Android-Based Islamic Religious Education Learning Media Application Design Body Removal Materials For Class Xi High School Students

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Article Information:	ABSTRACT
	Currently, there are many technology learning media that can be used by teachers, one of which is android media. Android media has not been widely used in high school / ma corpse starters. With android media, monotonous corpse novice learning will be effective and become a special attraction for students.This study aims to 1) find out how research and development are carried out for technological developments that require developments in educational methods. 2) To know how to cope with the large number of students who are less interested in monotonous classroom learning. This research is a development research using the ADDIE development model which consists of 5 stages, but in this developer the researcher uses only 4 stages, namely analysis, design, development, and implementation. Data collection instruments in the form of questionnaires, observations / tests of learning outcomes. The results showed: 1) Producing android media products that are attractive, technology-based and in accordance with the needs of students in the development of this era. 2) The product is developed through First, needs analysis. Second, designing learning media with storyboards, thirdly developing android media then validating material experts, media, and teachers. The fourth is the implementation of the teacher in the classroom.

INTRODUCTION

A. civilization can be said to be advanced if its information and communication technology can develop well. An advancement in information and communication technology

that can have an impact in every line of life is not even something strange anymore for the human community. The role of information and communication technology in today's era plays a crucial role in life, including in. industrial, economic, social, cultural, geography, education and so on.(Mulyanta & Leong, 2013, hlm. 110)

A new innovation in the field of education with the birth of the concept of electronic learning (e-learning), the emergence of which was caused by the development of information and communication technology. As time goes by, the concept of e-learning turns out to have weaknesses. One of the weaknesses of e-learning is limited space for students(Abas, 2018; Abramova, 2023; Abuhmaid & Abood, 2020), so a new innovation called M-learning has emerged. M-learning or what is known as mobile learning is able to provide opportunities for broader learning without being limited by space and time for students. This can make students free to learn and encourage them to be more active.

Therefore, to realize quality education, one thing that must be there are educators who have good competencies (Abdollahi dkk., 2020; Alabdulaziz, 2021; Chen, 2021). Quality educators are teachers who have the ability to realize national education, namely pedagogical competence, personality competence, social competence and professional competence. Pedagogical competence encourages a teacher to have the ability to use ICT-based media, which is something that a teacher absolutely must have. Using ICT-based learning media will determine the level of efficiency and effectiveness in the learning process. In order for this to work well, there needs to be training and introduction to the use of this media (Ahn, 2020; Cerone & Zhexenbayeva, 2018; Tuna dkk., 2022), both for educators and students. Don't let using ICT-based learning media create new problems in the learning itself so that the function of the media in the learning process does not exist.(Hari Rayanto & Sugianti, 2020, hlm. 101)

Learning Islamic Religious Education often experiences difficulties in innovating learning media compared to other subjects. This is also what is felt by class XI high school students. The existing learning media is only monotonous and boring. Even more so when students experience difficulties in the material of corpse disposal. Limited time in learning is not enough to cover all the material, especially with practice (ABDURRAHIM dkk., 2021; Ahmadillah, 2021; Amalia, 2019). So the delivery of corpse exhumation material is verbal which has an impact on students' inability to practice and it is not uncommon for students to play on their cellphones (smartphones) and ignore the learning process. In conditions like this, educators must provide learning media that is able to overcome these problems, so media is needed that is adapted to the conditions of the digital era for students, namely by innovating Android-based learning media (mobile learning) (Ali & Erihadiana, 2021; Alirahman, 2021;

Perez-Riverol, 2022). Because this is also the task of educators who must always try to improve their skills, both in the field they teach and in the way they teach it (Bilani, 2019; Ceriani de Oliveira Gomes, 2022). As it should be, providing learning to students must be adapted to the times, because the conditions of education in the past and today are certainly different.   Based on this background, the researcher is interested in conducting research with the title **'Design of an Android-Based Islamic Religious Education Learning Media Application Material for Mortification of Bodies for Class XI High School Students'**

With the development of this teaching material, it is hoped that students will become more active, less boring, and easier to understand in the learning process, especially in Islamic Religious Education subjects. Which in the end can help in improving learning outcomes so that they are effective in achieving learning goals.

RESEARCH METHODOLOGY
A. Types of Research and Development

The type of research used is research and development. Borg and Gall (1998) state that research and development is a method used to validate and develop products.(Metode Penelitian Kuantitatif Kualitatif dan R&D, 2018, hlm. 65) This research procedure uses the ADDIE development model (Aurich dkk., 2018; Théry dkk., 2018). The purpose of this development research is to determine the feasibility of the product being developed and produce certain products and to determine the effectiveness of the product in improving learning outcomes.

