Android-Based Interactive Multimedia Development For Students Of Sma Negeri 1 Kikim Selatan

Rachel Angelysca; Kusnadi

Master of Arts Education Study Program, Faculty of Languages, Arts, and Culture, Yogyakarta State University, Indonesia

Abstract

Interactive multimedia is a combined learning media of text, images, animation, audio and video that can be operated independently by the user to create two-way interaction, namely between the user and the media. The aim of this development is to develop an interactive multimedia product for learning Android-based Tanggai dance for students at SMA Negeri 1 Kikim Selatan and to assess the feasibility level of an interactive multimedia product for learning Android-based Tanggai dance for students at SMA Negeri 1 Kikim Selatan. The development model used in this research is the Alessi and Trolip model which consists of three main steps, namely: (1) planning, (2) design, and (3) development. The subjects of this research were students of class The average, namely 97.6, is categorized as very feasible. A large-scale trial involving 37 students obtained an average of 98.29 in the very feasible category. Based on these data, it can be concluded that the Android-based interactive multimedia for Tanggai dance learning is categorized as very feasible so that it can be used as a learning medium for students at SMA Negeri 1 Kikim Selatan.

Keywords: *Broccoli Produce; Manure; Semi-Organic; Broccoli Vegetables*

Introduction

South Sumatra has various types of traditional dances, one of which is the Tanggai dance which is used as a dance to welcome guests. In the creation of the Tanggai dance, there is indeed a breath of the Gending Sriwijaya dance and some of the Tanggai dance movements refer to the Gending Sriwijaya dance movements so that it gives the impression that the Tanggai dance is almost the same as the Gending Sriwijaya dance (Katungga, 2019). Tanggai dance is taught in schools in South Sumatra and still uses teacher-centered learning methods. The use of technology is still little used as a medium for delivering learning, especially in dance learning.

Currently, information and communication technology has developed very rapidly, including smartphone technology. Smartphones have the Android operating system which is very popular with the public. Android is an open source based operating system. The Android operating system with its various application developments is able to produce representative learning media. With Android-based

technology, learning will not be monotonous with just text, but can create audio or visual elements and even animations to make it easier for students to understand the learning material and provide maximum results (Dwiranata, et., al, 2017).

Technological developments and the 21st century learning industrial revolution require educators and students to be technologically literate. As a result, the Indonesian people are required to innovate in various fields to meet these demands. The development of information technology has influenced the use of various types of media as tools in the learning process. Learning using information technology (IT) can encourage students to be more communicative and interactions between students and teachers to be more flexible and free. Learning using information technology can make it easier for students to access information widely. By using information technology-based media, students are encouraged to learn independently to access various information more efficiently and effectively in order to achieve the learning goals set by the teacher.

Interactive multimedia learning is a learning aid that contains images, writing, sound, video, animation and contains learning messages. Interactive multimedia learning has very important benefits. The benefits are that it is able to attract students' attention so that it can foster motivation in learning, clarify the meaning of learning material so that it can be understood easily, and learning methods are more varied (Suratun et al, 2018). The benefits of interactive multimedia learning are that it provides students with unexpected experiences, shows students in real terms something that was initially impossible to see and analyzes changes over a certain period of time (Prastowo, 2012). The development of interactive multimedia learning can be done using various software and applications. One application that is currently developing is the Android application. The advantage of Android-based interactive learning multimedia in presentation is that it combines various multimedia elements (text, images, sound, video and interactivity). Android-based interactive multimedia has the characteristic of being able to encourage students to learn independently without having to be guided (Komalasari et al., 2021). Android-based interactive multimedia learning needs to be developed at every level of education. Android-based interactive multimedia is an innovation in presenting learning material. The learning material displayed is interesting and interactive so that the learning process is more active and enjoyable. The development of Android-based interactive multimedia aims to help students learn independently without direct direction and guidance from the teacher, especially in understanding learning material.

