

Developing Project-Based Learning Media for Islamic History Instruction in an Indonesian Islamic Boarding School

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A B S T R A C T

Tarekh learning at Pesantren Al-Ibrahimia Pasaman still relies on the *Khulashoh Nurul Yaqin* textbook, lecture-based instruction, and one-way *question-and-answer* sessions, without support from digital learning media. This condition limits students' engagement and enthusiasm and makes abstract concepts more difficult to understand. This study aimed to develop Project-Based Learning-based Tarekh learning media using Canva and Powtoon. The study employed a Research and Development approach using the ASSURE model. The findings showed that the developed media achieved a validity score of 0.90, a practicality score of 0.90, and an effectiveness score of 0.91. These results indicate that the media met the criteria of being valid, practical, and effective for classroom use. This study contributes to the integration of digital media in Tarekh learning by providing a more engaging and effective instructional medium for seventh-grade students at Pesantren Al-Ibrahimia Pasaman.

Abstrak

Pembelajaran Tarekh di Pesantren Al-Ibrahimia Pasaman masih bergantung pada kitab *Khulashoh Nurul Yaqin*, metode ceramah, dan sesi tanya jawab satu arah, serta belum didukung oleh media pembelajaran digital. Kondisi ini membatasi keterlibatan dan antusiasme peserta didik serta menyulitkan mereka dalam memahami konsep-konsep abstrak. Penelitian ini bertujuan untuk mengembangkan media pembelajaran Tarekh berbasis Project-Based Learning dengan memanfaatkan Canva dan Powtoon. Penelitian ini menggunakan pendekatan Research and Development dengan model ASSURE. Hasil penelitian menunjukkan bahwa media yang dikembangkan memperoleh skor validitas sebesar 0,90, praktikalitas 0,90, dan efektivitas 0,91. Temuan tersebut menunjukkan bahwa media yang dikembangkan memenuhi kriteria valid, praktis, dan efektif untuk digunakan dalam pembelajaran. Penelitian ini berkontribusi pada integrasi media digital dalam pembelajaran Tarekh melalui penyediaan media pembelajaran yang lebih menarik dan efektif bagi siswa kelas VII di Pesantren Al-Ibrahimia Pasaman.

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1. Introduction

The rapid development of digital technology has created broad opportunities for education to provide learning experiences that are more dynamic, engaging, and accessible. The use of instructional media that aligns with the characteristics of the subject matter and the needs of learners can increase students' interest in learning, strengthen retention, and promote deeper conceptual understanding [1], [2], [3]. In the learning process, media are no longer viewed merely as supporting tools, but as essential components that influence the quality of interaction, communication, and creativity in the delivery of instructional content [4], [5], [2].

Instructional media design is a systematic process that involves planning, developing, and producing learning tools effectively and efficiently [6]. In technology-based media

development, software plays an important role in supporting the creation of innovative instructional media [7]. Two relevant platforms for this purpose are Powtoon, which provides animated presentation features and ease of use [8], and Canva, which offers a wide range of visual design options for digital learning needs [9].

The use of digital media is also in line with current national education policy. Regulation of the Minister of Education and Culture No. 65 of 2013 emphasizes that learning should be interactive, inspiring, enjoyable, and should encourage active learner participation. One of the recommended models to support this process is Project-Based Learning (PjBL) [8]. This model places learners as active participants who understand concepts through investigation, problem-solving, and product creation [10]. Therefore, PjBL-based instructional media should be authentic, contextual, interactive, and flexible in order to support collaboration, independent exploration, and critical thinking [11], [12], [13].

Tarekh is one of the subject areas that is relevant to be developed through PjBL-based instructional media. Based on an interview with the Tarekh teacher at Pesantren Al-Ibrahimia Pasaman on February 10, 2025, it was found that instruction still relied on the Khulashoh Nurul Yaqin textbook, lecture-based teaching, and one-way question-and-answer sessions, without the support of digital learning media. This condition caused students to be less enthusiastic, easily bored, and to experience difficulties in understanding and remembering abstract concepts in Tarekh. Interviews with fifteen female students on the same date also indicated a need for more engaging and interactive instructional media.

