

Development of Powtoon Application-Based Animated Videos on Hajj and Umrah Material at Middle School

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ABSTRACT

This study intends to analyze the development stages of animated videos created using the Powtoon application for Hajj and Umrah material, as well as to evaluate the practicality and effectiveness of these animated videos. This study uses a development research approach with the ADDIE development model. The subjects of this study were Fiqh teachers and students of grade 8 at the Middle School, or Madrasah Tsanawiyah Suli, with a total of 22 students. The data collection techniques were interviews, observations, questionnaires, and documentation. This study employed a mixed-methods data analysis technique. The feasibility test results indicated that the material expert validator scored 81.81% in the "very valid" category, media experts scored 97.5% in the "very valid" category, linguists scored 75% in the "valid" category, Islamic jurisprudence subject teachers' practicality questionnaire received a score of 95.45% in the "very practical" category, and students' practicality questionnaire received a score of 91.43% in the "very practical" category. The development of Powtoon-based animated videos for Hajj and Umrah material has proven effective because it increases learning motivation and makes it easier for students to understand the Hajj and Umrah material. The use of Powtoon-based animated video learning media has demonstrated an increase in learning motivation and student understanding.

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1. INTRODUCTION

Learning is a process of interaction between teachers and students utilizing resources, infrastructure, and the learning environment (Alam, 2021). Through teacher creativity, several learning resources or tools also influence the success of the learning process, one of which is the skill in creating or applying learning media (Hsia et al., 2021). Learning should be enjoyable; therefore, teachers are required to be creative, diligent, patient, and sincere, and they should always innovate in learning (Žydzūnaitė & Arce, 2021). Enjoyable learning is stipulated in Government Regulation Number 57, Article 25, Paragraph (4) of 2021 concerning Standards for Educational Facilities and

Infrastructure (Jannah & Santosa, 2025). National Education Standard stipulates the following principles: "a) Supporting the implementation of active, creative, collaborative, enjoyable, and effective learning; b) Ensuring security, health, and safety; c) Being accessible to persons with disabilities; and d) Being environmentally sustainable." The contents of the National Education Standards above demonstrate that media, as a learning tool, must be continually updated to foster innovation in the implementation of learning, making classroom learning more enjoyable.

Developments in science and technology have penetrated all sectors, including the world of education (Oke & Fernandes, 2020). One way to improve the quality of education is by utilizing sophisticated technology, especially in the learning process (Serrano et al., 2019). Learning is essentially a communication process realized through the delivery of information to students. The information conveyed can include knowledge, expertise, skills, ideas, experiences, and so on. Teachers can convey this information in various ways to ensure students effectively absorb it (Lestari & Dewi, 2020). The development of digital technology in the 21st century has spurred various innovations in education, including in Islamic Religious Education. Today's teachers are required to adapt to the dynamics of the times by integrating media and technology into the learning process to make it more interactive, creative, and meaningful (Patra et al., 2022; Mujtahidah et al., 2023; Ajani, 2024).

By utilizing animated video learning media, teachers can more easily convey material (Lestari et al., 2022). Furthermore, using animated videos to explain material engages students more in listening to the teacher's explanation (Dewi & Negara, 2021). Students also easily absorb and understand the material presented, making the teaching and learning process more effective and efficient and increasing interest in learning. Media, as a learning tool, must be continually updated to ensure innovation in its implementation (Sofi-Karim et al., 2023). However, the current situation is far from the desired expectations. Some teachers in schools still face many obstacles in making learning more creative, particularly in innovating learning media. Some teachers rarely inventory the learning media they use in their lessons (Macgilchrist, 2021). Some teachers still lack understanding of how to create or use learning media, and teachers create media without paying attention to the principles of good and proper learning media (Sulthon et al., 2021).

Islamic religious education at the Islamic middle school level has an important effect on shaping students' character and religious knowledge (Masturin, 2022; Muzakki & Nurdin, 2022; Nahriyah et al., 2024), one of which is through the teaching of Hajj and Umrah. However, in practice, this material is often delivered conventionally, such as through lectures or simply reading textbooks. This results in students losing interest, making it difficult to fully understand the Hajj and Umrah process, and making it difficult to remember the sequence and meaning of each pillar of worship. Students tend to be passive due to the lack of interactive and visual learning media (Riawarda & Al Hamdany, 2024).

