

Development of Physical Education Learning Media for Football Material for Junior High School Class VII Students on Smartphones Based on Android Applications



Muhamad Halili¹, Erwin Setyo Kriswanto², Ujang Nurdin³, Afeb Chesa Arianto⁴

^{1,2,3,4} Department of Sport Science, Yogyakarta State University, Yogyakarta Indonesia

ABSTRACT: This study aims to (1) produce a product development of Physical Education Sports And Health learning media for soccer material on android application-based smartphones for Junior High School students, (2) determine the feasibility of Physical Education Sports And Health learning media development products for soccer material on android application-based smartphones for Junior High School students, and (3) determine the level of practicality Physical Education Sports And Health learning development products for soccer material on android application-based smartphones for Junior High School students. This research is a development research with the ADDIE approach model, namely: analyse, design, develop, implement, and evaluate. The subjects of this study were a small-scale trial of 7 students in class VII SMP N 2 Sewon, a large-scale trial subject of 30 students in class VII SMP N 2 Bantul, expert validation including material experts and media experts. The results showed that Physical Education Sports And Health learning media product of soccer material on smartphones based on android applications had a very good / very feasible level of feasibility. The level of product feasibility based on material expert validation reached an average of 90% with a very feasible category, media expert validation reached 86.6% with a very feasible category, small-scale trials reached an average of 92.3% with a very good / very feasible category, large-scale trials reached an average of 90.2% with a very good / very feasible category.

KEYWORDS: media development, football, android application

INTRODUCTION

Technological progress is a stage of development that always goes hand in hand with advances in science, so its progress is inevitable (Pansera & Fressoli, 2021). Technological advances in the present always increase and experience development every year, therefore technological progress is a demand that must always be addressed and improved in order to facilitate every human activity in their daily activities. Now there are mobile phones, video call media, sending electronic mail or email, and so on. The world of education certainly cannot be separated from technology (Islam, 2019). Technology and science are a symbiotic mutualism that is evident in education and everyday life (Coccia, 2019). The relationship between technology and science certainly has an impact on the learning process in education. The utilisation of media in an educational process, especially technology, is an advancement in the world of education to help achieve learning objectives (Ahmadi, 2018). With the media, technology can have a role in the learning process, for example if students want to read books related to learning at school, students now do not need to go out of the house or go to the library because now there are many applications that support students to read books online, so there is no need to go out of the house and can be accessed anywhere using a smartphone, laptop, or computer owned by the student. With this media, teachers or lecturers can explain the material to be conveyed without having to bother writing on the blackboard.

Research conducted by (Zulfritria et al., 2020) stated that the benefits of technology and the internet as a source of information that is relatively fast both in terms of time of receiving and updating data, relatively cheap costs, information that is global in the sense that it comes from all over the world, and is interactive and flexible. The existence of information technology media can simplify and minimise costs, energy and time to achieve a learning goal. Smartphone is a current technological development that has many users, almost all of whom have smartphones. The high connection to smartphones is a potential that must be considered and developed in the world of education as a learning medium. From this, it shows that the attractiveness and dependence on smartphones is very influential on the lifestyle of adolescents or students, so that the need for special control

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and attention so that smartphones can be used or utilised optimally in positive activities, especially in the world of education. Smartphones that are widely used today are android-based. As an educator, you must be good at utilising technological advances so that students' interest in smartphones can be useful in learning.

The need for learning media development so that the learning process is more varied and captures the interest of students in participating in learning and makes it easier for students to understand the material being taught (Puspitarini & Hanif, 2019). (Nurrita, 2018) stated the need for learning media that can improve student learning outcomes, with the existence of learning media: the teaching and learning process becomes easy and interesting so that students can understand and understand learning easily, student learning efficiency can increase because it is in accordance with learning objectives, helps student learning concentration because learning media is interesting and in accordance with student needs, increases student learning motivation because of the comprehensive experience in learning so that students can understand the material in real terms from the material provided more understand the material as a whole, students are involved in the learning process and students have the opportunity to do creativity and develop their potential.

Teaching and learning aids in schools have been influenced by advances in science and technology. Learning activities must also be adapted to the development of technology itself. However, there are still many obstacles that must be resolved by teachers and students so that education is even more advanced (Chowdhury, 2018). The existence of these problems, the lack of interest of students in receiving the delivery of Physical Education Sports And Health material affects the independence of students, so this is where learning independence is needed for students. Learning independence is a learning activity carried out by students without depending on other people, both friends and teachers, in achieving learning goals, namely mastering material or knowledge well with their own goals and being able to apply their knowledge in solving problems in everyday life (Hasibuan et al., 2019).

From the results of observations and unstructured interviews with three Physical Education Sports And Health teachers conducted by the author in April 2023 at SMP N 2 Bantul and SMP N 1 Sewon there are still many obstacles in providing football material, among others: (1) the field facilities are narrow and not proportional to the number of students, (2) the environment around the school has very little vacant land where most junior high schools are located on the edge of the highway so that there are no other choices or alternatives that can be utilised by teachers and students, (3) the use of school facilities that are less maximised in Physical Education Sports And Health learning, (4) the noisy school environment by vehicles, so that the material is less clear, (6) teachers in carrying out assessments are constrained by facilities and infrastructure, (7) the absence of learning media in junior high schools. Regulatory innovation in limited places in Physical Education Sports And Health learning needs to be done from limited facilities and infrastructure, teachers must be innovative so that Physical Education Sports And Health learning can be delivered in accordance with learning objectives. In point number seven where the absence of media that supports football learning in schools, especially in SMP 2 Bantul which is constrained by narrow land and can also be in schools that have narrow land and long field distances, learning media that supports the delivery of material is needed. As a teacher, you must realise that with the existence of learning media it will be easy to explain the material to students.