Several previous studies have shown that the integration of digital media with appropriate instructional models can improve learning quality. A study by Putu and Nyoman in 2021 found that Powtoon-based media integrated with Project-Based Learning was highly feasible for science instruction in elementary school because it enhanced students' motivation and understanding. Rinjani's 2024 study also showed that Project-Based Learning encouraged students to be more active in exploring and understanding historical content through projects they designed themselves [11]. More broadly, international studies have shown that Project-Based Learning is positively associated with various student learning outcomes and continues to develop as a relevant approach in technology-supported learning [12], [13].

However, previous studies have mainly focused on general subjects, such as science and history, and have not sufficiently examined the development of instructional media specifically designed for Islamic educational contexts, particularly for Tarekh learning in pesantren. In addition, most previous studies have emphasized the implementation of learning models without comprehensively integrating media design, students' characteristics, and curriculum needs into a single instructional product [14]. Therefore, there remains a research gap in the development of contextual PjBL-based digital instructional media for Tarekh learning in pesantren.

Based on this gap, the present study offers novelty through the design of Project-Based Learning-based Tarekh instructional media using Canva and Powtoon, tailored to the needs and characteristics of students at Pesantren Al-Ibrahimia Pasaman. The developed media functions not only as a tool for delivering content, but also as a medium that integrates project-based activities to foster active engagement, critical thinking, and contextual

understanding of Islamic history. Therefore, this study is expected to contribute to the development of innovative instructional media relevant to the pesantren context and to support more effective, interactive, and meaningful Tarekh learning [15].

2. Method

This study employed a Research and Development (R&D) design using the ASSURE model. The model was selected because it provides systematic procedures that are specifically oriented toward analyzing learner characteristics, selecting instructional methods, media, and materials, and engaging students actively in the learning process. It also emphasizes the use of media in authentic instructional settings [16]–[17]. The ASSURE model applied in this study consisted of six stages: Analyze Learners, State Objectives, Select Methods, Media, and Materials, Utilize Media and Materials, Require Learner Participation, and Evaluate and Revise [16], [18]:

A	Analyze Learner
S	State Objectives
S	Select Methods, Media, Materials
U	Utilize Media and Materials
R	Require Learner Participation
E	Evaluate and Revise

Figure 1. Steps of the ASSUR model [17].

2.1.1. Research Context and Setting

The study was conducted in Pesantren Al-Ibrahimia in the context of Tarekh instruction. The development process was designed to produce instructional media tailored to the needs and characteristics of learners in this setting.

2.1.2. Participants

The study involved teachers and students (santri) at Pesantren Al-Ibrahimia during the learner analysis and implementation stages. It also involved subject-matter experts, media experts, and instructional practitioners in the product evaluation stage. Editorial note: the exact number and characteristics of participants are not reported in the current method text and should be specified by the author.

2.1.3. Sampling Technique

Editorial note: the sampling or participant selection technique is not stated in the current manuscript and should be clarified.

2.1.4. Research Instruments

Several instruments were used in this study. First, interviews and interview forms were used during the Analyze Learners stage to identify students' initial abilities and characteristics. Second, a validation instrument using a Likert scale was used by material and media experts to assess content suitability, visual quality, ease of use, and alignment with instructional objectives. Third, a practicality questionnaire was used to assess the usability of the developed media. Fourth, an effectiveness measure was used to evaluate learning gains after the implementation of the media.

2.1.5. Data Collection Procedures

The data collection procedures followed the six stages of the ASSURE model.

At the Analyze Learners stage, the researcher identified students' characteristics and initial abilities through direct interviews with teachers and students and through interview forms. The results of this stage were used as the basis for designing the instructional media.

