend to limit opportunities for students to participate actively, engage in dialogue, and develop critical thinking skills ². This situation has raised concerns about whether IRE can fully contribute to the formation of well-rounded individuals who are able to integrate religious knowledge with the competencies required in contemporary society.

Teachers in IRE are expected not only to function as transmitters of religious knowledge but also to act as moral and spiritual mentors. Without strong teacher guidance, students' comprehension and internalization of Islamic values cannot be fully achieved ³. This dual role demands a balance between content delivery and value cultivation, requiring innovative approaches that can sustain both dimensions. Recent studies highlight that the transformation of teachers' mindsets is a fundamental factor in improving the quality of education, as it establishes the foundation for adopting new pedagogical methods and integrating technology effectively ⁴. Therefore, rethinking the way IRE is taught is essential to enhance its relevance and effectiveness in the current era.

One promising direction is the integration of digital and interactive learning resources. Interactive media, for instance, can foster two-way communication between learners and content, enabling students to become active participants in the learning process ⁵. The implementation of blended learning models has also been recognized as an effective strategy, as it enhances student engagement, participation, and achievement when properly designed and supported ⁶. At the same time, the development of automated and technology-aided methods, although still not as accurate as human-guided analysis, shows potential in

¹ Ridwan and Timothy Oswald Edward, "Integrating 21st Century Skills into Higher Education Curricula: Challenges and Opportunities," *Siber Nusantara of Education and Sport Review* 1, no. 1 (2024): 1–6, https://doi.org/10.38035/snesr.v1i1.224.

² Anggi Maulana Rizqi et al., *Challenges of Learning Islamic Religious Education in Elementary Schools Era 4.0* (Atlantis Press SARL, 2025), https://doi.org/10.2991/978-2-38476-360-3 53.

Moh. Faizin et al., "Keterampilan Pendidik Abad 21 Dalam Mengaplikasikan Pendekatan Student Centered Learning Pada Mata Pelajaran Pendidikan Agama Islam," *El Banat: Jurnal Pemikiran Dan Pendidikan Islam* 13, no.
1 (2023): 1–22,

http://ejournal.kopertais4.or.id/susi/index.php/elbanat/article/view/3620%0Ahttp://ejournal.kopertais4.or.id/susi/index.php/elbanat/article/download/3620/2567.

⁴ Dwi Afriyanto et al., "Transformasi Mindset Guru Pendidikan Agama Islam Profesional Di MTs Al-Barokah Robotika," *Ideguru: Jurnal Karya Ilmiah Guru* 10, no. 1 (2025): 881–88.

⁵ Devi Nur Aqmarina and Mohamad Joko Susilo, "Pengaruh Penggunaan Media Interaktif Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam," *Ta'lif: Jurnal Pendidikan Dan Agama Islam* 1, no. 1 (2025): 39–53.

⁶ Mahyar Mohammadi, Maria Paasivara, and Jussi Kasurinen, "Blended Learning in Higher Education: Good Practices in Platforms and Teachers Support , Enhancing Students," 2025, https://doi.org/10.1007/s10639-025-13770-8.

identifying learning environments that foster richer dialogue and interactivity ⁷. These innovations illustrate that education is increasingly moving towards a student-centered paradigm, which aligns with broader educational reforms.

Among the various innovations in instructional media, flipbooks have gained attention as a digital tool that combines visual, textual, and multimedia elements. Flipbooks allow the integration of images, animations, videos, and audio, which not only makes content delivery more engaging but also facilitates students' comprehension of complex material ⁸. The use of flipbooks has been found to positively influence students' motivation, learning interest, and independence. Moreover, research evidence indicates that flipbook-based learning can significantly improve student learning outcomes across different educational levels and subject areas, from elementary to vocational schools ⁹. These findings position flipbooks as a potentially powerful medium in supporting student-centered learning in IRE.

The application of flipbook media in IRE is particularly relevant because it offers solutions to several persistent challenges. First, it addresses the issue of monotonous lecture-based methods by providing students with interactive and visually appealing learning experiences. Second, it supports teachers in fulfilling their dual role as both knowledge transmitters and value educators, by presenting content in a structured and engaging format that can enhance both cognitive and affective learning outcomes. Third, it aligns with the global shift toward digital literacy, ensuring that students acquire not only religious knowledge but also digital competencies that are vital in the 21st century. According to the review by ¹⁰, the development of 21st-century competencies largely depends on students' digital literacy, as it serves as the foundation for critical thinking, communication, collaboration, and creativity. The study emphasizes that addressing digital literacy gaps is essential to prepare learners for technology-driven educational and professional environments.

Empirical studies further support the pedagogical potential of flipbooks in fostering active learning. For example, previous research has demonstrated that students' motivation and achievement increase significantly when digital flipbooks are incorporated into classroom practice. Other studies indicate that flipbooks can enhance critical thinking, writing skills, and overall learning engagement across subjects. These outcomes are consistent with the broader objectives of IRE, which aim to develop students' intellectual, emotional, and spiritual capacities. According to ¹¹, Islamic Religious Education plays a vital role in developing students' spiritual, social, and intellectual capacities, as it nurtures moral awareness, emotional balance, and reflective thinking based on Islamic values. Thus, integrating flipbook media into IRE provides a feasible and effective strategy for addressing current pedagogical gaps.

⁷ Sami Lehesvuori et al., "Discovering Technology-Aided Possibilities for Automatic Analysis of Science Teacher Questions," *Educational Technology Research and Development* 3, no. 0123456789 (2025), https://doi.org/10.1007/s11423-025-10545-3.

⁸ Yegi Gicella, Masykurillah, and Sri Astuti, "Penggunaan Media Flipbook Dalam Pembelajaran Pendidikan Agama Islam," *A I M u m t a Z : Jurnal Pendidikan Dan Sosial Keagamaan* 1, no. 02 (2022): 48–64.