In a preliminary study, the author observed that teachers at Middle School/Madrasah Tsanawiyah Suli conducted lessons using only lecture and question-and-answer

methods, relying on whiteboards and textbooks as the learning media during the fiqh learning process. The school's facilities, such as projectors and laptops, were not utilized optimally by teachers, who limited their use to images and the surrounding environment. Consequently, students did not pay attention to the teacher during the lesson. Interviews conducted indicated that a grade 8 fiqh teacher reported that there were problems during the learning process, namely a lack of learning media and student focus during learning. The conversations indicated that some teachers rarely used technology-based learning media due to the complexity of the creation process, resulting in a lack of student participation in the learning process.

This trend was evident when the researcher conducted a field survey observing the learning process at Madrasah Tsanawiyah Suli. Low learning interest was evident when the prospective researcher was in class, where some students were not paying attention to the teacher's explanation but were busy engaging in unrelated activities, such as chatting with friends and being confused. Even more concerning, some students preferred playing outside the classroom rather than participating in learning.

Several previous studies have developed animation-based learning media or interactive multimedia for various subjects ([Untari et al., 2020](#); [Sastradika et al., 2021](#); [Budakoğlu et al., 2023](#); [Mariana, 2024](#)). However, few studies have specifically developed animated videos based on the Powtoon application for Hajj and Umrah topics in eighth-grade Islamic middle schools. However, Powtoon can provide engaging visualizations, easy-to-understand narratives, and a short yet effective duration, all of which are suited to the learning characteristics of adolescent students ([Widyawati & Kamaludin, 2024](#)).

Therefore, the development of engaging and relevant learning media is urgently needed to enhance students' understanding of the Hajj and Umrah pilgrimages, which are the fifth pillar of Islam and essential practices in Islamic teachings. Eighth-grade Islamic middle school students (around 13–14 years old) typically prefer animated video learning media, as they get bored with listening alone, while animated videos offer engaging movement, color, and characters. The use of animation-based media, such as Powtoon, is expected to increase learning interest, strengthen conceptual understanding, and facilitate student memorization of the sequential stages of worship. Teachers can use this media as an efficient and flexible teaching aid in the classroom ([Kaur et al., 2015](#)).

If this research is not conducted, the learning process for the Hajj and Umrah will likely remain monotonous, risking a decline in students' interest and understanding of these important acts of worship. This could potentially impact the quality of Islamic religious education, particularly in terms of the practical aspects of worship. Moreover, junior high schools may not fully utilize the potential of educational technology such as Powtoon as an innovative teaching tool ([Wanti & Erita 2024](#)). This study aims to analyze the development stages and assess the validity, practicality, and effectiveness of animated videos created with the Powtoon application for teaching Hajj and Umrah material to grade 8 students at Madrasah Tsanawiyah Suli.

2. METHOD

This type of research is developmental, often referred to as Research and Development (R&D), aimed at producing a specific product or improving an existing one. The research model used is the ADDIE development model, which consists of five stages: analysis, design, development, implementation, and evaluation. The research location was Madrasah Tsanawiyah Suli, with teachers and students as the subjects. The object of the research was animated video learning media based on the Powtoon application. Figure 1 illustrates the ADDIE model design.



Figure 1. ADDIE Model Design

The steps of the ADDIE model include Analysis, which involves identifying needs and audiences; Design, which involves designing learning structures and strategies; Development, which involves creating learning materials; Implementation, which involves applying training materials; and Evaluation, which involves measuring program effectiveness.

Data collection techniques were conducted using four main methods: observation, interviews, questionnaires, and documentation. Observations were used to directly look at the school's condition, students, teachers, and existing facilities and infrastructure. Interviews were used to obtain qualitative data from teachers and students to measure the effectiveness of the animated videos. Questionnaires were distributed to respondents to assess the validity and practicality of the animated videos. The questionnaire instrument was developed based on practical indicators and validated by experts.

The data analysis technique used a mixed-methods approach, combining qualitative and quantitative approaches. The questionnaire data were analyzed using a Likert scale and categorized into specific criteria: very favorable, excellent, moderately poor, and

awful. The results of this analysis served as the basis for assessing the validity and practicality of the Powtoon-based animated video for Hajj and Umrah materials.

