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Article

Development of Berkah Application Learning Media in Improving the Analytical Thinking Ability of Class IX Students of SMP Negeri 1 Kebonsari Madiun

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ABSTRACT

The era of globalization is closely related to the development of science and technology. The development of technology can be utilized in terms of teaching and learning activities to make them more effective and efficient through learning media. This research aims to develop application-based learning media called Berkah in an effort to improve the analytical thinking skills of class IX students at SMP Negeri 1 Kebonsari Madiun. The background of this research is based on the importance of developing interactive learning media that suits students' needs in the digital era. The research method used is Research and Development (R&D) using the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development model approach. The research subjects were 33 students of class IX A and IX B . The results of the research showed that the Berkah application was able to significantly improve students' analytical thinking skills. This media not only strengthens understanding of concepts, but also helps students solve problems logically and structured. This media is very effective in improving students' analytical thinking skills based on the Paired Sample T-Test test results of 0.000 and the N Gain test results of 0,3651. The Berkah application was declared suitable for use as a learning medium to support teaching and learning activities in schools based on an average student response score of 93 in the very good category. It is hoped that these findings can be an innovative solution in learning and have a positive impact on student academic achievement, especially in subjects that require analytical skills.

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INTRODUCTION

The learning process lasts throughout a person's life and can occur anywhere and at any time (Djamaluddin, 2019). In the educational context, learning is a process of interaction between students and educators and learning resources in a conducive learning environment

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(Ubabuddin, 2019). In the current digital era, the use of technology-based learning media such as applications is very important to increase student engagement and understanding. One of the Islamic Religious Education materials that requires a contextual approach is the Qurban material. This material not only teaches ritual aspects but also social values, sacrifice and empathy which are pallicative in everyday life (Mukhtari, 2023).

Islamic Religious Education at SMP Negeri 1 Kebonsari has an important role in shaping students' character and understanding of Islamic religious teachings. The Berkah application developed regarding Qurban metrics is relevant because this school has a vision to improve the quality of education based on religious values. Meanwhile, students in class IX are at an important phase in developing critical and analytical thinking skills. Islamic Religious Education Teachers need to master various modern learning methods to support students' achievement of competency in analytical thinking and better understanding of Islamic values (Aji et al., 2024).

This research is actually important because the development of application-based media can provide interactive and more interesting learning alternatives for students. .(Mustaqim & Kurniawan, 2017) Based on cognitive theory, the use of digital media in learning can facilitate better understanding in a visual and interactive way (Wahyudi et al., 2023). The Berkah application is expected to improve students' analytical thinking skills in understanding Qurban material by linking theoretical concepts with real applications in their daily lives. The indicators measured in this research are students' analytical thinking skills which include understanding the concept of Qurban, relating it to social values and daily life, and being able to identify problems and provide solutions related to the implementation of Qurban in society. Previous research shows that the use of application-based learning media can increase student involvement and provide significant results in terms of increasing understanding of the material (Faturrokhman, 2024). Several studies related to interactive media in the field of Islamic religious education also show that students understand abstract concepts more easily when assisted. by digital visualization and simulation (Cahya et al., 2023).

The use of smartphone applications as an interactive learning medium has now become a strategic alternative to face the challenges of modern education (Budiana, 2019). One digital-based application that supports teaching Qurban material is Berkah, which has great potential to increase student involvement in learning (AJ & Yunikawati, 2022). This application utilizes technology that is familiar to students' daily lives, making it the right means to convey important concepts in Qurban material (Indarti et al., 2024). In it, students will be faced with a simulation of a dilemma or social conflict situation that contains religious values, so that they can analyze, evaluate and make choices more critically based on the learning they have obtained. This application is designed so that students can understand Qurban as more than just worship; they are invited to explore the meaning behind sacrifice and social care through various interactive challenges. The Berkah app presents cases that require analytical assessment, facilitating students to see the impact and consequences of the choices they make. By using this application, students not only learn to understand theory but are also exposed to real practice in situations relevant to their social world, which directly trains analytical thinking skills (Jakarsih, 2024).

Initial observation results at SMP Negeri 1 Kebonsari show that learning about Qurban material is still conventional with teachers more likely to use the lecture method and less use of technology. Students tend to be passive and less involved in the learning process so that their understanding of the concept of Qurban is still limited to theoretical aspects. So far, the method applied is a simple lecture and discussion method. However, this method has not been able to accommodate students' needs for analytical and critical thinking, and there is still minimal use of interactive media that can facilitate more meaningful learning (Joyo et al., 2020). Based on initial observations, there is an urgent need for the development of application-based learning

media which can increase student involvement and understanding (Kaltsum et al., 2024). Interactive learning media, such as the Berkah application, can help students understand the concept of Qurban better and develop students' analytical thinking skills (Furqan et al., 2015).