B. Subject of research and development

The subject of this research and development has several elements, namely: The experts referred to in this research are people who are competent in their field to validate research and development carried out by researchers. There are 3 experts who are validators in this research and development, namely as follows:

a) This Material Expert

This material expert consists of one lecturer who is a Practical Worship and Recitation lecturer who will provide an assessment of the content of the teaching materials that have been created. Apart from providing material expert assessments, they also provide suggestions and input.

b) Media Expert

In this case, the multimedia education program teacher. Which consists of one lecturer.

c) Learning Practitioner

In this case, there are two Islamic Religion subject teachers at Babus Salam High School. What is assessed is the content of the material contained in the application and aspects of its presentation. The subjects for testing teaching materials in this research were students in Class XI SMA Babussalam, totaling 10 students.

C. Research and Development Procedures

This research and development procedure refers to the ADDIE instructional media development research design. This research and development method is divided into 4 steps. These steps are analysis, design, development, implementation, and evaluatio. So based on the needs in the research and development process entitled Class XI Android-Based Teaching Material Design, the product development design starts from the first step to the fourth step. Thus the results of this product only reach implementation.

1. Data Collection Techniques

The data collection technique is an important step in a research, because the main purpose in the research is to obtain data, which will then be processed. The data collection techniques used in this research are Quantitative data collection techniques and Qualitative data collection techniques.

a. Quantitative data

This research uses quantitative data in the form of data showing numbers or amounts related to student learning motivation at Babussalam obtained from questionnaire results.

b. Qualitative Data

Qualitative data is obtained from various data collection techniques, such as documentation, interviews, observations, input, responses and suggestions from material experts and learning media design experts as well as teacher teaching materials documents at Babussalam.

2. Data Analysis

To process the development results data, it is necessary to use three data analyses, namely learning content analysis, descriptive analysis and test result analysis.

a. Qualitative Data Analysis

At the trial level, the data collected was obtained from closed and open questionnaires. The qualitative data obtained from the results of observations, suggestions and comments by the validator were analyzed qualitatively descriptively through the level of data collection as revision material for the produced teaching material product.

b. Quantitative Data Analysis

The data obtained from the media development process is then analyzed descriptively and further used to determine the accuracy, effectiveness and attractiveness of a product that has been developed. Data from the validation of material experts, media design experts and learning experts as well as student response questionnaires were analyzed to find out media qualifications.

RESULT AND DISCUSSION
A. Development Results Analyse
1. Analysis of student needs and characteristics

Needs analysis is a basic step in conducting research and development to test and find out what needs will be used in developing learning media products. Needs analysis relates to Core Competencies and Basic Competencies which will be included in learning media. At this stage, it discusses identifying products that are suitable for students, learning objectives, identifying the content of learning material, learning environment and learning strategies. The first thing is done by analyzing Core Competencies and Basic Competencies.

2. Media Needs Analysis

In this stage, researchers can select and design media through media needs analysis. The use of learning media needs analysis is to assist researchers in planning, implementing and following up on learning activities that will be managed by teachers.

a. Design

The steps for developing Android-based learning media in terms of media design begin with creating an Android media storyboard including cover, material title, materials, learning objectives, and so on. Everything from start to

finish will be summarized in a storyboard to make the development process easier and more focused.

b. Development (Pengembangan)

At the development stage, researchers realize the designs that have been created. To create Android-based learning media, there are several stages that are followed as follows:.

1) Product planning stage

At this stage, we begin creating an Android using application software, namely Photoshop. All things related to coloring, providing backgrounds, typesetting, and so on are done at this stage.

2) Appearance Design Stage

One of the important criteria in the first design stage is the appearance design stage, because appearance is a priority for attracting readers. At this stage, layering and structuring the flow with applications using Adobe Animate software.

3) Product manufacturing stage

a) Programming

The next step in creating media in the Adobe Animate software application is by using ActionScript 3.0 s before applying it to Android.

b) Procces compile

So the next step is the final stage of the compilation and rendering process, so that the media will be applied to Android (APK). At this stage, the Android media will be arranged in a coherent manner with various menus appropriate to the part, after that it will be tested on the smartphone. The Compile program stage can be done in the following way:

i. Klik file, kemudian publish setting

ii. Pastikan target adalah AIR 3.2 for Android

iii. Klik icon Setting yang terdapat disebelah Target

iv. klik Tab General, isi sesuai keinginan.

v. Mempublish aplikasi dalam bentuk APK yang bisa di run

di android. Klik Tab Icon, masukkan gambar icon. Setelah memasukkan icon untuk aplikasi, klik Publish, tunggu beberapa saat, aplikasi siap di install di smartphone.

c. Product Validation

Before being tested in the field, validation of the media being developed is required. The purpose of validity is to determine the level of suitability of Android-based learning media that was developed before the media was used generally. The results of this activity are input for improving Android-based learning media.