⁹ Achmadi Susilo et al., "Penerapan Media Pembelajaran Digital Flipbook Untuk Meningkatkan Hasil Belajar Siswa," *Seminar Nasional Pendidikan* 5, no. 5 (2023): 1–7.

¹⁰ Placidius Ndibalema, "Digital Literacy Gaps in Promoting 21st Century Skills Among Students in Higher Education Institutions in Sub-Saharan Africa: A Systematic Review," *Cogent Education* 12, no. 1 (2025): 1–15, https://doi.org/10.1080/2331186X.2025.2452085.

¹¹ Ali Imron et al., "The Impact of Islamic Religious Education on Students' Spiritual and Social Development: A Study at Universitas Muhammadiyah Semarang," *International Journal of Research in Education* 5, no. 1 (2025): 157–67, https://doi.org/10.26877/ijre.v5i1.1341.

Despite these promising developments, research on the use of flipbooks in the context of IRE, particularly in teaching historical topics such as the Battle of Badr, remains limited. Most existing studies focus on secular subjects such as science or language, while fewer explore religious education contexts. This presents a gap in the literature and highlights the need for further exploration of how digital flipbooks can be adapted to convey Islamic historical narratives in ways that are both pedagogically effective and spiritually meaningful. ¹² revealed that the use of digital storytelling in religious education significantly enhances students' motivation and engagement. Through interactive narrative-based learning, learners are able to connect more deeply with moral and spiritual concepts, making the learning experience more meaningful and reflective. These findings indicate that the integration of digital media in religious education, such as interactive flipbooks, can serve as an effective approach to conveying religious and ethical values in an engaging and pedagogically appropriate manner.

Therefore, this study aims to examine the effectiveness of flipbook media in Islamic Religious Education, with a specific focus on its role in enhancing student motivation and learning outcomes in the teaching of the Battle of Badr. By integrating digital innovation into religious education, this study seeks to contribute both theoretically and practically to the ongoing discourse on student-centered learning and digital pedagogy in Indonesia. It is expected that the findings will provide valuable insights for educators, policymakers, and researchers interested in advancing the quality of IRE through innovative and contextually relevant approaches.

RESEARCH METHODS

This study employed the Design and Development (D&D) methodology, which provides a systematic framework for producing evidence-based solutions in education. According to Richey and Klein (2014), D&D emphasizes structured processes that ensure both practical relevance and academic rigor. The framework typically involves three primary stages: design, development, and evaluation that collectively validate the effectiveness of the product ¹³. Furthermore, ¹⁴ highlight that D&D approaches are scalable and solution-oriented, making them appropriate for educational product development.

To operationalize this approach, the research adopted the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) as the working procedure. The study emphasizes that the ADDIE model functions as a systematic and iterative framework for developing effective instructional designs. Their research shows that each stage of the ADDIE process, from analysis to evaluation, is interconnected and continuously refined through expert feedback and validation. The authors highlight that during the design and development stages, revisions were made based on literature reviews and Delphi panel recommendations, ensuring that the resulting instructional model had a strong pedagogical

¹² Ahmad Aseery, "Enhancing Learners' Motivation and Engagement in Religious Education Classes at Elementary Levels," *British Journal of Religious Education* 46, no. 1 (2024): 43–58, https://doi.org/10.1080/01416200.2023.2256487.

¹³ Ken Peffers et al., "The Design Science Research Process: A Model For Producing And Presenting Information Systems Research," *Comuter Science Research* 24, no. 3 (2007): 45–77, h.

¹⁴ Alan R Hevner et al., "Design Science in Information Systems Research," *MIS Quarterly* 28, no. 1 (2004): 75–105.

foundation and was relevant to the learning context ¹⁵. These findings reinforce the flexibility of the ADDIE model and demonstrate its suitability for developing various types of learning media, including digital and interactive media such as flipbooks. The Journal of Educational Technology & Society identifies ADDIE as a comprehensive model that accommodates iterative refinement. In this study, ADDIE was adapted into six stages: (1) learning needs analysis, (2) formulation of objectives, (3) development of the KIBAFLO digital flipbook, (4) formative evaluation, (5) product implementation, and (6) dissemination of results ¹⁶. By integrating D&D with ADDIE, the research ensures a systematic alignment between theoretical underpinnings and practical application.

The study was conducted at SDN Sukaraja 2, Sumedang, involving grade 3 students as research subjects. This school was selected because it represents a typical public elementary school context where Islamic Religious Education (IRE) requires innovative learning resources. The trial was carried out in one classroom session on March 13, 2025. In addition, two key expert groups were involved: (1) a media and material expert to assess technical and pedagogical aspects, and (2) a classroom teacher of IRE to evaluate the practical feasibility of implementation. Their contributions were essential for validating both content accuracy and usability.

Data collection instruments included expert validation sheets and teacher-student feedback obtained through structured questionnaires and interview guidelines. A Likert scale was used to quantify responses ¹⁷, while qualitative notes from interviews were analyzed to provide supporting insights. This combination of quantitative and qualitative data was intended to enhance the reliability and comprehensiveness of the evaluation.

The feasibility indicators of the KIBAFLO flipbook were established in two domains:

- 1. Material aspects, assessed in terms of curriculum conformity, accuracy of content, and the actuality of information.
- 2. Media aspects are assessed in terms of usability, design quality, and language clarity. These indicators reflect essential criteria for educational media evaluation, aligning with the principle that learning resources must be both pedagogically sound and technologically functional.

Overall, this methodological design ensured that the development process was not only grounded in theory but also empirically validated through iterative testing and expert involvement. The adoption of the ADDIE model within the broader D&D methodology strengthened the rigor of this study and supported the creation of a contextually relevant and scalable learning product.

¹⁵ Wawat Srinawati, Syamsul Bahri, and Tri Yuliastuti, "Development of an Addie Based Instructional Model for ELT in Young Learners Education," *International Journal of Integrated Science and Technology (IJIST)* 1, no. 2 (2023): 59–70.