The blessing application is offered as a solution to bridge the gap between conventional learning methods and students' needs in understanding Qurban material. This application presents interactive, visual and problem-based content that will motivate students to be more active in learning and think analytically. The development of this blessing application-based learning media aims to improve the analytical thinking skills of class IX students at SMP Negeri 1 Kebonsari in understanding Qurban material. This development research will involve application testing, evaluation, effectiveness and application in a learning context to see improvements in students' thinking abilities.

METHODS

This research uses an R&D (Research and Development) approach which aims to identify user needs, then followed by a development stage to create a product and test the efficiency and effectiveness of the product. According to Borg and Gall, development research is an effort to design and validate products used in the learning process by creating new products or even answering a problem (M.D., 1983). Development research in the field of education is a type of research that aims to create learning products whose process starts from needs analysis, followed by product development, evaluation, revision, and distribution of the product (Purnama, 2013). In this research, it refers to the ADDIE research model, namely Analysis, Design, Development, Implementation, and Evaluation. The R&D approach was chosen in this research because it aims to produce products in the form of interactive learning media for the subjects of Islamic Religious Education and Character. Data collection in this educational application learning media research was taken at SMP Negeri 1 Kebonsari Madiun which was carried out in October 2024. With a class IX student population of 175 students. The subjects of this research were class IX B students as a group class with 10 students and class IX A as a field test class with 23 students.

The data that will be collected in this research is quantitative data, namely the main research data in the form of student research data about the Berkah application learning media. The instruments in the research are questionnaires and tests. The questionnaire is used to obtain data on assessing the quality of media suitability developed according to media experts, material experts and students. The questionnaire given to students used a Likert scale with 5 alternative answers with categories 1 being poor to 5 being very good. The indicators used to measure the quality and enrichment of the Berkah application learning media are (1) objectives, (2) materials, (3) usage, and (4) success. The data analysis technique is carried out by creating a percentage value for each indicator to see the comparison of the assessment results for each aspect with the expected feasibility. Eligibility percentage (%) = (number of scores obtained)/(maximum number of scores) x 100.

Then the tests that will be given consist of two types, namely pre-test and post-test. Pre-test is an activity to test students' understanding of the material to be taught. The pre-test is carried out before learning activities are given. The post-test is an activity of testing and asking questions after the lesson material has been presented. Tests are used to determine student learning outcomes before and after receiving different learning models.

The pre-test and post-test data analysis technique uses the N-Gain test and the Paired Sample T-Test statistical test. The condition for passing the hypothesis test must be tested for normality. Data can be said to be normally distributed if $p>0.05$.

RESULTS AND DISCUSSION

Development research can be interpreted as the process of creating new applications or improving existing applications. In this context, the development carried out was the creation of an application, namely the Berkah application, which was initially designed to support conventional learning activities with books but was later developed into an application, so that it has fundamental differences from learning materials in general.

Before entering the application creation stage, it is necessary to first analyze the needs and characteristics of users, especially students. This Berkah application was developed because the existing learning activities were deemed not to be able to fully support students' analytical thinking abilities, with the teacher's explanations still being conventional using the lecture method so that they were not able to improve their competence. Thus, it is necessary to develop applications that are able to involve students more actively through critical and analytical-based activities designed according to their characteristics.

The characteristics of the main users of this application, namely junior high school students, are generally able to think abstractly and idealistically. They are able to process information related to objects, principles and concepts that cannot be seen physically. Therefore, the Berkah application was developed with an approach that is able to accommodate abstract thinking abilities, so that it can encourage students to develop critical and analytical thinking skills. The development of the Berkah application learning media to improve students' analytical thinking skills follows the ADDIE development model with the stages of Analysis, Design, Development, Implementation and Evaluation. This research only reached the implementation stage. The implementation of the entire research development procedure in detail can be seen in the following description.

