

DEVELOPING INTERACTIVE LEARNING MEDIA ANDROID BASED IN TEACHING ENGLISH

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ABSTRACT

This research was conducted to develop Android-based interactive learning media in English Teaching. This study used research and development (R&D) methods with quantitative and qualitative approaches. The model development applied was ADDIE development model : Analysis, Design, Development, Implementation, and Evaluation. The data collection techniques were carried out by observation and questionnaires. This research has produced an android-based interactive learning media and has been tested through learning English in MTs. Nurul Ulum Tikung Lamongan at eighth grade students. The product has also been validated by some experts. The name of this product is "ESEN MEDIA". The mean result of the material aspect assessment is 4.3, the mean result of media expert judgement is 4.3, the mean result of the teacher's assesment is 4.3, those are included in the excellent category.

Keywords: Interactive Learning Media, Android-Based, English Teaching

INTRODUCTION

Language has an important role in our life. English as an international language is increasingly important and even a must for everyone who wants to succeed in this developed world. It is a fact that every formal education from elementary school to university in Indonesia use English lessons. We must really realize this, especially for language teachers in particular and for teachers in the field of study in general. Learning a language does not grow by itself but requires interaction with others such as interaction between teachers and students in learning.

In essence, learning is a process of interaction between teachers, students and learning resources in a learning environment. Learning may also be defined as a teacher's effort to convey knowledge to students in order to form a student's attitude and confidence. Learning is an active interaction between teachers who provide learning materials with students as objects. Learning is an active interaction between teachers and students to deliver lesson materials. (Nur, 2014). So that learning objectives can be achieved properly, then in the learning process is necessary to be well prepared as well such as preparing lesson plans, preparing learning media and conducting evaluations.

Two components of the success of learning are teaching methods and learning media (Ali, 2009) in (Widodo & Wahyudin, 2018). This research defines about the developing of learning media. The use of appropriate and attractive media in the learning process can increase students' interest. When the students' interest increases, their enthusiasm in learning will increase too. So that the process of receiving material will be more enjoyable and understanding of the material may also be easier. For teachers, learning media help realize concepts or ideas and help motivate

participants to learn actively. For students, the media can be an intermediary to think and act critically. Therefore the media can help the Assignment of teachers and students to achieve the basic competencies that have been set.

As science advancement is also combined with rapid technological development, success and new technologies should be achieved in education. The development of computer technology opens a very wide opportunity for educators to use it. Not only the development of computer technology but also the development on mobile phone technology in the form of Android-based application. It is obvious that incorporating technology into the educational process benefits both instructors and students. This advancement has a beneficial influence on the learning process, making it more engaging, accessible anywhere and anytime, and making it simpler to attain learning objectives.

Seeing this, the writer creates an application namely ESEN MEDIA. It is an application android-based that can access in mobile phone.

METHOD

This study is classified as a Research and Development based on its goal which developing interactive learning Android based on. This type of study obtain in the creation of product, media, learning methods, strategies, and teaching materials. Those are the examples of developed product.

Research and development is a process or series of steps that can be tracked in order to create a new product or improve an existing one. Products are not always shaped objects or hardware, such as modules, books, classroom or laboratory learning tools, but they can also be software. The type software can be utilized for data processing, Learning media, models of education and so forth. (Noor & Aisyah, 2018). The output of this research will be an Android-based interactive learning media for seventh grade students of junior high school presented as an Android-based aplication namely ESEN MEDIA.

The development model of this study is ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model (Dick, Carey, & Carey, 2004). According to (Hamzah, 2020) ADDIE has five steps that should be undertake. Here are the following steps:

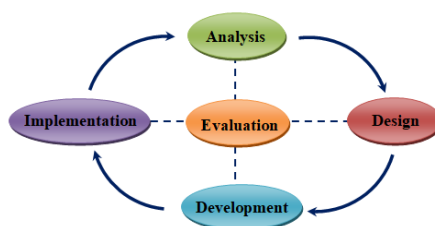


Figure 1. ADDIE model

This study applied two data collection techniques. Needs analysis is the first technique that is applied before the first draft of Android-based learning media is designed. Expert judgment and teacher assessment to the developed Android-based learning media is the second technique to collect data. The data was collected through the distribution of teacher assessment sheets and expert judgment questionnaire sheets which were used to evaluate the developed media both from the aspect of content and suitability of design.