Characteristics of the learning carried out at SMA Negeri 1 Kikim Selatan only using imitation methods and the media used is still less varied. In detail, the conditions of the dance learning process at SMA Negeri 1 Kikim are as follows: (1) learning is more teacher-centred using demonstration and imitation methods, (2) there is not much learning using modern technology, especially information technology-based, (3) The main learning source used is videos sourced from the YouTube platform. Basically, videos sourced from the YouTube platform can be used, but they have many shortcomings, for example, they only show the complete dance without packaging the parts completely, and have not been packaged specifically as a complete learning medium with complementary aspects. Based on the learning conditions which are not optimal as previously described, efforts need to be made to develop interactive multimedia learning for the Tanggai dance which is an icon of South Sumatra, especially the city of Palembang. Thus, it is interesting to carry out development research with the title "Development of Interactive Multimedia Learning for Android-Based Tanggai Dance for Students at SMA Negeri 1 Kikim Selatan."

Methodology

Development research, usually called research-based development, is a type of research that is often used in solving practical problems in the world of research. Primarily educational and learning research. This research aims to produce certain products and test the feasibility of the product. Furthermore, it is stated that the learning research and development procedure basically consists of two main objectives, namely: (1) product development and validating the product, (2) testing the effectiveness of the product in achieving the objectives. Researcher developing interactive multimedia for Android-based Tanggai dance learning at SMA Negeri 1 Kikim Selatan. The development model used is the development model by Alessi & Trollip (2001) through 3 steps, namely planning, design and development. The resulting data is in the form of qualitative and quantitative data which is then analyzed using descriptive statistics

Results and Discussion

Based on the development model proposed by Alessi & Trollip (2001) through 3 steps, namely planning, design and development. The planning stage begins with determining needs and goals. Needs and goals include what students will know or be able to do after completing learning. Next, collect sources such as reference books, original source materials, films and knowledge from other people in the field that support the creation of interactive multimedia, then generate ideas. This stage is brainstorming to produce creative ideas for development. Limited media causes learning to be less than optimal, students tend to be passive and dependent on the teacher's explanations. This is not in accordance with the independent curriculum where students are required to study independently and the learning center is on the students. Based on the results of this planning, media development is important to implement. Android, which is one of the learning tools for students at school, is a supporting force for developing Android-based interactive learning multimedia on the Tanggai Dance material. The next stage is the design stage, at this stage the researcher carries out processes including pre-production, production and post-production. The pre-production stage begins with creating a flowchart and storyboard.

The production stage is the stage of creating media that is developed with the help of Adobe Flash software starting from collecting materials, creating layouts, creating icons, inserting narration, audio and video used. The post-production stage includes finishing, mixing and rendering of the multimedia product being developed. The next stage is continued with the product development stage. At this stage, instrument validation is carried out by media experts and material experts. This expert validation aims to find out whether the instrument used is valid and suitable for use or whether it needs to be revised. After the instrument validation process was completed, the interactive multimedia product with the Tanggai Dance material was tested for its suitability by material experts and media experts. The media is revised according to suggestions and input from experts until the experts state that the media is suitable for use. Learning media development products are tested on a small scale first. After that, revisions are made according to student responses. In this way, the product can be used in large-scale trials and produce Android-based interactive multimedia products based on the Tanggai Dance material.

The feasibility of interactive multimedia is obtained from assessments by material experts, media experts, small-scale trials and large-scale trials which will be explained as follows:

a. Material Validation Data Analysis

Material validation data analysis aims to test the validity of the material according to expert validator input. The following is the data resulting from the material expert assessment:

No	Validator	Rated aspect			Earned Score
		Material	Contents	Draft	
1.	Treny Hera, M.Sn	19	28	39	86
	SMI	20	30	40	90
	Average				95,56
	Category	Very Worth It			