RESULT

1. Analysis Stage

Based on observations that have been made, the majority of class IX students at SMP Negeri 1 Kebonsari experience boredom in learning activities because many teachers still use conventional teaching methods in the form of lectures. With the use of application-based learning media, this is a new breakthrough and is certainly interesting in increasing student interest and learning outcomes. The Berkah application is considered an interesting learning medium because it seems practical and dynamic. Competency and instructional analysis relates to Competency Standards and Basic Competencies which will be included in learning media. The Competency Standards (SK) that are studied are Receiving Orders for Qurbani and Aqiqah, with the material indicators that will be explained are as follows: (1) slaughtering in Islamic teachings, (2) provisions for slaughtering, (3) provisions for the slaughtering process, (4)) procedures for slaughtering animals, and (5) benefits of slaughtering animals**.**

2. Design Stage

a. Creating Media Design

Media design is an overall picture of the Berkah application learning media that will be operated, so it can be used as a guide to simplify the media creation process.

b. Determining Material

The subject of Islamic Religious Education and Morals (PAI BP) with Qurban material was chosen because it was in accordance with the researcher's competence. Then there are difficulties in using media, especially for teachers who still use conventional methods such as lectures in learning activities. The Qurban material was chosen because of its high level of complexity, so it is necessary to have a practical and interactive learning media.

c. Compiling Practice Questions and Answers

The practice questions that will be created in this media are practice questions in which there is an assessment instrument for analytical thinking for students using a multiple choice model. The material that will be tested is related to slaughter in Islamic teachings, provisions for slaughter, provisions for the slaughter process, procedures for slaughtering animals, and the benefits of slaughtering animals. The preparation of material, questions and discussions in this media is made from textbook references.

d. Examining Subjects

Competency Standards (SK) Receiving orders for qurban and aqiqah with Basic Competencies (KD) explaining the meaning and provisions of Qurban in accordance with the curriculum guidelines in force at SMP Negeri 1 Kebonsari Madiun, namely the Merdeka Curriculum

e. Collect Backgrounds, Images, Fonts, etc.

Some of the backgrounds, images, fonts, etc. displayed in the media were designed by the researchers themselves. Combining images into an attractive display is downloaded from various sources. The collection of backgrounds, images, fonts, etc. are mostly downloaded from the Google Image page. Creating and combining images is done with the help of Canva and Pinterest. Images in jpg, png, and gif formats are combined and combined to produce an attractive appearance.

3. Development Stage

This media was created using hardware in the form of a laptop with 2133 GB SSD hard disk specifications, 4 G RAM, and the Windows 10 Pro operating system. All components that have been prepared in the design stage are then assembled and combined into one unit using the Smart Apps Creator (SAC) application according to the storyboard that has been created.

The first step is to create a simple loading screen with a combination of background, images and icons. There is a green home button that will connect to the application menu.

Figure 1. *Loading Screen*

Figure 2. *Loading Screen*

In the Berkah application there are several features, namely materials, videos and quiz. First, the material features are presented as shown in Figure 3. and Figure 4.

Figure 3. Menu

Figure 4. Material

The material feature presents a design that provides easy access for students to structured and interactive teaching materials. The material will be explained are as follows: (1) slaughtering in Islamic teachings, (2) provisions for slaughtering, (3) provisions for the slaughtering process, (4)) procedures for slaughtering animals, and (5) benefits of slaughtering animals**.** Learning material is actually a collection of information, concepts, skills and knowledge that are arranged systematically to be used in the learning process. This material is designed to achieve specific educational goals and is presented in various forms, such as text, images, videos, graphics and interactive activities so that it can meet students' learning needs. Learning materials function as a guide for students in understanding certain topics and assist teachers in delivering lessons in a structured and effective way.

Students who have analytical thinking skills and abilities can present conclusions based on the information obtained. Therefore the video features are presented as shown in Figure 5.

Figure 5. Video

The video feature in learning media applications is a component that allows the presentation of material in visual and audio form interactively. The video contains the history of Qurban and procedures for slaughtering Qurban. This feature is used to clarify concepts, present demonstrations, or provide more in-depth explanations. With videos, students can learn independently, understand the material more easily, and access explanations repeatedly as needed, which improves their learning experience and involvement in the learning process.

the quizziz feature was created as in Figure 6.