3. RESULTS AND DISCUSSION

Results

The findings of this study were obtained through various data collection techniques, including observation, interviews, questionnaires, and documentation conducted at Madrasah Tsanawiyah Suli. Data were collected from teachers and students directly involved in the use of animated videos based on the Powtoon application in the learning process. The stages developed by the researcher were:

The Process of Developing Fiqh Learning Media Using Animated Videos Based on the Powtoon Application

Analysis

The researcher's observations at the research location, when the teacher entered the fiqh lesson, some students did not pay attention to the teacher's explanations, such as chatting with their friends, feeling sleepy and confused. Unfortunately, some students even preferred to play outside the classroom rather than participate in the learning process. This was because the teacher still used conventional media such as printed books and whiteboards, resulting in students lacking enthusiasm for learning and poor comprehension of the material. Therefore, based on the data obtained by the researcher, according to the needs analysis, students require animated videos for the Islamic jurisprudence (fiqh) subject, which will stimulate student enthusiasm for learning and help them easily understand the material presented by the teacher.

Design

The second stage is design, which aims to create learning media, namely Powtoon-based videos on the Hajj and Umrah topics. This product design was carried out by designing the material and selecting animation templates appropriate for the learning.

1) Material Design

The material was structured in a coherent manner to facilitate student understanding. The material selected was Hajj and Umrah and was based on the Grade 8 Islamic Jurisprudence textbook (K13 Revision) for Students.

2) Determining animation, image, and audio templates.

The researcher chose templates that were as engaging as possible to engage students in learning Islamic jurisprudence (fiqh) for the Hajj and Umrah topics. In this case, the researcher used an educational template according to the character of the students and chose images that were appropriate to the Hajj and Umrah material, as in the following figure 2.

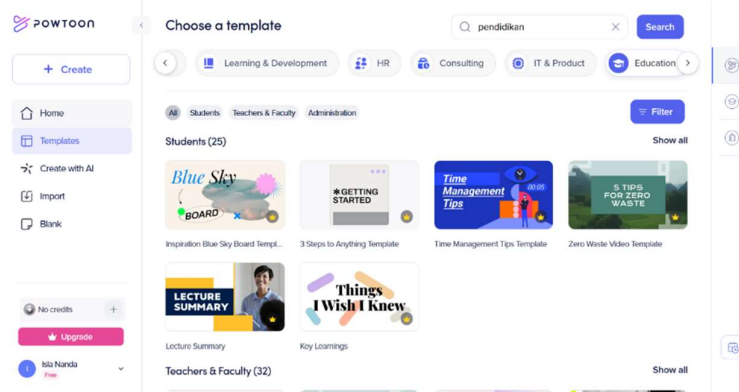


Figure 2. Display of Education Templates in the Powtoon Application

3) After selecting a template, add a background to the PowToon.

By clicking the background section on the right side of the PowToon, you will be shown several available background options, as shown in the following figure 3.

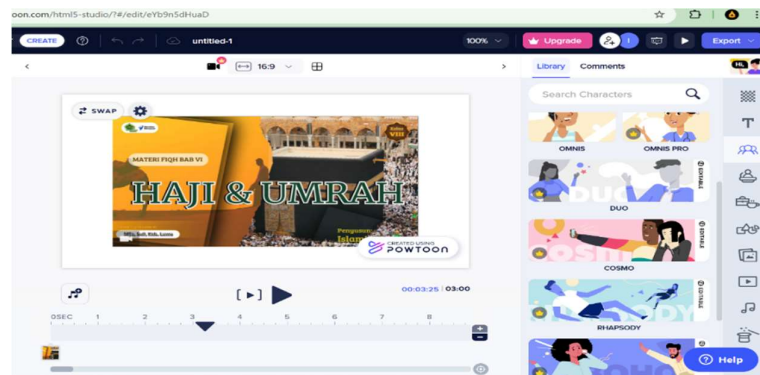


Figure 3. Background of Hajj and Umrah

4) The next step is to insert text or writing into the Powtoon.

By clicking the text options in the upper right corner, you'll see several interesting text format options to improve your animated video learning media. As shown in the following figure 4.

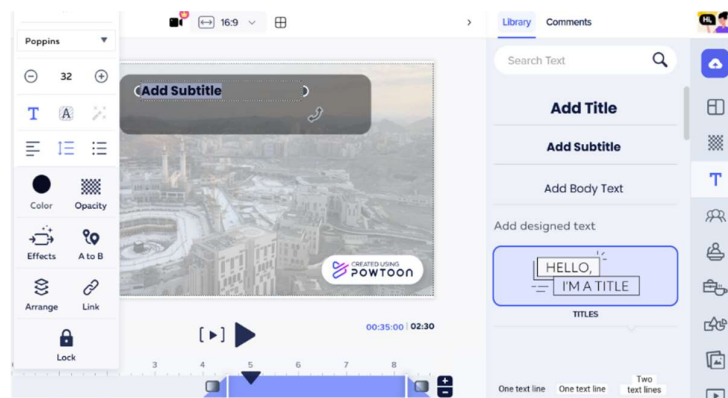


Figure 4. Powtoon Text Writing

5) Adding animated characters

Selecting animated characters on the right will display several animated characters that can be used, as shown in the following figure 5.