At the State Objectives stage, learning objectives were formulated based on the analysis of student characteristics, curriculum learning outcomes, and intended final competencies in Tarekh.

At the Select Methods, Media, and Materials stage, the researcher selected instructional strategies, technologies, media, and materials appropriate to the characteristics of the students and the instructional objectives. At this stage, the navigation structure, storyboard, and interface design were prepared.

At the Utilize Media and Materials stage, the researcher produced the instructional media by integrating Canva for static visual design and Powtoon for animated video production. After the media were produced, black-box testing was conducted.

At the Require Learner Participation stage, students were actively engaged through project tasks, group discussions, presentations, and other collaborative learning activities. The developed media were used fully during this stage.

At the Evaluate and Revise stage, feedback from expert reviewers was used to revise the product. The media were then evaluated in terms of validity, practicality, and effectiveness.

2.1.6. Product Evaluation and Data Analysis

The developed instructional media were evaluated through three main stages: validity testing, practicality testing, and effectiveness testing. Each stage used a different analytical procedure according to the evaluation purpose. Content validity was assessed using Aiken's V, practicality was analyzed using Moment Kappa, and effectiveness was measured using Richard R. Hake's normalized gain (G-Score). This sequence was intended to ensure that the developed media were appropriate in content, practical in use, and effective in supporting learning outcomes. The use of content-validity procedures such as Aiken's V is widely accepted for judging the representativeness of instrument items through expert judgment.

2.1.6.1. Validity Testing

Validity testing was conducted by material experts and media experts to evaluate the appropriateness of the Tarekh content, interface quality, ease of use, and alignment of the media with the intended learning objectives. The validation instrument used a Likert scale, and the resulting scores were analyzed using Aiken's V. The formula is presented as follows:

$$V = \Sigma s / [n(c - 1)]$$

Description:

where:

$$s = r - l_o$$

l_o = the lowest validity rating

c = the highest validity rating

r = the score given by each rater

n = the number of raters

The product was categorized as valid if the Aiken's V value ranged from 0.60 to 1.00, and not valid if the value was below 0.60 [19]

Table 1. Aiken's V Decision Categories

Aiken's V	Criteria
< 0.60	Not Valid
≥ 0.60	Valid

2.1.6.2. *Practicality Testing*

Practicality testing was conducted to determine the extent to which the developed media were easy to use and feasible to implement in the learning process. A product was considered practical when it could be used efficiently, was easy to administer, and did not create unnecessary difficulties for users. Practicality data were obtained through a practicality questionnaire, and the responses were analyzed using the Moment Kappa formula. The formula is presented as follows:

$$momen\ kappa\ (k) = \frac{\rho_o - \rho_e}{1 - \rho_e}$$

Description:

K = Moment Kappa coefficient indicating product practicality

P = the realized proportion, calculated by dividing the total score given by respondents by the maximum possible score

P_e = the unrealized proportion, calculated by subtracting the total obtained score from the maximum score, then dividing it by the maximum score

The resulting Kappa coefficient was interpreted using the practicality categories shown in Table 2 [20].

Table 2. Moment Kappa Decision Categories

Interval	Category
0.81-1.00	Very High
0.61-0.80	High
0.41-0.60	Moderate
0.21-0.40	Low
0.01-0.20	Very Low
≤ 0.00	Not Practical

2.1.6.3. Effectiveness Testing

Effectiveness testing was carried out to determine the extent to which the developed media improved students' learning outcomes after implementation. In this study, effectiveness was analyzed using Richard R. Hake's normalized gain (G-Score), which measures the increase between the initial score and the final score after treatment. The normalized gain has been widely used as a measure of instructional effectiveness in concept learning. The formula is presented as follows:

$$g = \frac{S_f - S_i}{S_{max} - S_i}$$

Description:

g = normalized gain score

S_f = final score obtained by students

S_i = initial score before using the instructional media

S_{max} = maximum possible score

The effectiveness level was interpreted using the criteria in Table 3 [2].