Figure 6. Quiz

The Quiz feature in the Berkah learning application is an interactive component designed to measure students' understanding and analytical abilities of the material they have studied. This feature presents a series of questions in multiple choice form arranged progressively to challenge students' analytical thinking. Analytical thinking skills can develop because students are trained to answer problems through questions presented in quizzes that are adapted to analytical thinking assessment instruments (differentiating, organizing and attributing). The quiz feature is also supported by automatic feedback, where each answer given by students will be accompanied by an explanation or justification. The main purpose of this feature is to provide immediate feedback, motivate students to think more critically, and help them identify and correct errors in understanding the concepts being studied

4. Implementation Stage

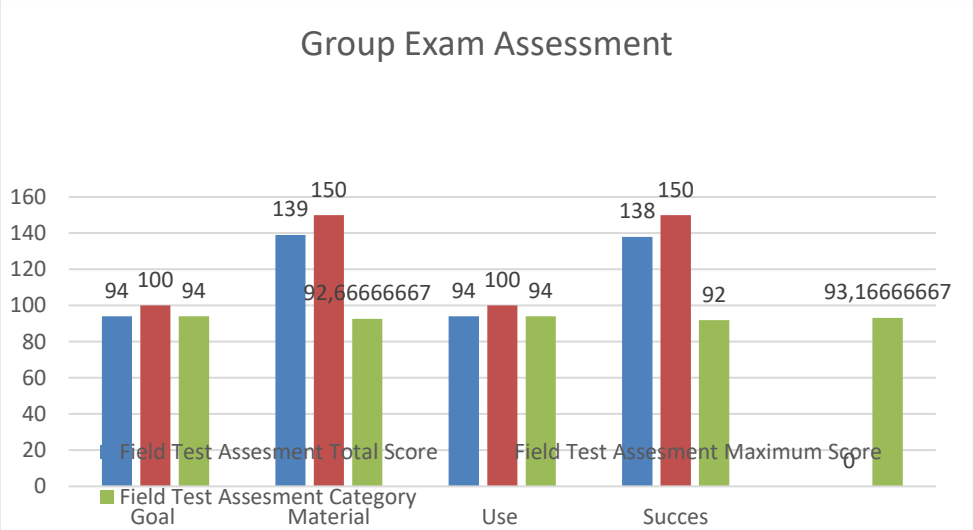
The trial of developing learning media for the blessing application in improving students' analytical thinking skills was carried out at SMP Negeri 1 Kebonsari with a class IX student population of 175 students. The subjects of this research were class IX B students as a group class with 10 students and class IX A as a field test class with 23 students. The results of student responses regarding the implementation of the development of the blessing application learning media can be seen in Table 1 and Table 2.

Tabel 1. Group Trial

Aspect of Group Test Assesment	Total Score	Score Max	Category
Golas	94	100	94
Material	139	150	92.66667
Usage	94	100	94
Succes	138	150	92
		Average	93.16667

Based on the table above, the results of the accumulated percentages given to 10 students who had filled out the response questionnaire as a trial showed a percentage of 94% for the goal category, 92.6% for the material aspect, 94% for the use aspect and 92% for the success aspect.

. Based on these four aspects, it can be seen that the average per aspect is 91.16% with very good criteria. The percentage results above show the very good category so that learning media is implemented. Apart from tables, researchers also present this small group trial in graphical form. It can be seen below in Graph 1.