¹⁶ B. Baharuddin, "ADDIE Model Application Promoting Interactive Multimedia," *IOP Conference Series:* Materials Science and Engineering 306, no. 1 (2018), https://doi.org/10.1088/1757-899X/306/1/012020.

¹⁷ Ankur Joshi et al., "Likert Scale: Explored and Explained," *British Journal of Applied Science & Technology* 7, no. 4 (2015): 396–403, https://doi.org/10.9734/bjast/2015/14975.

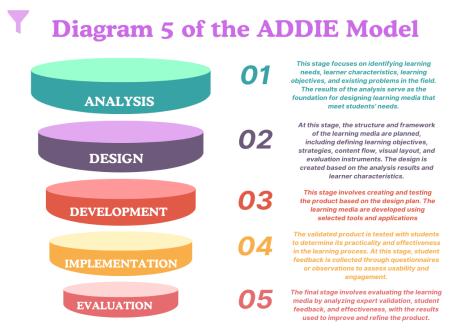


Figure 1. Diagram of the ADDIE Model

The expert validation process was conducted to ensure the feasibility and quality of the KIBAFLO Digital Flipbook before its implementation in the classroom. This validation involved two experts with relevant academic and professional backgrounds. The material expert was Mrs. Sri Intan Nurbaeti, S.Pd., an Islamic Religious Education (IRE) teacher at SDN Sukaraja 2 Sumedang, who evaluated the accuracy of the content, its alignment with the curriculum, and the integration of moral values within the material. Meanwhile, the media expert was Mrs. Ani Nur Aeni, M.Pd.., a lecturer at the Indonesia University of Education (UPI) specializing in Islamic Religious Education, who was responsible for assessing the technical and visual aspects of the flipbook, including layout, interactivity, and ease of use.

Both experts independently reviewed the product using the validation sheets and provided scores for each indicator based on a four-point Likert scale. According to the study, the four-point Likert scale was effectively used to assess product validation, student satisfaction questionnaires, and classroom implementation observations, providing clear and consistent data for evaluating the feasibility of learning media ¹⁸. In addition to quantitative assessments, they also gave qualitative feedback and suggestions for improvement, which were used to revise and refine the flipbook prior to its classroom implementation. This validation process ensured that the developed product met the required standards in terms of content accuracy, media quality, and pedagogical relevance before being tested with students.

Meanwhile, a student response questionnaire was used to assess the practicality and user response toward the KIBAFLO Digital Flipbook by collecting direct feedback from third-grade students who participated in the learning activity. The practicality aspect was evaluated based on how easily students could operate and navigate the flipbook, the clarity

¹⁸ Flavia Aurelia Hidajat, "The Development of Digital E-Books to Improve Students' Creativity Skills: A Self-Regulation Strategies Approach," *International Journal of Instruction* 16, no. 4 (2023): 367–84, https://doi.org/10.29333/iji.2023.16422a.

of the instructions, and the accessibility of the content through various multimedia elements such as images, animations, and audio narration. The flipbook-based digital e-book learning media was categorized as very practical and feasible for classroom use. The results indicated that this type of media was easy to operate, engaging for students, and effectively supported the learning process while fostering higher-order thinking skills in science education ¹⁹. The user response aspect, on the other hand, focused on students' emotional and motivational reactions while using the flipbook, including their levels of interest, enjoyment, and engagement during the learning process. The study reported that user responses toward flipbook-based learning media were highly positive, indicating that the flipbook was not only engaging and easy to use but also capable of creating an interactive and enjoyable learning atmosphere for elementary school students. The findings further explained that digital flipbooks have great potential to enhance learning motivation and strengthen conceptual understanding, particularly through attractive visual presentations and simple navigation. Thus, these results support the findings of the KIBAFLO study, which also showed positive student responses toward interactive flipbook media, highlighting its important role in increasing engagement, interest, and learning effectiveness in the classroom 20.

Through this instrument, the students' responses provided insights into how effectively the flipbook functioned as a learning tool in an actual classroom setting. High average scores on the practicality aspect indicated that the flipbook was easy to use, accessible, and effective in supporting independent learning, while positive responses in the motivational and engagement indicators showed that the media was engaging, enjoyable, and capable of increasing students' enthusiasm for learning Islamic Religious Education. Therefore, this questionnaire served as an essential instrument for evaluating both the usability and affective impact of the KIBAFLO Flipbook on students' learning experiences.

RESEARCH RESULTS AND DISCUSSION

The main objective of this research was to design, develop, and validate KIBAFLO (Kisah Badar Flipbook Online) as a digital interactive learning medium for grade 3 students. The use of flipbooks in learning has gained recognition as an innovative approach to enhance student engagement and improve learning outcomes, particularly when dealing with historical and religious content that is often perceived as abstract or less attractive for younger learners. The results of this research are presented according to the stages of development and validation, namely analysis, design, development, implementation, and evaluation. The findings are then discussed critically in relation to existing theories and previous studies to demonstrate the contribution of this study to the broader field of Islamic Religious Education (IRE) and digital learning media. Digital literacy skills are defined as "the skills associated with using technology to enable users to find, evaluate, organize,

¹⁹ Izmi Afifatul Azizah and Imam Sucahyo, "Flipbook-Based Digital E-Book Learning Media on Mechanical Wave Materials to Practice Critical Thinking Skills," *Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram* 10, no. 3 (2022): 712–18, https://doi.org/10.33394/j-ps.v10i3.5474. ²⁰ Yuliani Rahmawati, Komariah Komariah, and Dede Trie Kurniawan, "The Development of Flipbook Based on the Addie Model in Science Learning for Elementary School Students," *International Journal of Learning and Instruction (IJLI)* 4, no. 2 (2022): 56–64, https://doi.org/10.26418/ijli.v4i2.59356.

create, and communicate information; and developing digital citizenship and the responsible use of technology" ²¹.