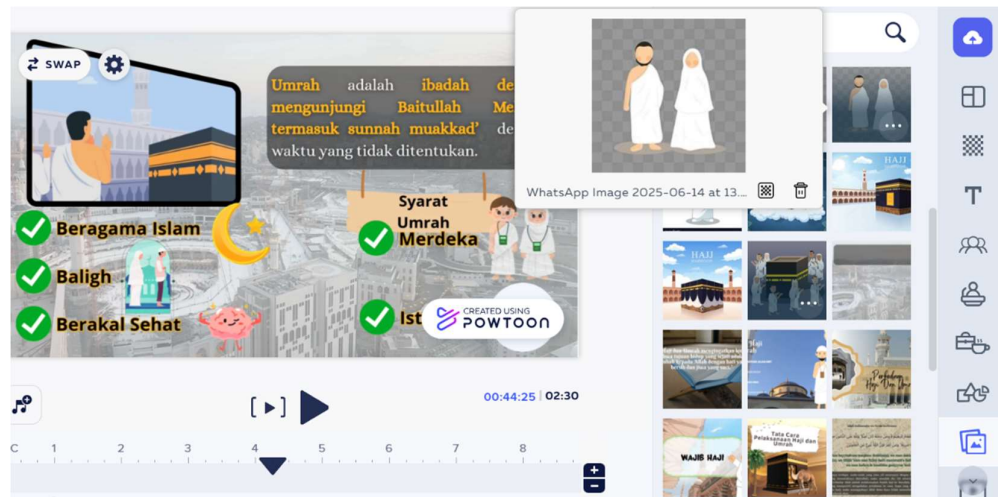


Figure 5. Powtoon Animated Characters

6) Next, export it to CapCut software.

CapCut software is used to extend the video duration in PowToon. Due to limitations of the PowToon software used by the researcher, the video processed in PowToon software had to be exported into several video segments. These were then combined into a single file and soundtrack downloaded from ttsmakar was added, as shown in the figure 6 below.

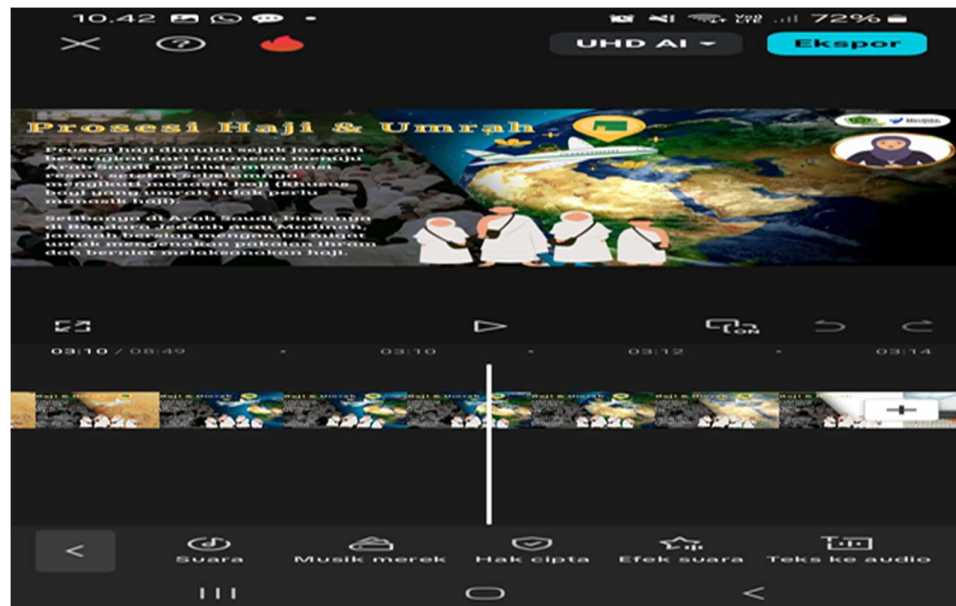


Figure 6. Software Capcut

7) Next, voiceover:

Do the voiceover for each slide of the script using TTS Maker. TTS Maker simplifies the voiceover process because it offers practical voice-over editing features. Furthermore, the effects tool allows users to change the voice to reflect the desired character, making the narrative more lively and contextual. Edit the voiceover to create a learning video.