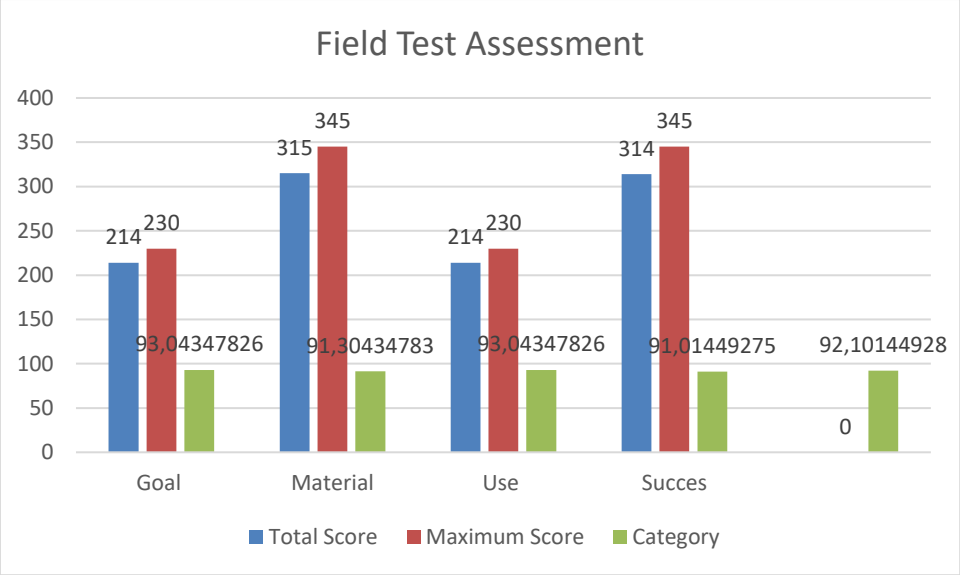
Graph 1. Group Trial

Next, there was a field trial conducted in class IX A with a sample size of 23 students. The steps are the same as for small group trials, namely by giving students a response questionnaire to the media in the form of the Berkah application which then students fill out. The following is the accumulated percentage obtained from the questionnaire given, which can be seen in Table 2 below

Tabel 2. Field Trials

Field Test Assesment Aspects	Total Score	Score Max	Category
Goals	214	230	93.04348
Material	315	345	91.30435
Usage	214	230	93.04348
Succes	314	345	91.01449
		Average	92.10145

Based on the table above, the results of the accumulated percentage of field trials obtained at the Kebonsari 1 Public Middle School. The percentage of this quality assessment aspect was found to be 93%, material 91%, use 93% and success 91%. Then the average percentage value obtained from these three aspects was 92% in the very good category. The percentage results above show the very good category so that learning media is implemented Apart from tables, researchers also present this field trial in graphical form. It can be seen below in Graph 2.



Graph 2. Field Test Assesment

Based on the table above, it can be seen that the feasibility of the Berkah application learning media from the results of the questionnaire filled out by students was declared very good with answers of 93% from 33 students.

5. Evaluating Stage

Effectiveness data was obtained from analytical thinking assessment instrument tests in group classes in the form of pre-test and post-test and field classes in the form of pre-test and post-test. The students' pre-test and post-test results were analyzed using the data normality test with Kolmogorov Smirnov, then tested with paired sample t-tests and finally with the N-Gain test. The results can be seen in the table below:

Group tets

Normality Test

Tabel 3. Normality Test Kolmogorov-Smirnov

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
PreTest	Eksperimen	.200	10	.200*	.953	10	.703
PostTest	Eksperimen	.172	10	.200*	.917	10	.330

*. This is a lower bound of the true significance.

Based on the results of the normality test with Kolmogorov Smirnov in Table 3, the results obtained were for the group experimental pre-test with statistics of 0.200 with a df of 10 and a significant value of 0.200. The Shapiro-Wilk statistic is 0.953 with a significance of 0.703. Meanwhile, for the group post-test, the statistic was 0.172 with a df of 10 and a significance of 0.200. The Shapiro-Wilk statistic is 0.917 with a significance of 0.330. So it

can be concluded that the data in the PreTest and PostTest Experiments are normally distributed.

Paired T-Test

Tabel 4. Paired Sample T-Test

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pre Test – PostTest	-21.000	7.379	2.333	-26.278	-15.722	-9.000	9	.000

Table 4 displays the results of the Paired Sample T-Test with an average difference between the Experimental PreTest and PostTest of -21,000. With t (t value) -9.000, df 9, and significant value (2-tailed) 0.000, which shows a significant difference. Thus, it can be concluded that there was a significant increase in the PostTest results after the treatment was given. In this way, learning media can be used effectively because there are significant differences.

N-Gain Test

Tabel 5. N-Gain Test

Descriptives

	Kelompok		Statistic	Std. Error
PreTest	Eksperimen	Mean	50.00	3.651
		95% Confidence Interval for Mean Lower Bound	41.74	
		Upper Bound	58.26	
		5% Trimmed Mean	50.00	
		Median	50.00	
		Variance	133.333	
		Std. Deviation	11.547	

	Minimum	30	
	Maximum	70	
	Range	40	
	Interquartile Range	20	
	Skewness	.000	.687
	Kurtosis	.080	1.334
PostTest Eksperimen	Mean	71.00	4.583
	95% Confidence Interval for Mean Lower Bound	60.63	
	95% Confidence Interval for Mean Upper Bound	81.37	
	5% Trimmed Mean	71.11	
	Median	70.00	
	Variance	210.000	
	Std. Deviation	14.491	
	Minimum	50	
	Maximum	90	
	Range	40	
	Interquartile Range	25	
	Skewness	-.214	.687
	Kurtosis	-.987	1.334
NGain_Persen Eksperimen	Mean	44.6905	6.13837
	95% Confidence Interval for Mean Lower Bound	30.8045	
	95% Confidence Interval for Mean Upper Bound	58.5764	
	5% Trimmed Mean	44.5635	
	Median	45.0000	
	Variance	376.796	
	Std. Deviation	19.41123	
	Minimum	16.67	
	Maximum	75.00	
	Range	58.33	

