Development of Interactive Multimedia for Indonesian Language Class VII SMPN 1 Gido

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Abstract-The aim of this study is to create legitimate, usable, and efficient interactive multimedia learning tools. Research and development describes this sort of study. One such model that is utilized is the 4D model. For the creation of a wide range of educational materials, the 4D development model is an invaluable tool. There are four steps to the 4D process: defining, designing, developing, and disseminating. Interactive multimedia learning materials in the form of apps were created and tested in class VII-B at SMP Negeri 1 Gido using a validity testing stage that involved three validators, small group tests, and field tests. Interactive multimedia learning media in the form of apps has been validated by 97.5% of material and content experts, 100% of language experts, and 96.67% of design experts as valid and viable, according to the research. The questionnaire used to evaluate the practicality of application-based interactive multimedia learning material has a rating range from 1 to 4, with 4 being the most appropriate, 3 the most appropriate, 2 the least appropriate, and 1 the least appropriate. Applications using interactive multimedia learning materials that have been validated are considered viable for testing. In small group assessments, 86.67% of students found interactive multimedia learning materials to be practically applicable, while in field tests, 88.46% fell into the "very practical" category. A two-part student response questionnaire, administered in both small-group and field settings, was used to assess the usefulness of Indonesian language apps as interactive multimedia learning tools. With a percentage of classical completeness of 100% in the field test and an impressive 83.3% in the small group test, it is clear that learning mediums are highly successful. If the classical completeness in each trial is more than 80% with a very effective degree of efficacy, then learning is considered to grow. Research conducted by SMP Negeri 1 Gido in seventh grade using a 4D model to create an interactive multimedia learning tool that analyzes the language and structure of fables has been shown to be valid, practical, and successful.

Keywords: Multimedia Learning Media, 4D, Valid, Practical, Effective

I. INTRODUCTION

The effort that can be made to advance human civilization is education. Education is inseparable in human life. In an increasingly advanced era, education is the capital that every human being must have in order to face the demands of the times. The progress or decline of a nation is influenced by educational factors. The better education in a nation, the more qualified the nation's human resources will be. In addition, education is very important for the process of forming the next generation of a quality nation. If the process of education fails, it will be difficult to achieve the progress of a nation.

Currently, the government, in this case the Ministry of Education and Culture, is trying to introduce and implement a new curriculum called the independent curriculum. The independent curriculum is a curriculum that intends to hone the interests, abilities and talents of each student according to their respective abilities. In the

independent curriculum there is the term independent learning, meaning that learning focuses on essential material and is flexible according to the abilities, interests, talents and needs of each student.

Indonesia is entering the era of society 5.0, in this era the development and utilization of technology is very important. Era 5.0 centers on the use of modern technology by humans to simplify life. The world of education is certainly inseparable from the rapid development of technology, this is certainly related to the use of media in the learning process. Learning media is a tool for a teacher to convey subject matter so that students become more interested in the learning process. Often a teacher does not use the media when learning takes place. There are various reasons why a teacher does not use media, such as difficulty determining the right media, lack of creativity of a teacher, lack of cost of making media or other reasons.

Based on interviews with Indonesian language teachers at SMP Negeri 1 Gido when researchers were carrying out the internship program, it is known that many teachers still do not use learning media. Some teachers still use the lecture method in delivering lessons. It is known that if teachers only use the same learning media continuously, namely using PowerPoint media, it makes students tend to be passive in the learning process.

The use of smartphone technology in the Era of society 5.0 is inseparable. The use of smartphones will make it easier for humans to carry out daily activities, of course this also applies to teachers and students in teaching and learning activities. In modern times the use of smartphones is very attached to teachers or students. The use of smartphones to be utilized in the learning process is certainly very suitable with multimedia. Researchers want to develop interactive learning media by utilizing smartphone technology. Using a smartphone certainly needs an application, the application in question is a learning multimedia application. Making applications is needed so that learning with smartphones will be carried out as expected. In this case, researchers used computer software called Smart Apps Creator in making the interactive multimedia.

Based on the description described above, the researcher provides a solution by conducting a study entitled "Development of Interactive Multimedia in the Form of Applications on the Material of Analyzing the Structure and Language of Fables in Grade VII SMP Negeri 1 Gido."

According to Kustandi & Darmawan (2020) learning media is a tool that can help the learning process with a function to clarify the meaning or message conveyed so that the lesson objectives become better and perfect. Meanwhile, according to Indrawan et al. (2020) learning media is a tool that functions as an intermediary or conveying message content in the form of visual or verbal knowledge information so that it can be useful for stimulating students' thoughts, attention, feelings, abilities or skills so that there is an encouragement for the learning and learning process.

Based on the opinions of the experts above, the researcher concludes that learning media is a tool or container that can help the teaching and learning process which functions as an intermediary to clarify a message containing knowledge that can trigger a better learning process. According to Kristanto (2016) the functions of learning media include: 1) Educational function means that it can provide an influence that has educational value, can educate students and society to be able to think critically and provide meaningful experiences. 2) The economic function means that the efficiency of learning objectives can be achieved and the achievement of material can minimize the use of costs and time. 3) Social function means that it can multiply the association between students, increase understanding, provide experience and develop the intelligence of each student. 4) Cultural function means that it can change aspects of human life and inherit and continue cultural and artistic elements in a community environment.