The results of the material expert assessment show an average value of 95.56 which states that the material used is in the very appropriate category, so it can be interpreted that the Tanggai dance material in the interactive multimedia product Tanggai dance learning can be used or in small scale trials or trials. field.

b. Media Validation Data Analysis

Media validation data analysis aims to test product validity according to expert validator input. The following is the data resulting from the media expert assessment:

No	Validator	Rated aspect				Earned Score
		Appearance	Text	Picture	Use	
1.	M. Edo Pratama Putra, M.Sn.	20	16	14	19	69
	SMI	20	20	15	20	75
	Average					92
	Category	Very Worth It				

The results of the media expert assessment show an average value of 92, which states that the media used is in the very appropriate category, so it can be interpreted that the interactive multimedia product for Tanggai dance learning can be used in small-scale trials or field trials.

c. Analysis of Small-Scale Test Data

Analysis of small-scale test data totaling 9 people, aims to determine the suitability of the product according to the interactive multimedia learning assessment instrument for users. Assessment of the results of student responses obtained the following data:

No	Aspect	Average	Category
1.	Media Quality	98,05	Very Worth It
2.	Media Functions	96,88	Very Worth It
3.	Whole	97,6	Very Worth It

The results of the small-scale trial showed an average score of 98.05 in assessing media quality, 96.88 in assessing media function and 97.6 in scoring with each category being very feasible, so it can be interpreted that the interactive multimedia product for Tanggai dance learning can be used for testing. try

on a large scale. The assessment process by users produces several inputs in the form of revisions, namely adding sound to the interactive multimedia.

d. Analysis of Large-Scale Test Data

Analysis of large-scale test data totaling 37 people, aims to determine the feasibility of the product from the aspect of interactive multimedia learning assessment instruments for users. Assessing the results of student responses, the following data was obtained:

No	Aspect	Average	Category
1.	Media Quality	98.37	Very Worth It
2.	Media Functions	98.16	Very Worth It
3.	Whole	98.29	Very Worth It

The results of the large-scale trial showed an average score of 98.37 in the media quality assessment, 98.16 in the media function assessment and 98.29 in the acquisition score with each category being very feasible, so it can be concluded that the interactive multimedia product for Android-based Tanggai dance learning is very suitable for use. for South Kikim 1 Public High School.

The results of the development of learning media in the form of an interactive multimedia product for Android-based Tanggai dance learning can be run on an Android smartphone with a full screen display. This Android-based interactive multimedia learning for Tanggai dance contains Tanggai Dance material which contains: 1) History of Tanggai Dance; 2) The meaning of the Tanggai dance movements; 3) Tanggai Dance Clothing; 4) Tanggai Dance video. The main material discussed has been adapted to the Teaching Module in the Merdeka phase F curriculum at the school, which has previously been discussed with teachers who teach arts and culture subjects at the research site. The creation of this interactive multimedia development product has previously gone through a validation process by material experts and media experts. The results of criticism and suggestions are then used as material for improving learning media. Media experts and material experts then stated that interactive media was suitable for use for research, and were then tested on a small-scale group of 9 students, and a large-scale product test with a total of 37 students. The trial results show that the Android-based interactive multimedia for Tanggai dance learning is very suitable for use as a learning medium.

Conclusion

Based on the results of the research and discussion, conclusions can be drawn from the research entitled "Development of Interactive Multimedia Learning for Android-Based Tanggai Dance for Students at SMA Negeri 1 Kikim Selatan". Obtaining assessment results from material experts with an average of 95.56 which states that the material used is in the very appropriate category, Media expert assessment with an average of 92 which states that the media used is in the very appropriate category, Scale trial The small scale trial involving 9 students obtained an average of 97.6 which was categorized as very feasible. The large scale trial involving 37 students obtained an average of 98.29 with a very feasible category. Based on these data, it can be concluded that the Android-based interactive multimedia for Tanggai dance learning is categorized as It is very suitable so it can be used as a learning medium for students at SMA Negeri 1 Kikim Selatan.

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