	Interquartile Range	35.24	
	Skewness	.017	.687
	Kurtosis	-.972	1.334

Table 5 shows the results of the N-Gain test with an Experimental PreTest mean of 50.00 and an Experimental PostTest mean of 71.00. N-Gain Percent in the Experiment has a mean of 44.6905, with a minimum value of 16.67 and a maximum value of 75.00. Thus, it can be concluded that there was a significant increase in learning outcomes after treatment, although the variation in improvement between participants was quite diverse. In this way, learning media can be used effectively because there are significant differences.

Field Test

Normality Test

Tabel 6. Normality Test Kolmogorov Smirnov

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Pre Test	Uji Lapangan	.174	23	.069	.916	23	.054
Post Test	Uji Lapangan	.160	23	.133	.934	23	.134

a. Lilliefors Significance Correction

Based on the normality test results shown in Table 6, the PreTest and PostTest data in the Field Test are normally distributed. This is indicated by the significant Kolmogorov-Smirnov value for the PreTest of 0.069 and PostTest of 0.133, as well as the significant Shapiro-Wilk value for the PreTest of 0.054 and PostTest of 0.134. All significant values were above 0.05, indicating that the data did not differ significantly from a normal distribution. Thus, the normality assumption is met for the PreTest and PostTest data in the Field Test.

Paired Sample T-Test

Tabel 7. Paired T-Test

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference: Lower	Upper			

Pair 1	Pre Test - Post Test	-28.696	4.577	.954	-30.675	-26.716	-30.068	22	.000

Based on the Paired T-Test test results shown in Table 7, there is a significant difference between the PreTest and PostTest scores in the Field Test. The average difference of -28.696 shows a significant increase in the PostTest score compared to the PreTest. The t value of -30.068 with degrees of freedom (df) 22 and a significance value of 0.000 (less than 0.05) confirms that this difference is statistically significant. Thus, it can be concluded that the treatment given has succeeded in significantly improving the participants' learning outcomes in the Field Test.

N-Gain Test

Tabel 8. N-Gain Test

Descriptives

	Kelompok			Statistic	Std. Error
NGain_Persen	Uji Lapangan	Mean		62.0704	4.55273
		95% Confidence Interval for Mean	Lower Bound	52.6286	
			Upper Bound	71.5122	
		5% Trimmed Mean		61.7897	
		Median		60.0000	
		Variance		476.729	
		Std. Deviation		21.83412	
		Minimum		28.57	
		Maximum		100.00	
		Range		71.43	
		Interquartile Range		25.00	
		Skewness		.622	.481
		Kurtosis		-.574	.935
Pre Test	Uji Lapangan	Mean		50.00	2.667
		95% Confidence Interval for Mean	Lower Bound	44.47	

			Upper Bound	55.53	
		5% Trimmed Mean		50.00	
		Median		50.00	
		Variance		163.636	
		Std. Deviation		12.792	
		Minimum		30	
		Maximum		70	
		Range		40	
		Interquartile Range		20	
		Skewness		.000	.481
		Kurtosis		-1.048	.935
Post Test	Uji Lapangan	Mean		78.70	3.035
		95% Confidence Interval for Mean	Lower Bound	72.40	
			Upper Bound	84.99	
		5% Trimmed Mean		79.03	
		Median		80.00	
		Variance		211.858	
		Std. Deviation		14.555	
		Minimum		50	
		Maximum		100	
		Range		50	
		Interquartile Range		20	
		Skewness		-.044	.481
		Kurtosis		-.837	.935

Based on the N-Gain test results shown in Table 8, the average N-Gain Percent in the Field Test was 62.0704, which shows a good improvement in learning outcomes. The minimum N-Gain value of 28.57 and the maximum value of 100.00 indicates variation in improvement between participants. With a relatively high average N-Gain, it can be concluded that the treatment given in the Field Test succeeded in significantly improving participant learning outcomes.

Based on the table above, it can be seen that the feasibility of the Berkah application learning media from the results of the questionnaire filled out by students was declared very good with answers of 93% from 33 students. This is reinforced by the table which states that there is a level of student understanding which is reflected in the student learning outcomes,

the Paired Sample T-Test test results are 0.000 and the N Gain test results are 3.651. It can be concluded that there is a significant increase in learning outcomes after treatment, although the variation in improvement between participants is quite diverse.