At the analysis stage, the needs of grade 3 students regarding their understanding of the Battle of Badr were identified. Observations of previous learning processes showed that students often encountered difficulties in understanding historical content, especially moral values such as courage, leadership, justice, and loyalty. These values are central to Islamic teachings, yet their integration into classroom practices often remains limited due to the use of monotonous lecture-based methods. As highlighted by ²², Islamic Religious Education in Indonesia is still dominated by one-dimensional teaching approaches, thereby restricting opportunities for interactive and critical learning.

The analysis further revealed that students demonstrated a preference for visual and interactive media in learning. According to ²³, one of the essential competencies in modern education is visual literacy, which allows learners to interpret and construct meaning from images and other visual inputs. This aligns with the developmental characteristics of grade 3 students, who tend to be more engaged when learning materials are supported by illustrations, animations, and interactive features ²⁴ also emphasize the importance of using animated media in children's literature and learning materials, as it creates a more enjoyable and comprehensible learning process. These insights justified the integration of animation-based flipbooks into the design of KIBAFLO, making the product relevant to the digital learning era.

The design stage focused on creating the visual and narrative framework of the KIBAFLO flipbook. Several steps were carried out systematically, including:

- 1. Determining the content of the story by extracting key points from the Battle of Badr narrative and aligning them with the learning outcomes and objectives set in the curriculum.
- 2. Designing the flipbook cover using Canva, tailored to the interests of grade 3 students by employing bright colors, child-friendly fonts, and relevant illustrations.
- 3. Creating background and illustration elements to visually represent different scenes of the Battle of Badr in a way that is appealing yet contextually accurate.
- 4. Inserting story content into each sheet with concise narratives, ensuring that students would remain engaged without being overwhelmed by text-heavy explanations.
- 5. Integrating Qur'anic verses relevant to the story, thereby reinforcing the spiritual and moral dimension of the material.
- 6. Adding page numbers, references, and tidying the content to ensure clarity and accuracy.
- 7. Producing voice recordings to narrate the story, supporting students who learn better through auditory channels.
- 8. Designing interactive quiz games using Wordwall to enhance active participation.
- 9. Embedding audio narration into the flipbook via Book Creator, ensuring synchronization between text, visuals, and voice.

²¹ Jenifer Vanek, "What Does It Mean to Have Digital Literacy Skills?," *U.S. Department of Education*, no. Digital Literacy (2017): 1–7.

²² Rizgi et al., Challenges of Learning Islamic Religious Education in Elementary Schools Era 4.0.

²³ Atin Fatimah and Kristiana Maryani, "Visual Literasi Media Pembelajaran Buku Cerita Anak," *Jurnal Inovasi Teknologi Pendidikan* 5, no. 1 (2018): 61–69, https://doi.org/10.21831/jitp.v5i1.16212.

²⁴ Ani Nur Aeni et al., "Pengembangan Aplikasi Games Edukatif Wordwall Sebagai Media Pembelajaran Untuk Memahami Materi Pendidikan Agama Islam Bagi Siswa SD," *Primary: Jurnal Pendidikan Guru Sekolah Dasar* 11, no. 6 (2022): 1835–52, https://doi.org/10.33578/jpfkip.v11i6.9313.

10. Reviewing and finalizing the digital flipbook before publishing the prototype for classroom use.

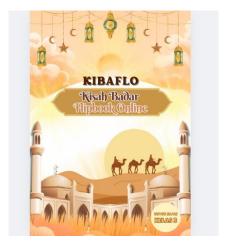


Figure 2. Cover design

This structured design process is in line with ²⁵, who stress the importance of adapting learning media to the cognitive and affective characteristics of elementary school students. By combining narration, images, and interactive quizzes, the KIBAFLO flipbook was expected to provide a comprehensive learning experience, supporting multiple learning styles.

The development stage produced the first prototype of the KIBAFLO flipbook. The content emphasized both historical accuracy and moral value exploration. Key events of the Battle of Badr were described in simple yet meaningful language, ensuring accessibility for younger learners. For example, the narrative highlighted how the Prophet Muhammad demonstrated courage and justice in his leadership, providing students with concrete moral lessons.



Figure 3. Main content

²⁵ Francisca Francisca et al., "Pengembangan E-Book BUDIMAS 'Buku Digital Agama Islam' Untuk Pembelajaran PAI Pada Siswa Sekolah Dasar," *Jurnal Basicedu* 6, no. 3 (2022): 5268–77, https://doi.org/10.31004/basicedu.v6i3.3043.

Interactive features were incorporated to foster student engagement ²⁶ argue that digital flipbooks serve as structured self-learning materials that promote multisensory learning experiences, thereby making them attractive and effective in supporting student understanding. Similarly, ²⁷ highlight that interactive media such as game-based applications stimulate curiosity, increase motivation, and enhance mastery of complex material. These perspectives further support the inclusion of Wordwall-based quizzes and audio narration in KIBAFLO.

Implementation was carried out at SDN Sukaraja 2, Sumedang, involving grade 3 students as research participants. The trial session was conducted on March 13, 2025. During the session, the KIBAFLO flipbook was projected in the classroom, allowing students to follow along by reading, listening to narrations, and participating in interactive quizzes.

Observation showed that students exhibited high levels of enthusiasm and engagement. They responded actively to the questions in the Wordwall quiz, and discussions following the quiz indicated a deeper understanding of both historical content and moral values. Teachers also reported that the flipbook facilitated classroom management, as students remained focused throughout the session. This finding aligns with ²⁸, who argue that the integration of interactive media fosters student attention and enhances conceptual understanding. Similarly, ²⁹ state that interactive tools such as Wordwall help synchronize different learning modalities (visual, auditory, kinesthetic), creating a unified and inclusive learning experience.