The data analysis technique used in this development research is descriptive analysis. The data obtained in the needs analysis through observations sheets will be present as qualitative data, and the results of the questionnaire from expert judgement and teacher assesment will be presented in the form of quantitative data.

The results of the data from expert validation using a different calculation formula based on the Levin and Stephen (2010) formula.



□ $\sum X_i$ = the sum of data score
 n = the number of summed data

To define whether the developed media is good and feasible, it can be seen in the following table:

Table 1. The assessment of the mean

Scale	Range	Categories
1	0 – 1	Poor
2	1.1 – 2	Fair
3	2.1 – 3	Good
4	3.1 – 4	Very Good
5	4.1 – 5	Excellent

RESULT AND DISCUSSION

There are several steps that have been passed in developing Android-based interactive learning media. The steps of this development research include analysis problems, data collection, product design, design validation, design revision, trial implementation, and evaluation. The overall steps will be explained by following the steps in the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) research model.

Analysis

In this step, a needs analysis is carried out to obtain instructional media information that is relevant to what students need with the aim that students' interest in learning can increase and every material presented can be understood well. Needed analysis was conducted by observing the learning process of eight grade students in MTs. Nurul Ulum by asking several questions in a pre-research observing sheet to find out about students' interest in learning English, the learning resources used and what learning media they like.

From the results of these observations, it was concluded that the learning media used by the teacher was monotonous. so that students felt bored. The media usually used by teachers are textbooks with the lecture method.

After analyzing the results of observation sheets, the researcher decided to create an interesting learning media that could invited students to be more active in learning as well. The learning media that was created by the researcher was an Android-based interactive learning media namely ESEN MEDIA.

Design

In this step, the researcher makes a storyboard or an outline for the media to be developed. Some of the things prepared were collected the materials, designed the media template, and selected several software applications that was appropriate for media development. The following software applications used to developing Adroid-based interactive learning media were Microsoft Power Point 2010, iSpring Suite 10, Corel Draw X5, Website 2 APK Builder Pro.

Development

The storyboard that has been formed becomes a guide in the media development process. Among the activities that have been carried out were making materials, quizzes, games, student attendance forms, display media layouts, menu buttons, and animated videos.

The main software application that used to developing Android-based interactive learning media was Microsoft Power Point 2010. Some of components in the developed media were the starting page, main menus, topics, quizzes, videos, games, references, and attendance list.



Figure 2. The start page

Table 2. The result of the material expert judgement

Table 2: The result of the material expert judgement							
No	Criteria	Score					Feedback or Suggestions for Improvement
		5	4	3	2	1	
A.Learning Design							
1	Clarity of learning objectives (formulation, realistic)	√					
2	Relevance of learning objectives with KI/KD/Curriculum.	√					
3	The suitability of the material in the media with the learning objectives.		√				
4	The suitability of the material in KI and KD.	√					
5	The level of interactivity in Android-based interactive English learning media.	√					
6	Support in increasing student interest in learning.	√					
7	Contextually and actuality of material content			√			Revision for the use of examples on the material "Wish" in chapter 2.
8	Completeness and quality of study aids.	√					
9	The depth of the given material.		√				
10	Ease of the material to understand.		√				
11	The description of the material is systematic, sequential, and logical flow is clear.		√				
12	Clarity in providing material, discussions, examples, simulations, and exercises for	√					

understanding concepts.

13	Consistency of evaluation with learning objectives.	√
14	The suitability of the material with the evaluation questions.	√
15	The accuracy of the evaluation tool.	√
16	Clarity of quiz questions.	√
17	Equality of answer choices.	√
18	The accuracy of providing feedback on the evaluation results.	√
Sum of data values		83
Number of summed data		18
Mean		4.6

From the table 2 above, the mean result of the material aspect assessment is 4.3, it is included in the excellent category. so it can be concluded that the material in android-based interactive learning media is feasible to use with some suggestions that have been given by material experts.