Product validation was carried out by 2 validators consisting of 1 lecturer at the Faculty of Tarbiyah and Teacher Training, Abditama Scholars University and 1 teacher at Babus Salam High School. Validation data is obtained from an assessment questionnaire given by the validator. Apart from providing an assessment, the validator also provides criticism and suggestions for the development product at the end of the questionnaire. The following are the score criteria used in the validation process: The results of the validity test on Android-based Islamic Religious Education learning media development products are as follows:

1. **Material Expert Trial Data**

   Material expert in the development of learning media,This step was chosen as a way to improve product quality. Material experts give evaluations, comments and suggestions on this learning media. The following will be presented a descriptive display of the results of the material expert's research on this learning media development product which was submitted using the questionnaire questionnaire method.

   a. **Quantitative Data**

      In the material expert questionnaire instrument presented, there are several aspects of assessment including appropriateness of content, appropriateness of presentation and language. Data was obtained from a questionnaire with a Likert scale. Based on

the results of research data, the percentage of validity can be calculated in the following way

$$P = \frac{\Sigma x}{\Sigma x i} \times 100\%$$

$$= \frac{64}{70} \times 100\%$$

$$= 91\ \%$$

Based on the results obtained above, it shows that the percentage of appropriateness for learning media is 91%, which is a valid qualification so that learning media does not need revision. On the Linkert scale, a percentage of 91% is categorized as feasible.

b. Qualitative Data

The following is a presentation of qualitative data obtained from criticism and suggestions by material experts which can be seen in the table. Table attached. Based on qualitative data obtained from criticism and suggestions by learning experts at Pemulasaran Jenazah, the results obtained indicate that Android-based learning media is good.

2. Media Expert Validation Results

a. Quantitative Data

Descriptive presentation of media expert validation results on Android-based learning media development products on corpse disposal material.

$$P = \frac{\Sigma x}{\Sigma x i} \times 100\%$$

$$= \frac{61}{\ \ \ \ } \times 100\%$$

$$70$$

$$= 87 \%$$

Based on the results obtained above, it shows that the percentage of appropriateness for learning media is 87%, which is a valid qualification so that learning media does not need revision. On the Linkert scale, a percentage of 87% is categorized as feasible.

b. Qualitative Data

Qualitative data was obtained from criticism and suggestions on learning media products.Based on qualitative data obtained from criticism and suggestions by media experts the results obtained indicate that Android-based learning media is good.

CONCLUSION

The development of Android-based learning media in the corpse exhumation material for class XI high school students, aims to analyze the characteristics of learning media needs that suit the needs of students. In the development of Android-based learning media, the Corpse Examination material is equipped with learning material and videos that have been adapted to the distribution of Core Competencies and Basic Competencies stated in the 2013 Curriculum.

The process of developing Android-based learning media for Class XI Corpse Examination material in high school. This research uses a 5-stage development model consisting of (1) Analysis Stage, (2) Design Stage, (3) Development Stage, (4) Implementation Stage (5) Evaluation Stage. With the necessary changes, this development research does not go through step 5 due to limited time, costs and energy from researchers.

The development of Android-based learning media was validated by material experts, media experts and learning experts (class teachers) from the research site schools. The validation results from all experts show that the development of Android-based learning media is very suitable for use in class XI SMA Babus Salam. This is proven by validation from learning experts and class learning achievement (measured

from the posttest).

Based on media feasibility tests on material aspects by validators, a percentage of 91% was obtained. The suggestions given to researchers are intended so that the media produced is perfect and meets the objectives. Based on media feasibility tests on media aspects by validators, a percentage of 87% was obtained. From the results of this media test, several criticisms and suggestions were obtained as written abovethe body disposal material teacher assessed that this Android-based learning media was 'very suitable' to use. This is based on an assessment of the questionnaire he filled out. With a percentage of 88%. Based on the media feasibility and user comfort test, students obtained an increase of 27 from the difference between the pretest and posttest averages.

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