Table 3. G-Score Criteria

G-Score	Criteria
$g > 0.7$	High Effectiveness
$0.3 < g < 0.7$	Moderate Effectiveness
$g < 0.3$	Low Effectiveness

Based on these criteria, the developed media were categorized as highly effective when the normalized gain score was greater than 0.7, moderately effective when the score ranged between 0.3 and 0.7, and less effective when the score was below 0.3.

3. Result and Discussion

3.1. Result

This study developed Project-Based Learning-based instructional media for Tarekh at Pesantren Al-Ibrahimia Pasaman using the ASSURE model, which consisted of the following stages: Analyze Learners, State Objectives, Select Methods, Media, and Materials, Utilize Media and Materials, Require Learner Participation, and Evaluate and Revise. The results are presented according to the development stages and product evaluation outcomes.

3.1.1. Results of the ASSURE-Based Development Process

At this stage, the study identified the instructional requirements for Tarekh learning. The needs analysis was presented using a fishbone diagram, which mapped the causal factors underlying the learning problem, as shown in Figure 2

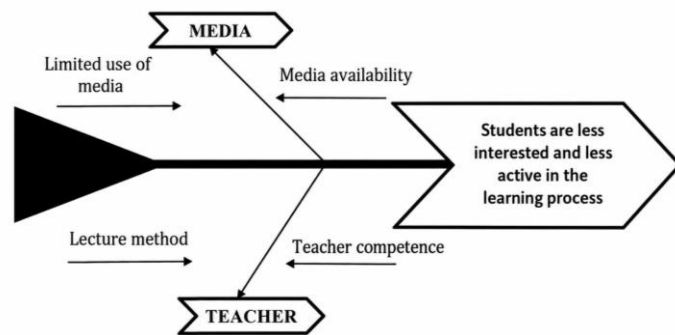


Figure 2. Fishbone Diagram

The learner characteristics analysis showed that Grade VII students at Pesantren Al-Ibrahimia Pasaman had difficulty understanding and remembering abstract concepts in Tarekh. Observation results also indicated that the learning process was still dominated by lecture-based instruction, while the use of instructional media remained limited to classical texts. Based on these findings, more innovative and interactive instructional media were needed to make learning more engaging and to improve students' understanding of Tarekh. In this study, the media were developed using Canva and Powtoon.

The system and user analysis further showed that the designed media needed to match the facilities available at Pesantren Al-Ibrahimia Pasaman, such as projectors or computers. The media therefore had to have a simple interface, be easy to operate, and be flexible for both individual and group learning.

3.1.2.State Objectives

At the objective-setting stage, learning objectives were formulated through an in-depth analysis of learner characteristics so that the developed media could optimally support instructional goals. The study focused on Grade VII students at Pesantren Al-Ibrahimia Pasaman. Curriculum analysis was also conducted to ensure that the selected Tarekh content was aligned with the developed Project-Based Learning-based media.

3.1.3.Select Methods, Media, and Materials

The instructional strategy selected for the media was project-based exploratory learning or discovery learning, in line with the principles of the Merdeka Curriculum. This strategy was intended to encourage learners to actively explore the material independently and collaboratively through Project-Based Learning activities.

The media were designed using Canva and Powtoon. The product included Tarekh materials in the form of animated videos, translated text from the kitab, and project activities. At this stage, the navigation structure, storyboard, and interface were designed

The navigation structure of the Tarekh instructional media used a hierarchical model, allowing users to access interconnected menus. The main navigation structure is shown in Figure 3.