The evaluation stage involved both expert validation and student satisfaction assessment. Validation was carried out by material and media experts. The results indicated that the KIBAFLO flipbook met the eligibility criteria at an excellent level, with an average feasibility score of 95% for design and interactivity, and 90% for material quality. Media experts particularly highlighted the flipbook's intuitive navigation, attractive visual layout, and integration of multimedia elements such as audio narration and videos. This confirms that the product is not only feasible but also capable of increasing student engagement and supporting independent learning.

Student satisfaction was measured through a structured questionnaire. The results are summarized as follows:

Indicator	Like Very Much	Like	Average	Disliked
Favorability of colors and images in flipbooks	56%	44%	0%	0%

Table 1. Results of the Student Evaluation Questionnaire

²⁶ Fajriyatin Ana Ni, mah, Udik Yudiono, and Affan Afian, "Pengembangan Media Pembelajaran Flipbook Digital," *Jurnal Riset Pendidikan Ekonomi* 9, no. 1 (2024): 125–32.

²⁷ Andi Prasetyo et al., "Pengaruh Media Pembelajaran Interaktif Terhadap Motivasi Belajar Siswa," *Central Publisher* 1, no. 11 (2023): 1257–64.

²⁸ Ella Nurhayati et al., "Pengembangan Website POLARAS (Politik Ala Rasulullah) Untuk Mengenalkan Keteladanan Politik Nabi Muhammad SAW Di Sekolah Dasar," *As-Sabiqun Jurnal Pendidikan Islam Anak Usia Dini* 5, no. 3 (2023): 781–92, https://doi.org/10.36088/assabiqun.v5i3.3318.

²⁹ Sulfi Purnamasari et al., "Bermain Bersama Pengetahuan Peserta Didik Melalui Media Pembelajaran Berbasis Game Online Word Wall," *Jurnal Pengabdian Kepada Masyarakat* 3, no. 1 (2020): 70–77.

Ease of understanding	32%	36%	32%	0%
the story in the flipbook				
The appeal of flipbooks compared to regular books	64%	32%	4%	0%
Desire to read the flipbook more than once	56%	44%	0%	0%
Ease of reading the text in the flipbook	52%	36%	12%	0%

These results demonstrate that the flipbook was well-received, with particularly strong responses regarding its visual appeal and overall attractiveness. The only noted area for improvement was text readability, as a small portion of students reported difficulties. Nevertheless, the overall response was overwhelmingly positive, indicating that KIBAFLO achieved its intended objectives.

The findings confirm that the development of the KIBAFLO flipbook aligns with the demands of 21st-century learning, particularly in Islamic Religious Education. The integration of visual, auditory, and interactive elements addressed the limitations of traditional lecture-based methods ³⁰. Moreover, the role of teachers remained central, as emphasized by ³¹, since they guided students in interpreting and internalizing moral values embedded in the flipbook content.

In addition to student feedback, expert validation further strengthened the feasibility of KIBAFLO as an instructional medium. The product underwent review by two specialists: a material expert and a media expert. The Material Expert rated the content's feasibility at 90% (Very Good), confirming that the historical and moral elements were accurate, relevant, and aligned with curriculum standards. Meanwhile, the Media Expert provided an overall feasibility rating of 95% (Very Good), with high scores across all categories: product suitability, design appeal, accessibility, and motivational impact. A single note of improvement was identified, namely the absence of a detailed user guide for teachers.

The results of this study also underscore the importance of teacher mindset transformation in adopting innovative media. ³² assert that the teacher's mindset is the foundation of educational quality. The successful implementation of KIBAFLO demonstrates how teachers' willingness to embrace digital tools can lead to more engaging and effective teaching practices.

³⁰ Rizqi et al., Challenges of Learning Islamic Religious Education in Elementary Schools Era 4.0.

³¹ Faizin et al., "Keterampilan Pendidik Abad 21 Dalam Mengaplikasikan Pendekatan Student Centered Learning Pada Mata Pelajaran Pendidikan Agama Islam."

³² Afriyanto et al., "Transformasi Mindset Guru Pendidikan Agama Islam Profesional Di MTs Al-Barokah Robotika."

Table 2. Media Expert Validation Results

Category	Indicator	Score	Note
Product Suitability	Design matches student characteristics	4	_
	Colors match content	4	_
	Illustrations align with content	4	_
	Font size appropriate	4	_
	Font type suitable for the age group	4	_
Product Appearance	Design is attractive	4	_
	Images are clear	4	_
	Color composition is appealing	4	_
	Audio is clear	4	_
	Equipped with a usage guide	0	Not available
Ease of Access	Easy to use	4	_
	Buttons function properly	4	_
	Contains various accessible menus	4	_
	Usable anywhere	4	_
	Child-friendly	4	_
Positive Impact	Motivates good behavior	4	_
	Encourages learning diligence	4	_
	Promotes social/environmental awareness	4	_
	Improves the quality of worship	4	_
	Increases worship intensity	4	_

Average Score: 95% (Very Good)

Validator: Dr. Ani Nur Aeni, M.Pd.

Table 3. Material Expert Validation Results

NO	ASSESSMENT DESCRIPTOR	SCORE (1-4)	NOTES
MATERIAL SUITABILITY			
1.	Material suitability with learning goals	3	-
2.	Material suitability with learning objectives	3	-
3.	Material suitability with student characteristics	3	-
4.	Material suitability with the core topics taught in class	3	-
5.	Material suitability with the phase/class	3	-
MATERIAL PRESENTATION			
6.	Presentation is easy to understand	4	-
7.	The language used in the material content is easy to understand	4	-
8.	The presented material content is legible	4	-
9.	The presented material content has a clear meaning	4	-
10.	Material content is sufficient (not too much or too little)	4	-
WRITING			
11.	Writing of Al-Qur'an/Hadith texts has no errors	4	-
12.	Text writing has no typing errors	4	-
13.	Material content is accompanied by source citations	4	-

14.	Text writing considers the use of uppercase letters	4	-
15.	Text writing considers the use of punctuation	4	-
POSITIVE IMPACT			
16.	Contains material that encourages students to have noble character	4	
17.	Contains material that encourages students to study diligently	4	
18.	Contains material that encourages students' curiosity	4	
19.	Contains material that encourages student empathy	4	
20.	Contains material that encourages students to form good habits	4	

Average Score: 90% (Very Good)

Validator: Sri Intan Nurbaeti S.Pd.