Table 3. The result of the media expert judgement

No	Criteria	Score					Feedback or Suggestions for Improvement
		5	4	3	2	1	
A. Software engineering							
1	The accuracy of the application software selection that used in the development of Android-based interactive learning media in learning English		√				
2	The use of application software can be managed easily.	√					
3	The application is easy to use and operate		√				
4	creative and innovative in presenting English learning materials on Android-based interactive learning media.	√					
5	Clarity of instructions for using media	√					
6	Opportunities for media development on the development of science and technology.		√				
B. Audio-Visual Communication							
7	Communicative, in accordance with the message and can be received according to the wishes of the target.		√				

8	Creative in ideas following the implementation of ideas in making media.	√
9	Simple and interesting.	√
10	The suitability of audio selection (sound effect narration, back sound).	√
11	The suitability of the visual development selection (layout design, typography, color).	√
12	Accuracy in animation selection	√
13	Accuracy in the selection of interactive layouts (navigation icons).	√
14	The suitability of the font selection.	√
15	Conformity in the selection of font sizes.	√
16	Text and animation sizing.	√
17	The suitability of the animated illustration with the material.	√
18	Color clarity animated illustration.	√
Total Score		80
Mean		4.3

From the table 3 above, the mean result of media expert judgement is 4.3, it is included in the excellent category. so it can be concluded that the component of design, layout and display in android-based interactive learning media is feasible to use with some suggestions that have been given by media experts.

Product feasibility refers to the results of experts judgment and the assessment of teacher to Android-based interactive learning media developed. The results calculation of the score and its interpretation have been explained in the previous discussion, where the feasibility of the product is included in the excellent category.

Table 4. The result of the teacher's assesment

No	Criteria	Score				
		5	4	3	2	1
A. Quality of Content and purpose						
1	Accuracy of learning objectives		√			
2	The suitability of the description of the material in the media with the learning objectives	√				
3	The suitability of the material in the media with the learning objectives	√				
4	Completeness and quality of multimedia as learning aids		√			
5	Can increase the interest/attention of students to learn	√				
B. Instructional quality						
6	Conformity with the level of students' knowledge		√			
7	The suitability of the media in providing assistance for learning	√				
8	Clarity of the content of the question or quiz	√				
9	Equality in the choice of answers to the questions	√				
10	It has a good impact on students		√			

11	It has a good impact on educators in teaching	√
C. Technical Quality		
12	Readability of font size and shape	√
13	The use of language does not lead to multiple interpretations	√
14	The attractiveness of the application used	√
15	Media can be used anytime in learning	√
Total Score		80
Mean		4.3

From the table 4 above, the mean result of the teacher's assesment is 4.3, it is included in the excellent category. so it can be concluded that design,layout and display in android-based interactive learning media is feasible to use in English learning.

Implementation

On Monday, June 14th, 2021, this android-based interactive learning media was implemented for 8th grade students at MTs. Nurul Ulum Tikung. product implementation is carried out after the product is revised according to expert advice. This implementation aims to find out how students are interested in learning when using android-based interactive learning media.

Evaluation

At this stage, an evaluation of the results of the media feasibility assessment was carried out by material experts, media experts, and English teachers. The researcher also looked at students' responses to the media that had been developed to find out whether the media that had been developed was feasible or not to be used.

CONCLUSION

The purpose of this research is to develop android-based interactive learning media in learning English. Furthermore, the results of this development are expected to increase student interest in learning and can make it easier for teachers to convey the existing material.

This development research uses the ADDIE model, namely analysis, design, development, implementation and evaluation. each step of the development of this android-based interactive learning media has been described in detail in result and discussion. From the several steps that have been passed, it is concluded that the results of the development of this learning media is attactive and fisible to use in learning English. This statement is based on the results of validation from experts and English teacher.

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