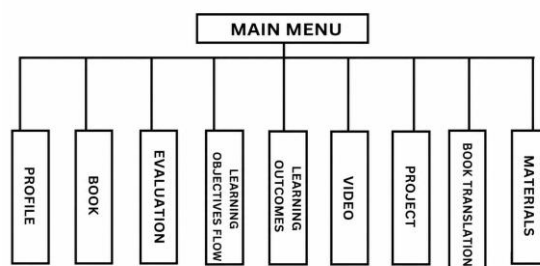
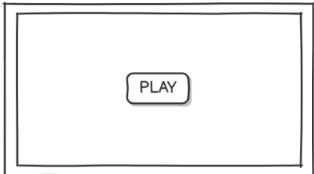
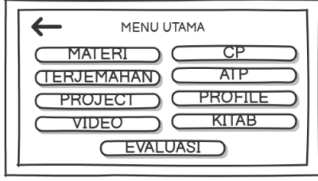
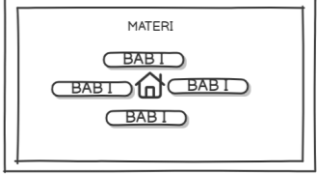
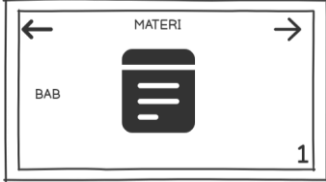
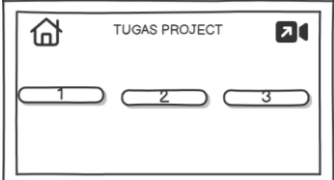


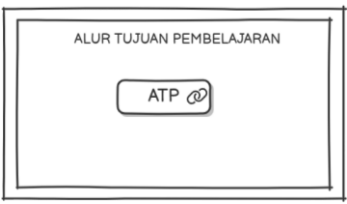
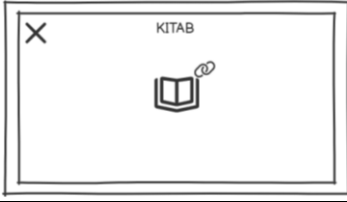
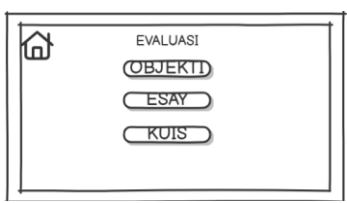
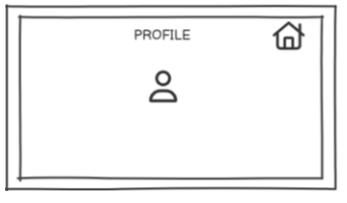
Figure 3. Navigation Structure

The storyboard functioned as a visual guide to organize the flow of scenes and to ensure that each element of the Project-Based Learning-based media was systematically arranged according to the instructional objectives. A summary of the storyboard is presented in Table 4

Tabel 4. Storyboard

Scane	Visual	Audio	Description
1		Arabic	<i>This scene displays the cover page. Navigation button: Start. Text color: pink and white.</i>

2		Arabic	<i>This scene displays the main menu. Navigation buttons: Material, Translation, Project, Video, CP, ATP, Profile, Kitab, Evaluation, and Back. Text color: blue and yellow.</i>
3		Arabic	<i>This scene displays all material chapter pages. Navigation buttons: Chapters 1, 2, 3, and 4, and Home. Text color: blue and yellow.</i>
4		Bahasa Arab penjelasan materi	<i>This scene displays the explanation of each chapter. Navigation buttons: Previous and Next. Text color: orange and blue.</i>
5		Sholawat Nabi	<i>This scene displays the translation of Khulasah-Nuru-al-Yaqin-Juz-1. Navigation button: Home. Text color: black.</i>
6		-	<i>This scene displays all project tasks, namely the Prophet Muhammad genealogy tree, Ka'bah diorama, and pop-up book of the Prophet's story. Navigation buttons: each project option, project tutorial video, and Home. Text color: black.</i>
7		Sholawat Nabi	<i>This scene displays the learning video on the history of the Prophet. Navigation button: Exit. Text color: black.</i>
8		-	<i>This scene displays the learning outcomes link stored in Google Drive. Navigation button: CP Link. Text color: black.</i>