Overall, both validations confirm that the KIBAFLO flipbook meets high standards of academic and technical quality, making it a suitable and engaging medium for moral value education in the digital era. Following the feedback provided by the Media Expert, particularly concerning the absence of a user guide, the product was subsequently refined. A comprehensive usage guide was developed and integrated into the flipbook to help teachers and students navigate its features effectively. This revision ensures that the improved version of KIBAFLO is fully ready for classroom implementation and wider educational use.

In addition, the study supports the argument made by ³³ that flipbooks are effective because they combine multimedia elements that facilitate comprehension. Similarly, ³⁴ found that flipbooks enhance student learning outcomes across multiple levels and subjects. The present findings extend this literature by showing that flipbooks are particularly effective in teaching historical and moral content in Islamic education, an area where abstract concepts often pose challenges for younger learners.

Finally, the evaluation results suggest that the KIBAFLO flipbook has the potential for scalability. Its compatibility with multiple devices and learning contexts (distance, flipped classroom, remedial learning) positions it as a versatile tool for modern education. However, limitations remain, particularly in terms of text readability for some students and

³³ Gicella, Masykurillah, and Astuti, "Penggunaan Media Flipbook Dalam Pembelajaran Pendidikan Agama

³⁴ Susilo et al., "Penerapan Media Pembelajaran Digital Flipbook Untuk Meningkatkan Hasil Belajar Siswa."

the need for further development of collaborative features. Future research is therefore recommended to explore the integration of KIBAFLO into broader learning management systems and to test its effectiveness across diverse school contexts. When implemented, audio-visual media significantly increase learning motivation and are effective in visualizing abstract concepts of spiritual and moral values, making them more concrete and comprehensible ³⁵.

The potential of Flipbook-based e-modules, as revealed in this study, is further supported by ³⁶, who developed a Fiqh e-module for *Madrasah Tsanawiyah* in Medan. Their results demonstrated that the product was not only valid according to expert judgment, with scores reaching up to 98% for content validation and 78% for media and IT validation, but also highly practical, as shown by positive student responses with a score of 89.8%. Importantly, post-test results showed a substantial improvement compared to pre-test scores, indicating that the Flipbook-based e-module significantly enhanced students' comprehension of Fiqh. This suggests that the use of Flipbook media is not restricted to science or general education, but can also be effectively applied in religious education to increase student engagement and understanding of abstract or complex subject matter.

In a similar vein, ³⁷ highlighted the effectiveness of a STEM Qur'an Flipbook-based e-module in Islamic boarding schools. Their study revealed significant gains in students' scientific literacy, with average scores increasing from 35.3–38.9 in the pre-test to 80.58–80.62 in the post-test. These findings emphasize that Flipbook-based e-modules not only facilitate knowledge acquisition but also foster deeper conceptual understanding by integrating interactive features, multimedia elements, and meaningful contextualization such as Qur'anic values. Thus, both ³⁸ and ³⁹ affirm the dual potential of Flipbook-based e-modules: they are effective for enhancing students' learning outcomes across both secular (science) and religious (Fiqh) domains.

Taken together, the evidence underscores the scalability and adaptability of Flipbook-based learning tools like KIBAFLO. By demonstrating effectiveness across disciplines and contexts ranging from science literacy in *pesantren* to religious studies in *madrasah*, these studies confirm that such tools can bridge educational divides and support diverse curricular needs. For KIBAFLO, this means that its development should continue not only with technological refinements (e.g., improving readability and collaborative features) but also with curricular adaptability, enabling integration into a wide variety of subjects. This cross-contextual validation strengthens the argument that Flipbook-based emodules can serve as a universal medium for modern education, combining accessibility, interactivity, and contextual relevance.

³⁵ Halarry Mega Pulo, Yosep Belen Keban, and Petrus Tukan, "Education and Philosophical Inquiry Implementation of AudioVisual Media in Enhancing Catholic Religious Education Learning Motivation among Elementary School Students," *International Journal of Christian Education and Philosophical Inquiry* 2, no. 3 (2025): 103–10.

³⁶ Sri Wahyuni Harahap, Mardianto Mardianto, and Salminawati Salminawati, "Pengembangan E-Modul Fikih Dalam Pembelajaran Fikih Untuk Madrasah Tsanawiyah Di Medan," *Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme* 4, no. 2 (2022): 625–42, https://doi.org/10.37680/scaffolding.v4i2.5235.

³⁷ Suci Prihatiningtyas et al., "Enhancing Science Literacy Through Flipbook-Based STEM Qur'an e-Modules: A Case Study in Islamic Boarding Schools," *Humanities and Social Sciences Communications* 12, no. 1 (2025): 1–12, https://doi.org/10.1057/s41599-025-05054-w.

³⁸ Harahap, Mardianto, and Salminawati, "Pengembangan E-Modul Fikih Dalam Pembelajaran Fikih Untuk Madrasah Tsanawiyah Di Medan."

³⁹ Prihatiningtyas et al., "Enhancing Science Literacy Through Flipbook-Based STEM Qur'an e-Modules: A Case Study in Islamic Boarding Schools."