DISCUSSION

The final result of this media is in the form of a multimedia application, namely the Berkah application which is used for Android smartphones with material about carrying out sacrifices. This application is a learning medium that contains material and practice questions. The material is made based on SK (Competency Standards) and KD (Basic Competencies) contained in the Curriculum for Islamic Religious Education and Character Education subjects at SMP Negeri 1 Kebonsari Madiun. This media was designed with the help of the SAC (Smart Apps Creator) application. By combining various backgrounds, images, icons and colors, this interactive application can be created. This Berkah application has several advantages and disadvantages as a learning medium. The advantages include; (1) the Berkah application is a learning medium for Islamic Religious Education and Character with Qurban material presented on a smartphone which is quite easy to use with attractive image displays; (2) the Berkah application is a learning medium for Islamic Religious Education and Character that is dynamic, practical and economical. It is cheap to operate and easy to carry and can be used anytime and anywhere; and (3) the Berkah application is the latest innovation in PAI learning media for Qurban material using smartphone technology. This application has the potential to be developed in accordance with developments in science and technology.

In the implementation of learning media, the results are obtained from the student response questionnaire sheet. In the student response questionnaire during the group test on the usage aspect, the score was 94%, but the average percentage of implementation of learning media was 93% in the very good category, although it had decreased, it was still in the good category. The increase in the implementation of learning media is influenced by the response of students and the educators themselves. Responses can be interpreted as results or impressions obtained from observations of subjects, events, or relationships, obtained through inferring information and interpreting messages (Rahmat, 1999). Using interesting learning media can stimulate students to carry out learning activities independently and actively (Junaidi, 2019). So that using learning media can provide the same experience for every student (Wulandari et al., 2023).

For effectiveness, researchers carried out two stages of testing to ensure the effectiveness of the learning media used. Before carrying out an effectiveness test, prerequisite tests and hypothesis tests must be carried out. The prerequisite test carried out is the normality test. In the group test, the normality test produces normal data so that parametric tests can be carried out to test the hypothesis. The parametric test used is the paired T test. The Paired Test produces a significance of 0.000. These results show that the accepted hypothesis is that there is a significant difference in average scores between before and after using educational application learning media. Once the differences are known, the effectiveness will be tested using N Gain to determine the level of effectiveness of the learning media. In the N Gain test there is an average result of 0.3651. With this average, the level of effectiveness of learning media is categorized as medium. The average value of N Gain is said to be in the medium category because based on the interpretation of the N Gain value of 0.3, the effectiveness of learning has certain criteria as measured by student learning outcomes, student responses, and implementation of learning. Student learning outcomes will indicate that the use of learning media in the form of educational applications is effective if there is an increase in learning outcomes, with the average student category being at least at a sufficient level (Rosmana et al., 2023).

Disadvantages of this media include; (1) the material presented in the Berkah application is limited to material for the implementation of the Qurbani service only; (2) the ease of use of the application is very dependent on the type of smartphone and the user's skills; and (3) the application's storage capacity is very large due to the many photo and video features in the application.

The Berkah application is different from applications and books in general because the learning basis of the Berkah application which has been researched can improve students' analytical thinking skills. The author lists the principles of the Berkah application in the form of unique features. The features in question are materials, videos and quizzes. The creation of these features is based on a statement stating that analytical thinking skills can develop because students are trained to think analytically to solve problems by collecting, analyzing and processing information systematically. Analyzing is the skill of breaking down material (information) into important parts, identifying relationships between parts, and observing the systems that make up these parts (Kusnawa, 2014).This analytical ability also includes solving unusual problems, finding relationship patterns, proving concept, formulate, and ensure the truth of a generalization (Ruseffendi, 2006). Educational goals related to analysis include the process of learning to identify relevant or important pieces of information (differentiating), determining ways to arrange that information (organizing), and understanding the purpose behind the information (attributed) (Anderson, 2015). Differentiating here means that students can sort out the important parts of the problem and can sort out the relevant parts of the problem. Meanwhile, organizing here means that after students identify the important part of the problem, they get complete information to solve the problem, then they can build a strategy to solve the problem. The last one is providing attributes, namely providing goals or conclusions from the results of solving the problem.