9		-	<i>This scene displays the learning objectives flow link stored in Google Drive. Navigation button: ATP Link. Text color: black.</i>
10		-	<i>This scene displays the Arabic kitab stored in Google Drive. Navigation button: Kitab Link. Text color: black.</i>
11		-	<i>This scene displays evaluation tasks consisting of objective items, essay items, and quizzes. Navigation buttons: Objective, Essay, Quiz, and Home. Text color: orange and yellow.</i>
12			<i>This scene displays the author profile, including name, birth details, study program, faculty, gender, religion, address, contact person, phone, email, and Instagram. Navigation button: Home. Text color: orange and black.</i>

3.1.4. Utilize Technology, Media, and Materials

The technological tools used in this media development were Canva and Powtoon. Canva was used to design posters, infographics, and interactive visual displays, while Powtoon was used to produce animated videos that helped students present historical analysis visually and narratively.

The media production stage resulted in several main interfaces. The main menu consisted of nine buttons: *Materi*, *Terjemahan Kitab*, *Project*, *Video*, *CP*, *ATP*, *Evaluasi*, *Kitab*, and *Profile Penulis*, as shown in Figure 4. Each button was linked to the next scene using the custom interaction feature in Canva.



Figure 4. Main Menu Display

The material page functioned as a submenu of “Materi” and consisted of four chapter buttons and one Home button (Figure 5). The content page contained introductory material about the Prophet Muhammad and used Previous and Next buttons for navigation (Figure 6). The project page displayed three creative projects: the Prophet’s genealogy tree, a Ka’bah diorama, and a pop-up book of the Prophet’s story (Figure 7). The translation page displayed Arabic text and its Indonesian translation side by side (Figure 8). The evaluation page provided three forms of assessment: objective questions, essay questions, and quizzes (Figure 9). Additional displays included the author profile (Figure 10), the learning video (Figure 11), the ATP page linked to Google Drive (Figure 12), and the project tutorial video (Figure 13).



Figure 5. Material Menu Display



Figure 6. Content Display



Figure 7. Project Task Display



Figure 8. Kitab Translation Display



Figure 9. Evaluation Display



Figure 10. Profile Display



Figure 11. Learning Video Display



Figure 12. ATP Display



Figure 13. Project Video Display

A **black-box test** was conducted to ensure that all buttons and visual elements could be accessed properly. As presented in **Table 5**, all tested components were successful.

Table 5. Black-Box Testing Results

No.	Data	Result
1	Background display	Successful
2	Text display	Successful
3	Image display	Successful
4	Video display	Successful
5	Project display	Successful

The media were then used by the teacher through a projector as a visual instructional guide. The lesson began with an explanation of the learning objectives and project instructions. The media displayed project guidance, such as the creation of the Prophet Muhammad genealogy tree, a Ka'bah diorama, and a pop-up book of the Prophet's story. Students worked in groups on these projects, while the teacher guided and facilitated the process. The project results were evaluated in terms of understanding, creativity, and teamwork. The content of the media was based on *Khulashah Nurul Yaqin Juz 1*, which was reorganized into interactive project-based learning materials suited to learners' level of understanding.

3.1.5. Require Learner Participation

Students were actively involved from the beginning through group discussions, selection of project forms, and the process of designing and producing products such as the Prophet Muhammad genealogy tree, a Ka'bah diorama, or a pop-up book about the Prophet's story. They worked in teams to develop ideas, divide tasks, and prepare final products to be presented in class. The teacher guided the process, facilitated discussion, and provided feedback throughout the implementation of the projects

3.2. Product Evaluation Results

3.2.1. Product Validity

Table 6. Validity Test Results

Validator	Aspect	Validity Score
Dr. Supratman Zakir, M.Pd, M.Kom	Construct	0.94
Buya H. Roi Ibrahim, LC., MA	Content	0.81
Erlina Wafidah, S.Pd	Language	0.96

The average validity score was 0.90, indicating that the developed product met the criteria of a valid instructional media product.