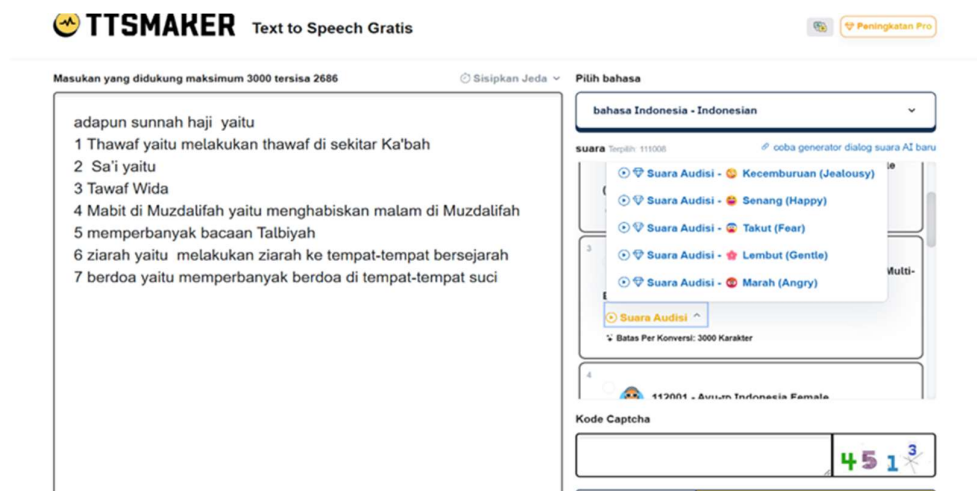


Figure 7. Voice Actors for Animated Videos

Development

In the development stage, it begins with design, then carries out the validation process through validation sheets and direct discussions with the validator about the validity or feasibility of the animated video learning media using the designed Powtoon application, as well as asking for suggestions for improving the animated video learning media. The following presents the results of validity tests conducted by three experts in Table 1.

Table 1. Results of Validity Tests Conducted By Three Experts

Respondent	Percentage	Category
Materials Expert	81,81%	Very Valid
Media Expert	97,5%	Very Valid
Linguist	75%	Valid

These results show that animated videos are suitable for use in terms of material, media, and language with all component valid and very valid.

Implementation

The next stage, implementation, aimed to apply the video learning media and determine the practicality of student responses to the Powtoon-based video learning media developed in the learning process of eighth-grade students at Madrasah Tsanawiyah Suli. This practicality test involved one teacher, the Islamic jurisprudence teacher at Madrasah Tsanawiyah Suli, and 22 eighth-grade students. The researcher

provided animation-based learning media to the teachers, then asked them to complete a practicality questionnaire. The experiment was then conducted with the students. Before beginning the learning process, the researcher prepared the learning media in the form of an animated learning video. The researcher then directed the students to sit in an orderly manner. The researcher used the animated video learning media on a laptop connected to an LCD projector. Following this, the researcher showcased the animated video learning media product, to which the students attentively listened.

After using the media and completing all classroom learning processes, the researcher then administered a questionnaire to the students. The questionnaire included an assessment sheet for the product. The application of video learning media in the Islamic jurisprudence (Fiqh) subject of Hajj and Umrah was carried out to determine changes in student behavior before and after learning using animated video media. During observations of the learning process in the classroom, before and after using video learning media, there were changes in student behavior during the learning process; namely, students appeared very enthusiastic in participating in the learning process. The following Table 2 presents the results of the teacher and student practicality questionnaire.

Table 2. Results of Practicality Tests Conducted on Teachers and Students

Respondents	Percentage	Category
Teachers	95,45%	Very Practical
Students	91,43%	Very Practical

Therefore, from these results, the researcher concluded that the animation-based learning media that the researcher developed was good and suitable for application in classroom learning.