The involvement of analytical thinking in learning media has a significant influence on learning outcomes and knowledge (Furqan et al., 2015).The application of analytical thinking models can improve critical thinking skills (Fadholi et al., 2023). Based on this statement, media is needed learning that contains material to shape students' analytical and critical thinking. Critical and analytical thinking skills can develop well if students are able to interpret concepts and theories well (Rahardian, 2022). Analytical thinking skills can develop because students are trained to answer problems through questions presented in quizzes that are adapted to analytical thinking assessment instruments (differentiating, organizing and attributing) (Mahyastuti et al., 2020).

Based on the results obtained in each practical aspect, it can be seen that the Berkah application is able to provide interest and enthusiasm for students to learn, the Berkah application is also able to present material that is in line with students' expectations and needs, apart from that the Berkah application can provide convenience for readers by making it easier for students to learn. , read, and understand the material in terms of shape, letter size, word order, and instructions in the application.

The Berkah application can provide interest in the sense of motivating students to learn with interesting media so that they can participate in learning activities with students being able to answer questions. Apart from that, the Berkah application can attract students' attention by listening to all the content in it such as materials, videos and quizzes. Students' enthusiasm for learning is shown by the ability to focus attention by listening and paying close attention to what is instructed before the learning activity begins and when operating the application (Intaniasari & Utami, 2022).

Effective learning media are tools or methods designed to convey material in an interesting, interactive and easy to understand way for students, so as to increase their understanding and interest in learning. Effective learning media has several important characteristics, such as relevance to learning objectives, the ability to facilitate active

involvement of students, and flexibility in its use in various classroom situations (Titin et al., 2023). This media can be in the form of books, videos, interactive simulations , or digital applications that allow students to access material in a more practical and varied way. Apart from that, effective learning media must also be able to accommodate various student learning styles, both visual, auditory and kinesthetic, so that each student can achieve optimal learning outcomes (Nurbadiyah et al., 2024). By utilizing the right media, teachers can creating a more interesting and conducive learning atmosphere, which ultimately encourages students' critical thinking skills and learning independence.

Analytical thinking in developing learning media is actually the ability to critically analyze student needs and learning objectives and formulate effective and appropriate delivery methods. Analytical thinking helps media developers to consider various aspects, such as content structure, visual choices, interactivity, and ways of presenting information that can attract students' attention and facilitate their understanding (Idris & Suhendi, 2023).In addition, with an analytical approach, developers can assess the advantages and disadvantages of the media to be used, ensuring that the media supports optimal student engagement and allows for effective learning evaluation (Wibowo, 2016).Thus, analytical thinking not only helps in producing quality media, but also in creating a good learning experience deep and meaningful for students.

The implementation of effective learning media is characterized by the media's ability to facilitate optimal achievement of learning objectives (Setyosari, 2014). Effective learning media is able to attract students' interest and attention, facilitate understanding of the material, and increase interaction and active involvement in the learning process (Nurfadhillah et al., 2021). The effectiveness of learning media also depends on the suitability between the content presented and the needs and characteristics of students, as well as ease of access which allows learning to take place in various conditions. In addition, effective media is usually supported by continuous evaluation and feedback, so that it can be adjusted and improved continuously according to technological developments and learning needs. This shows that the Berkah application learning media helps improve students' analytical thinking skills about Qurban material with activities that train students to differentiate, organize and attributing.

Presenting text material combined with images, graphics, video and sound will help students in navigating, interacting, creating and communicating (Fauziyyah et al., 2023). Besides that, The presentation of creative and interactive multimedia learning media will attract interest and motivation student learning. With an integrated system in smartphones, the operation of learning media Smart Apps Creator (SAC) will be more dynamic, meaning it can be accessed anytime and anywhere (Wahyuningtyas & Okimustava, 2023).

CONCLUSION

Based on research, the development of the Berkah application as a digital-based learning media has proven to be effective in improving the analytical thinking skills of class IX students at SMP Negeri 1 Kebonsari Madiun. This application provides interactive material, video features, and quizzes that support students' understanding of the concept of Qurban, both from a theoretical perspective and application in everyday life. The results of the effectiveness test show a significant increase in analytical thinking skills, which is reflected in a significant increase in the average post-test score and N-Gain test results. This application also received positive responses from students with an average rating of very good, indicating that the Berkah application is suitable for use as an innovative learning media that can support the teaching and learning process more interactively and meaningfully in the digital era. This research concludes that the Berkah application provides an innovative solution in learning Islamic Religious Education, especially Qurban material, and has a positive impact on students' academic achievement and their analytical thinking skills.

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