3.2.2. Product Practicality

The practicality of the product was assessed by two Tarekh teachers using the Moment Kappa statistic. The results are presented in Table 7.

Table 7. Practicality Test Results

Respondent	Score
Nur Hasia Ritonga, S.Pd.I	52
Nur Anisa, S.Ag	49
Average Moment Kappa Score	0.90

Based on the practicality test, the average score was 0.90, which placed the developed Project-Based Learning-based Tarekh instructional media in the very high practicality category

3.2.3. Product Effectiveness

The effectiveness of the Tarekh instructional media was assessed using an effectiveness sheet completed by 24 students. Product effectiveness was analyzed using Richard R. Hake's G-Score. The calculation result was 0.91.

Table 8. Effectiveness Test Result

Number of Students	G-Score	Category
24	0.91	Very High

3.2 Discussion

This study developed a Project-Based Learning (PjBL)-based Tarekh instructional medium for Grade VII students at Pesantren Al-Ibrahimia Pasaman. The product was designed as interactive digital content that could be accessed through

smartphones and computers, with visual and animated elements developed using Canva and Powtoon. The evaluation results showed that the media achieved a validity score of 0.90, a practicality score of 0.90, and an effectiveness score of 0.91, indicating that the product was feasible, practical, and effective for classroom use.

These findings suggest that the media successfully addressed the instructional needs identified in the study context. The high validity score indicates that the product was considered appropriate in terms of content, design, and language. The high practicality score suggests that the media were easy to use and manageable for instructional implementation. The high effectiveness score further indicates that the product supported learning in a meaningful way. In this regard, the combination of visual presentation, animated explanation, translated kitab content, and project-based activities appears to have made Tarekh learning more accessible and contextual for students.

The present findings are in line with previous studies reporting that project-based instructional media can improve students' understanding and creativity. As noted in the manuscript, developed Islamic Cultural History learning media based on Project-Based Learning for the MTs level using the ADDIE model [12]. That study showed that PjBL was effective in increasing student engagement, although the developed media were still limited to content presentation without the integration of diverse interactive digital features as found in the present study. Similarly, designed digital Islamic history learning media using Canva with the 4D model. Although the product was visually attractive, it did not integrate a project-based approach, and therefore the level of student interactivity and engagement remained more limited than in the present study [21].

The current study also relates to the work of Lestari, who developed thematic Project-Based Learning media for social studies at the junior secondary level using the Borg and Gall model [13]. That study reported increased learning activity, but the material scope and learning context were different, and it did not combine multiple digital media tools in the way this study did. Likewise, the study by Citra Kamila et al. emphasized Canva-based PjBL to improve students' creativity [22]. While that study demonstrated increased creativity, it did not integrate animated media or a comprehensive menu structure such as the one developed in the present study. In addition, the study by Ariska Setya Widyaningrum and Dewi Nilam Tyas examined the effect of Powtoon-assisted PjBL on science learning outcomes. Although that study showed improved learning outcomes, it focused on a single subject and did not develop a more complete instructional media structure [23].

Taken together, these comparisons indicate that the present study supports previous findings regarding the positive role of PjBL and digital media, while also extending prior work by integrating multiple digital tools, project-based tasks, and pesantren-relevant instructional content into one coherent Tarekh learning medium[2].

Theoretically, this study contributes to the growing discussion on how Project-Based Learning can be integrated with digital instructional media to support subject-

specific learning. The findings indicate that project-based digital media can be adapted not only for general school subjects but also for Tarekh, which involves text-based and abstract historical-religious content. This suggests that instructional media can become more meaningful when they combine contextual content, visual support, and active learning tasks.