CONCLUSION

This study concludes that the KIBAFLO Digital Flipbook serves as an effective and engaging learning medium for third-grade elementary students, enabling them to explore the history of the Battle of Badr and understand the moral values embedded within it. Designed based on students' needs and learning characteristics, the flipbook integrates visual, auditory, and kinesthetic elements through the use of images, animations, and audio narration, making the learning experience more interactive and enjoyable. Validation results from material and media experts rated the product as "Very Good" in terms of content relevance, design quality, and ease of use. Similarly, student feedback indicated high levels of interest, motivation, and satisfaction when using the flipbook. The utilization of interactive digital platforms in PAI education can have a positive impact on the learning process, especially in improving the religious literacy of elementary school students ⁴⁰. However, this study has several limitations. The research was conducted on a relatively small sample within one school, and the evaluation focused primarily on the product's feasibility and user responses rather than its long-term impact on learning outcomes. In addition, some students reported minor readability issues in the text layout. Therefore, future research is recommended to involve larger and more diverse samples, integrate the KIBAFLO Flipbook into various classroom contexts, and measure its long-term effectiveness through experimental or quasi-experimental designs. Further development could also focus on improving accessibility features and adding collaborative tools to enhance interactive learning experiences.

REFERENCES

Aeni, Ani Nur, Dadan Djuanda, Maulana Maulana, Rini Nursaadah, and Salsabila Baliani Putri Sopian. "Pengembangan Aplikasi Games Edukatif Wordwall Sebagai Media Pembelajaran Untuk Memahami Materi Pendidikan Agama Islam Bagi Siswa SD." *Primary: Jurnal Pendidikan Guru Sekolah Dasar* 11, no. 6 (2022): 1835–52. https://doi.org/10.33578/jpfkip.v11i6.9313.

Afriyanto, Dwi, Anatansyah Anandari, Sukiman, and Sibawaihi. "Transformasi Mindset Guru Pendidikan Agama Islam Profesional Di MTs Al-Barokah Robotika." *Ideguru: Jurnal Karya Ilmiah Guru* 10, no. 1 (2025): 881–88.

Aqmarina, Devi Nur, and Mohamad Joko Susilo. "Pengaruh Penggunaan Media Interaktif Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam." *Ta'lif: Jurnal Pendidikan Dan Agama Islam* 1, no. 1 (2025): 39–53.

Aseery, Ahmad. "Enhancing Learners' Motivation and Engagement in Religious Education Classes at Elementary Levels." *British Journal of Religious Education* 46, no. 1 (2024): 43–58. https://doi.org/10.1080/01416200.2023.2256487.

Azizah, Izmi Afifatul, and Imam Sucahyo. "Flipbook-Based Digital E-Book Learning Media on Mechanical Wave Materials to Practice Critical Thinking Skills." *Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram* 10, no. 3 (2022): 712–18. https://doi.org/10.33394/j-ps.v10i3.5474.

Baharuddin, B. "ADDIE Model Application Promoting Interactive Multimedia." IOP

⁴⁰ Cita Suci Soleha et al., "Utilization of Interactive Digital Platforms in PAI Learning to Improve Religious Literacy of Elementary School Students," *LECTURES: Journal of Islamic and Education Studies* 4, no. 3 (2025): 386–99, https://doi.org/10.58355/lectures.v4i3.171.

- *Conference Series: Materials Science and Engineering* 306, no. 1 (2018). https://doi.org/10.1088/1757-899X/306/1/012020.
- Faizin, Moh., Rifani Nabilla Rahman, Saniyyah Labibah, Vanissa Arum Saharani, and Azmi Niswah Nabila. "Keterampilan Pendidik Abad 21 Dalam Mengaplikasikan Pendekatan Student Centered Learning Pada Mata Pelajaran Pendidikan Agama Islam." *El Banat: Jurnal Pemikiran Dan Pendidikan Islam* 13, no. 1 (2023): 1–22. http://ejournal.kopertais4.or.id/susi/index.php/elbanat/article/view/3620%0Ahttp://ejournal.kopertais4.or.id/susi/index.php/elbanat/article/download/3620/2567.
- Fatimah, Atin, and Kristiana Maryani. "Visual Literasi Media Pembelajaran Buku Cerita Anak." *Jurnal Inovasi Teknologi Pendidikan* 5, no. 1 (2018): 61–69. https://doi.org/10.21831/jitp.v5i1.16212.
- Francisca, Francisca, Jovanka Oktavia Venneza Zahra, Sri Hesty Anggraeni, and Ani Nur Aeni. "Pengembangan E-Book BUDIMAS 'Buku Digital Agama Islam' Untuk Pembelajaran PAI Pada Siswa Sekolah Dasar." *Jurnal Basicedu* 6, no. 3 (2022): 5268–77. https://doi.org/10.31004/basicedu.v6i3.3043.
- Gicella, Yegi, Masykurillah, and Sri Astuti. "Penggunaan Media Flipbook Dalam Pembelajaran Pendidikan Agama Islam." *A l M u m t a Z : Jurnal Pendidikan Dan Sosial Keagamaan* 1, no. 02 (2022): 48–64.
- Harahap, Sri Wahyuni, Mardianto Mardianto, and Salminawati Salminawati. "Pengembangan E-Modul Fikih Dalam Pembelajaran Fikih Untuk Madrasah Tsanawiyah Di Medan." *Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme* 4, no. 2 (2022): 625–42. https://doi.org/10.37680/scaffolding.v4i2.5235.
- Hevner, Alan R, Salvatore T March, Jinsoo Park, and Sudha Ram. "Design Science in Information Systems Research." *MIS Quarterly* 28, no. 1 (2004): 75–105.
- Hidajat, Flavia Aurelia. "The Development of Digital E-Books to Improve Students' Creativity Skills: A Self-Regulation Strategies Approach." *International Journal of Instruction* 16, no. 4 (2023): 367–84. https://doi.org/10.29333/iji.2023.16422a.
- Imron, Ali, Mamdukh Budiman, Budi Setyono, Mardian Hayati, and Safril Ahamdi Sanmas. "The Impact of Islamic Religious Education on Students' Spiritual and Social Development: A Study at Universitas Muhammadiyah Semarang." *International Journal of Research in Education* 5, no. 1 (2025): 157–67. https://doi.org/10.26877/ijre.v5i1.1341.
- Joshi, Ankur, Saket Kale, Satish Chandel, and K.D. Pal. "Likert Scale: Explored and Explained." *British Journal of Applied Science & Technology* 7, no. 4 (2015): 396–403. https://doi.org/10.9734/bjast/2015/14975.
- Lehesvuori, Sami, Felipe Urrutia, Ville Heilala, Roberto Araya, and Raija Hämäläinen. "Discovering Technology-Aided Possibilities for Automatic Analysis of Science Teacher Questions." *Educational Technology Research and Development* 3, no. 0123456789 (2025). https://doi.org/10.1007/s11423-025-10545-3.
- Mohammadi, Mahyar, Maria Paasivara, and Jussi Kasurinen. "Blended Learning in Higher Education: Good Practices in Platforms and Teachers Support, Enhancing Students," 2025. https://doi.org/https://doi.org/10.1007/s10639-025-13770-8.
- Ndibalema, Placidius. "Digital Literacy Gaps in Promoting 21st Century Skills Among Students in Higher Education Institutions in Sub-Saharan Africa: A Systematic Review." *Cogent Education* 12, no. 1 (2025): 1–15. https://doi.org/10.1080/2331186X.2025.2452085.
- Ni, mah, Fajriyatin Ana, Udik Yudiono, and Affan Affan. "Pengembangan Media Pembelajaran Flipbook Digital." *Jurnal Riset Pendidikan Ekonomi* 9, no. 1 (2024):