Evaluation

Evaluation is the final stage of the ADDIE method. Evaluation is conducted to assess the overall effectiveness of the learning media. This evaluation consists of two types: formative evaluation and summative evaluation. Formative evaluation is conducted during the development and implementation process, such as product improvements based on suggestions and criticisms from several validators, then the product is tested, and the results of the trial of the improved product are based on the research that has been conducted. Meanwhile, summative evaluation is conducted after the media is fully implemented, with the aim of assessing its impact on student learning motivation. This evaluation was conducted through interviews with teachers and students. Based on the evaluation results, researchers received responses from teachers and students who stated that this product was satisfactory and interesting. Therefore, the data concluded that the animated video learning media had been completed or successfully developed.

Discussion

The development of this animated video learning media used the ADDIE model, which consists of five stages: the first stage is analysis, which includes a needs analysis.

The second stage is design, which consists of designing the material and determining the animation, image, and audio templates. The third stage is development, which involves creating the previously designed animated video and providing validation sheets to validators, subject matter experts, and media experts for product testing. The fourth stage is implementation, which involves product trials and administering questionnaires to fiqh teachers and students. The fifth stage is evaluation, which, after conducting the validation test, allows the animated video learning media on the Hajj and Umrah material to be used.

Researchers validated the learning media with experts to gather feedback and suggestions. Expert validation was conducted to determine the suitability of the video media for use in the school. The video media validation process was carried out by three validators. The first validator, a subject expert, assessed the material aspects of the media. The second validator, a media expert, assessed media aspects such as visual and audio quality. The third validator, a language expert, assessed language aspects such as clear wording, correct sentence structure, and appropriate terminology.

This animated video learning media was tested on 22 students in class VIII A of Madrasah Tsanawiyah Suli, Luwu Regency, South Sulawesi Province. Before the product was used by the students, the researcher prepared it for classroom use and distributed a questionnaire to assess the animated video media. The researcher used a laptop and LCD screen to display the animated video media, and the students followed the researcher's instructions. After displaying the animated video media, students were interviewed and asked to complete a 16-item questionnaire. The results of the teacher and student questionnaires were analyzed. The average score from student responses was 91.43%, categorized as "very good"; in contrast, the analysis of teacher responses to the animated video learning media yielded a score of 95.45%, also rated as "very good."

Effectiveness indicates that the Powtoon animated video successfully met their need for engaging and easy-to-understand learning media (Suprianti, 2020; Rahmawati & Ramadan, 2021; Ardaningsih & Adnyayanti, 2022; Barbara & Bayu, 2022). The engaging visuals and clear presentation of the material were key factors contributing to increased student motivation. This aligns with the principle that interactive visual-audio media can increase learning interest and facilitate the understanding of abstract concepts (Pasaribu et al., 2025). Teachers also confirmed that the video was an effective teaching tool. Teachers found it helpful in conveying material that is traditionally considered difficult to explain verbally. Overall, the Powtoon animated video was well-received by both teachers and students as a relevant and beneficial innovation in increasing student motivation for the Hajj and Umrah topics.

As a research implication, this medium serves as an excellent instrument for educators in communicating intricate content. Educators can utilize animated videos created with the Powtoon application as a pedagogical tool to enhance student engagement and comprehension of Hajj and Umrah content. This study aims to enhance the quality of education in junior high schools through the utilization of animated videos created with the Powtoon application as a pedagogical tool.

4. CONCLUSION

In the development of fiqh learning media using animated videos based on the Powtoon application, the material for the Hajj and Umrah was developed using the ADDIE model, which consists of five stages. The feasibility of Islamic jurisprudence learning media using animated videos based on the Powtoon application for Hajj and Umrah material was assessed by several experts: material experts (81.81%) with a very valid rating, media experts (97.5%) with a very valid rating, and language experts (75%) with a valid rating. The development of Islamic jurisprudence learning media using animated videos based on the Powtoon application for Hajj and Umrah material showed that the product developed had a very satisfactory level of practicality, with results of 95.45% and 91.43%. The development of animated videos based on Powtoon for Hajj and Umrah material has proven effective because it increases learning motivation and facilitates students' understanding of things that are invisible or difficult to imagine through attractive visual displays and clear presentation of material.

As a suggestion, this media is also an effective tool for teachers in conveying complex material. Teachers can use animated videos based on the Powtoon application as a learning medium to increase student engagement and understanding of the Hajj and Umrah material. This research can help improve the quality of learning in junior high schools by using animated videos based on the Powtoon application as a learning medium. Further research can be conducted to develop animated videos based on the Powtoon application for other materials in junior high schools, such as religion, history, or language. Additionally, further research could focus on creating a more effective tool to assess students' understanding of the Hajj and Umrah material after they have used animated videos created with the Powtoon application.

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