Kustandi and Darmawan (2020) classify several forms of educational media according to their evolution, including: 1) Media that transmit information by means of mechanical or photographic printing processes are known as print technology-based media. 2) Media that utilize audiovisual technology refers to media that transmit information using mechanical devices that display visual and auditory signals. Thirdly, media that transmit content via means of microprocessors are referred to as computer-based media. Fourthly, "combined technology media" refers to a method of content creation and distribution that makes use of many computer-

controlled media types.

In a well-balanced presentation that honors the artistic components of a program, multimedia combines and integrates visuals, text, music, and moving pictures (Kustandi & Darmawan, 2020). Surjono (2017) explains that multimedia can be useful in other sectors, namely: 1) Education, multimedia can be useful in producing products such as interactive learning multimedia, e-learning or learning tutorials. 2) Business, utilizing multimedia in the business sector can produce business support products including advertisements, product demos, e-commerce or e-training. 3) Tourism, multimedia can produce products such as tourist maps or performing arts. 4) Entertainment, utilizing multimedia for entertainment purposes can take the form of games or animated films. 5) Household, multimedia can also be useful for household needs such as CDs on cooking, gardening, gymnastics or other skills.

According to Susanti (2022) the definition of reading is a skill that not only sees and recognizes words but involves the mind in order to understand the word so that the message to be conveyed can be achieved. Fables are stories about the lives of animals that behave like or resemble humans (Kemendikbud, 2017).

II. METHODS

Researchers employ the development technique, also known as Research and Development (R&D), to carry out this study. In order to create new goods or enhance current ones in a way that appeals to students' interests and makes the learning process more successful, the research and development technique is followed. According to the goal of generating the product, the research and development process should yield a product that is both effective and beneficial.

As per Khaeroni (2021), the research and development process is a way to create a product in a certain area of expertise. This method also results in certain by-products and ensures that the product works as intended. While researchers may choose from a variety of models for studying development, they choose to employ Thiagarajan's 4D development model in this instance. In the 4D model, there are four steps: defining, designing, developing, and disseminating.

Disseminate: With limited time and resources, the researcher delivered the product to pupils at SMP Negeri 1 Gido using a smartphone app. This was done mostly with class VII-B students. Sending files in the apk format, which are utilized by Android-based smartphone devices, is how products are distributed.

Research and development-based interactive multimedia learning media apps have the following limitations: The research subject is limited to students in class VII-B of SMP Negeri 1 Gido, and the questions contained in the applications of interactive multimedia learning media have not been validated, so the quality of the questions has not been tested. The applications only contain material studying the structure and language of fables. Only a small subset of pupils have access to the created programs that provide interactive multimedia learning materials.

III. RESULT AND DISCUSSION

The research conducted by this researcher has produced a learning media, namely interactive multimedia in the form of applications. The resulting product has been validated by experts, has been tested and proven suitable for use in learning. This research is located at SMP Negeri 1 Gido, Gido sub-district, Nias district. This learning media is used in class VII fable material.

Based on suggestions and input from material and content experts after being validated twice, it has been revised. The results of the revision according to the suggestions for improvement obtained in writing can be described as follows: Laying out basic competencies separated from learning objectives, core competencies and learning indicators are added, writing learning resources is written like writing a bibliography.

Based on suggestions and input from language experts after being validated twice, it has been revised. The results of the revision according to the suggestions for improvement can be described as follows: Correcting the use of capital letters, changing the word detail to identify, words in foreign languages italicized, adding punctuation.

The following are some suggestions and input from design experts for improving multimedia learning media: Remove the flower image on the user manual page, change the

appearance of the researcher's profile photo, change the background, remove the underline in the title.

In this research, the creation of interactive multimedia in the form of applications using computer software called Smart App Creator. The software produces learning media packaged in a format that can be used through smartphone devices. Interactive multimedia in the form of this application is distributed or sent through delivery media such as WhatsApp, Bluetooth and so on.

3.1 Define Stage

In this step, researchers made observations or observations in class VII SMP Negeri 1 Gido. It is known that students tend to be passive and lack of media variations in the learning process. In this student analysis step, it is carried out by observing students at SMP Negeri 1 Gido class VII under study. The learning materials chosen to be developed in this product are materials that are in accordance with the syllabus. This task analysis is compiled based on the basic competencies and achievement indicators on the material provided. In this step, students are expected to be able to follow and understand any instructions given in the product so that the desired competencies can be achieved.

3.2 Design Stage

Researchers chose multimedia learning media in the form of applications because the use of learning media at the research location is still not varied so that students tend to get bored. Researchers also want to utilize the use of technology in learning activities. Multimedia in the form of applications that utilize technology in their use is certainly very suitable in the selection of learning media. In this step, the researcher begins to make the product to be used. Researchers make products using laptop devices. Product work uses software called Smart Apps Creator and Canva.