125-32.

- Nurhayati, Ella, Tresna Nuraeni, Karan Bagas Adrain, and Ani Nur Aeni. "Pengembangan Website POLARAS (Politik Ala Rasulullah) Untuk Mengenalkan Keteladanan Politik Nabi Muhammad SAW Di Sekolah Dasar." *As-Sabiqun Jurnal Pendidikan Islam Anak Usia Dini* 5, no. 3 (2023): 781–92. https://doi.org/10.36088/assabiqun.v5i3.3318.
- Peffers, Ken, Tuure Tuunanen, Charles E. Gengler, Matti Rossi, Wendy Hui, Ville Virtanen, and Johanna Bragge. "The Design Science Research Process: A Model For Producing And Presenting Information Systems Research." *Comuter Science Research* 24, no. 3 (2007): 45–77.
- Prasetyo, Andi, Dwi Maria Santosa, Siti Nurhayati, and Budi Setiawan. "Pengaruh Media Pembelajaran Interaktif Terhadap Motivasi Belajar Siswa." *Central Publisher* 1, no. 11 (2023): 1257–64.
- Prihatiningtyas, Suci, Noly Shofiyah, Sitti Rahma Yunus, Iin Baroroh Ma'arif, and Ino Angga Putra. "Enhancing Science Literacy Through Flipbook-Based STEM Qur'an e-Modules: A Case Study in Islamic Boarding Schools." *Humanities and Social Sciences Communications* 12, no. 1 (2025): 1–12. https://doi.org/10.1057/s41599-025-05054-w.
- Pulo, Halarry Mega, Yosep Belen Keban, and Petrus Tukan. "Education and Philosophical Inquiry Implementation of AudioVisual Media in Enhancing Catholic Religious Education Learning Motivation among Elementary School Students." *International Journal of Christian Education and Philosophical Inquiry* 2, no. 3 (2025): 103–10.
- Purnamasari, Sulfi, Fika Rahmanita, Soffi Soffiatun, Wiwit Kurniawan, and Fiqoh Afriliani. "Bermain Bersama Pengetahuan Peserta Didik Melalui Media Pembelajaran Berbasis Game Online Word Wall." *Jurnal Pengabdian Kepada Masyarakat* 3, no. 1 (2020): 70–77.
- Rahmawati, Yuliani, Komariah Komariah, and Dede Trie Kurniawan. "The Development of Flipbook Based on the Addie Model in Science Learning for Elementary School Students." *International Journal of Learning and Instruction (IJLI)* 4, no. 2 (2022): 56–64. https://doi.org/10.26418/ijli.v4i2.59356.
- Ridwan, and Timothy Oswald Edward. "Integrating 21st Century Skills into Higher Education Curricula: Challenges and Opportunities." *Siber Nusantara of Education and Sport Review* 1, no. 1 (2024): 1–6. https://doi.org/10.38035/snesr.v1i1.224.
- Rizqi, Anggi Maulana, Syarip Hidayat, Dian Indihadi, Fahmi Qodrul Asphar, and Risnandar Sudarman. *Challenges of Learning Islamic Religious Education in Elementary Schools Era 4.0.* Atlantis Press SARL, 2025. https://doi.org/10.2991/978-2-38476-360-3_53.
- Soleha, Cita Suci, U Abdullah Mu, Mahamadaree Waen, and Shifa Aulia. "Utilization of Interactive Digital Platforms in PAI Learning to Improve Religious Literacy of Elementary School Students." *LECTURES: Journal of Islamic and Education Studies* 4, no. 3 (2025): 386–99. https://doi.org/10.58355/lectures.v4i3.171.
- Srinawati, Wawat, Syamsul Bahri, and Tri Yuliastuti. "Development of an Addie Based Instructional Model for ELT in Young Learners Education." *International Journal of Integrated Science and Technology (IJIST)* 1, no. 2 (2023): 59–70.
- Susilo, Achmadi, Bambang Ardianto, Siti Romlah, Maulidiyah Wirdaini, and Musta'inah Musta'inah. "Penerapan Media Pembelajaran Digital Flipbook Untuk Meningkatkan Hasil Belajar Siswa." *Seminar Nasional Pendidikan* 5, no. 5 (2023): 1–7.
- Vanek, Jenifer. "What Does It Mean to Have Digital Literacy Skills?" *U.S. Department of Education*, no. Digital Literacy (2017): 1–7.