Practically, the study offers a pedagogical contribution for Tarekh instruction in pesantren. The developed media provided a structured learning environment through integrated menus such as materials, translated kitab, projects, videos, CP, ATP, evaluation, kitab, and profile, enabling students to engage with the material more interactively. The project-based tasks, including the genealogy tree, diorama, and pop-up book, also encouraged students to participate actively rather than receive information passively. In this sense, the media offer a practical alternative to conventional lecture-based instruction in pesantren settings.

Methodologically, this study shows the value of developing instructional media that combine Canva for visual design and Powtoon for animation within a Project-Based Learning framework. The study therefore provides an example of how a digital learning product can be designed not only as a presentation tool but also as a project-oriented instructional medium suited to the characteristics of learners in a specific educational context.

Despite the positive findings, several limitations should be acknowledged. First, the study was conducted in a specific context, namely Grade VII students at Pesantren Al-Ibrahimia Pasaman, so the applicability of the findings to other settings remains limited. Second, although the media were shown to be valid, practical, and effective, the available report does not provide a broader comparison across institutions or learner groups. Third, the literature comparison in the present manuscript remains relatively limited, especially in relation to international studies on digital project-based learning and technology integration in Islamic education.

Future research may therefore examine the use of similar Project-Based Learning-based Tarekh media in other pesantren or Islamic school contexts, involve broader learner groups, and compare different combinations of digital tools and project formats. Further studies may also investigate longer-term outcomes, such as sustained conceptual understanding, creativity, and learner autonomy.

4. Conclusion

This study achieved its objective by producing Project-Based Learning-based Tarekh instructional media for Grade VII students at Pesantren Al-Ibrahimia Pasaman. The developed media met the criteria of being valid, practical, and effective, as indicated by the validity score of 0.90, the practicality score of 0.90, and the effectiveness score of 0.91. These findings indicate that the media are suitable for supporting Tarekh learning through a more systematic and interactive instructional design.

The main contribution of this study lies in the development of digital instructional media that integrate Project-Based Learning with visual and animated presentation through Canva and Powtoon in the context of pesantren-based Tarekh learning. Pedagogically, the media provide an alternative for creating more active, engaging, and meaningful learning experiences through project-based tasks and structured content

presentation. This study also suggests that digital media can support the delivery of abstract and text-based religious-historical content more effectively in classroom practice.

However, the study was conducted on a limited scale, and this restricts the broader generalization of the findings. Further research is therefore needed to examine the implementation of the developed media in wider contexts and with larger participant groups. Overall, the study shows that Project-Based Learning-based digital media have strong potential to support more interactive and meaningful Tarekh learning in pesantren settings.

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Declarations

Author Contribution Statement

Author 1 contributed to the study conceptualization, research design, data collection, data analysis, interpretation of the results, and manuscript drafting. Author 2 contributed to critical revision of the manuscript, validation of data analysis, and final approval of the manuscript before submission. All authors have read and approved the final version of the manuscript.

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Data Availability Statement

The data generated and analyzed during this study are available from the corresponding author upon reasonable request. The data are not publicly available due to privacy and ethical considerations related to the participants involved in the study.

Declaration of Interests Statement

The authors declare that there are no competing interests, financial or non-financial, related to this study and the publication of this manuscript.

AI Use Statement

[1] During the preparation of this manuscript, the authors used Google Translate for language editing, grammar correction, clarity, and readability improvement. The authors reviewed, revised, and verified the final manuscript and take full responsibility for the content of this publication.

[2] The authors used Grammarly Premium to support language refinement and structuring of several parts of the manuscript. All edited outputs were critically reviewed, revised where necessary, and verified against the study data and cited references. The authors remain fully responsible for the accuracy, originality, and integrity of the manuscript.

[3] The authors did not use generative AI or AI-assisted tools in the writing, editing, or preparation of this manuscript.

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