3.3 Develop Stage

After the creation of multimedia in the form of applications has been completed, followed by validation of learning media to validators including material and content

validators, language validators and design validators. Media validation is carried out to get criticism and suggestions so that the product can be improved into a more feasible product. The results of the validation are as follows:

1. Feasibility of Interactive Multimedia. The results of validation from material and content experts in revision I reached 75% with decent criteria and revision II reached 97.5% with very decent criteria. Validation from language experts in revision I obtained a score with a percentage of up to 96.43% with very feasible criteria and in revision II reached 100% with very feasible criteria. Meanwhile, validation from design experts in revision I only obtained a percentage of 55% with fairly decent criteria and experienced a very high increase in revision II with a percentage of 96.67% with very decent criteria. Based on the validation results obtained from the material and content expert validators, linguists and design experts, the multimedia learning media is declared valid and suitable for testing.

2. Practicality of Interactive Multimedia. The practicality of Indonesian language learning multimedia was measured using a learner response questionnaire which was carried out in 2 stages, namely small group tests and field tests. The average percentage in the small group test which was tested on 6 students obtained an average percentage of 86.67% with a very practical category. After the small group trial was carried out, it was continued with a field test which was attended by 26 students of class VII-B SMP Negeri 1 Gido who obtained an average percentage reaching 88.46% with a very feasible category. The results of students' responses from the 2 trials can be seen in the following table and graph:

Table 01. The students' responses from the two trials

No.	Trial	Mean (%)	Practicality Criteria
1.	Small Group Test	86,67%	Highly Practical
2.	Field Test	88,46%	Highly Practical

Figure 01. The students' responses from the two trials
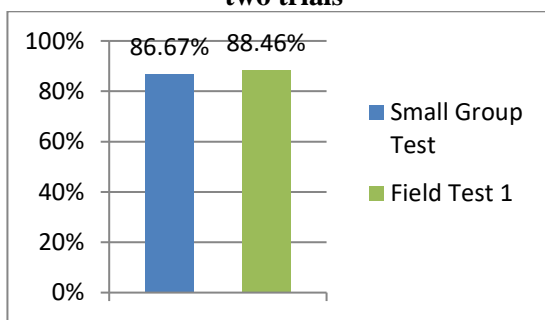
3. Effectiveness of Interactive Multimedia. Learning is said to improve if the classical completeness in each trial is greater than 80% with a very effective level of effectiveness. Based on the analysis of student learning outcomes on the material of analyzing the structure and language of fables in the small group test of 6 students, as many as 5 students experienced completeness and 1 student did not complete so that the percentage of completeness reached 83.3% with very effective criteria. Meanwhile, in the field test, 26 students scored above the KKM so that they experienced completeness in the learning outcomes test with a percentage of completeness reaching 100% with very effective criteria. The percentage of student learning completeness can be seen in the following graph:

Figure 02. The students' responses from the two trials
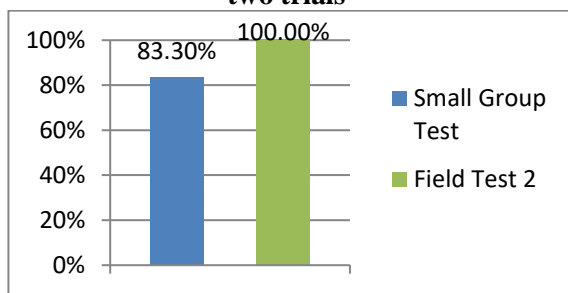
3.4 Disseminate Stage

In this last stage, researchers distributed products in the form of applications used on smartphones to students at SMP Negeri 1 Gido, especially class VII-B students due to limited time and facilities. Product distribution is done by sending .apk format files that are used on android-based smartphone devices.

IV. CONCLUSION

The research and development of the interactive multimedia applications on the topic of analyzing the structure and language of fables in class VII SMP Negeri 1 Gido has followed the 4D development model, which includes the following steps: defining the problem, designing the solution, developing it, and finally, disseminating it so that it can be used effectively to teach Indonesian. This conclusion is based on data processing and analysis.

With an average score of material and content validity reaching 97.5% with very feasible criteria, language validity reaching 100% with very feasible criteria, and design validity reaching 96.67% with very feasible criteria, the feasibility of using interactive multimedia applications on the material of analyzing the structure and language of fables in class VII at SMP Negeri 1 Gido has been verified to be very valid and feasible for use in the learning process.

Results from two trials with student response questionnaires showed that the practicality of interactive multimedia applications on the material of analyzing the structure and language of fables in class VII at SMP Negeri 1 Gido achieved very practical criteria, with small group test scores reaching 86.67% and field test scores reaching 88.46%.

Using very effective criteria, the percentage of classical completeness in the small group test reached 83.3% and in the field test reached 100%, indicating that the interactive multimedia applications on the topic of analyzing the structure and language of fables in class VII at SMP Negeri 1 Gido are feasible for use in the learning process.

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