Along with the practice of students at school using media or rules modified by the teacher, students will also get basic knowledge of soccer material through learning media that will be developed by the author, so that it is hoped that the objectives of the three domains can be achieved optimally. Based on what is described above, it shows that the android application system has the greatest opportunity to use learning media applications that can be modified into a learning media and inserted on a smartphone. It is still rare to find learning materials in the form of android-based applications. It is hoped that by including soccer material on smartphones, students can easily access and find information related to Physical Education Sports And Health learning material on soccer material.

METHOD

The type of research used is Research and Development (RnD) or development research. Research and Development is a process carried out to develop or improve a product and test the practicality of the product (Siahaan et al., 2021). The product development model used in this study aims to develop and test the feasibility of a product that can help students in learning. Many development models can be used, the learning development model used in this research is the ADDIE Development Design Model (Analysis-Design-DevelopImplement-Evaluate).

The subjects of this study were small-scale test subjects carried out at SMP Negeri 2 Sewon, the number of respondents was 7 students who were in accordance with the characteristics of the need, namely grade 7, large-scale subjects were carried out at SMP Negeri 2 Bantul with the number of respondents 30 students taken by random sampling. In this study, researchers used a questionnaire instrument. Questionnaires were given to material experts, media experts, and students as respondents. This

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questionnaire instrument is arranged with a Likert Scale with four kinds of answer choices. The data analysis technique was carried out using quantitative descriptive analysis techniques with percentages, namely by analysing quantitative data obtained from expert test questionnaires and field tests.

RESULTS

The results of research and development of learning media on smartphones based on android applications for soccer material for grade VII junior high school students are as follows:



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Figure 1. The results of the development of PHYSICAL EDUCATION SPORTS AND HEALTH learning media on smartphones based on Android applications

Based on the picture above, it can be seen an example of the appearance of the product development of Physical Education Sports And Health learning media for soccer material on smartphones based on android applications for VII grade junior high school students. In the process of developing android application media, the products developed need to go through a validation and trial process. The validation process in this study consists of material validation with material expert lecturers and media expert validation with media expert lecturers, followed by a trial process with VII grade junior high school students. This process is carried out so that the product developed is suitable for use in delivering material in the learning process.

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DISCUSSION

Shape of Learning Media Product

The output of this research and development is the learning media for Physical Education Sports And Health football material on smartphones based on android applications that refer to the Merdeka curriculum for class VII Junior High School. This application learning media is in the form of an application that can be downloaded via a smartphone online that has the drive link. In this android application-based learning media, there are several menu features that are tailored to the needs of students, namely learning text material, images, learning videos and interactive quizzes. The content of the android-based learning media is compiled and adapted from several books that are relevant to the learning outcomes of the independent curriculum. The learning video in the application includes a narration of each movement to make it easier for students to understand the basic movements in the game of football. The quizzes contained in the application are also adjusted to each material discussed.

In using this android application-based learning media is not difficult because in appearance it does not require special software, the most important thing is to have an android smartphone in operation is also very easy like applications in general. So that if ordinary people or senior Physical Education Sports And Health teachers who are still unfamiliar with technology have no difficulty using this learning application. The operation is quite simple because in the application there are already clear bottom buttons to use such as a picture of a house to return to the initial menu, an arrow to go to the next slide and a cross to exit the application.

Learning Media Feasibility

At the validation stage by material experts, the average percentage obtained from two material experts is 90% with the category of product feasibility is very feasible / very good to be accepted by students, while for the results of the media expert test, the percentage assessment of three media experts obtained an average product feasibility assessment with a percentage of 86.6% with a very good / very feasible category. The results of the material and media expert tests that have been carried out show that the Physical Education Sports And Health learning media application of soccer material on android-based smartphones developed is declared very feasible to be used by students as a reference material for physical education learning. There are comments and suggestions at this validation stage by both material and media experts, for example, the suitability of the image with the material should be included with the source.

After conducting validation to experts and getting input, suggestions, shortcomings and advantages of application learning media, the next step is to revise the product to make it better. The revision carried out is to fix writing errors, add image sources listed, and fix the narration in the video. The next process after making revisions according to the suggestions and input from the validator is to test the product to 7 students as a sample taken at SMP N 2 Sewon. At this stage students are asked to respond and fill out a questionnaire that has been prepared to assess the ease, attractiveness, and helpfulness of Physical Education Sports And Health learning media on soccer material on smartphones based on android applications. The results of the product trial the number of scores obtained from the response questionnaire of class VII students of SMP N 2 Sewon on the practicality of Physical Education Sports And Health learning media is 92.3% which is in the category of very good / very feasible to be used in the Physical Education Sports And Health learning process of class VII junior high school. After the small-scale trial, there were no significant obstacles so that no improvements were made to the product and the research could be continued to the next stage.

The trial was conducted with a larger sample of 30 students taken from SMP N 2 Bantul class VII by random sampling. The large-scale trial was carried out to test the practicality of asking students to fill in the items of the research instrument for the practicality of learning media based on android applications. The aspects assessed were related to media display, material content, and learning. The results of the product trial the number of scores obtained from the response questionnaire of seventh grade students on the practicality of Physical Education Sports And Health learning media on smartphones based on android applications is 90.2% in the category of very good / very feasible to use in the learning process of Physical Education Sports And Health class VII junior high school. After conducting a series of research and development of learning media for Physical Education Sports And Health football material on smartphones based on android applications can already be disseminated and used in the process of learning Physical Education Sports And Health football material in class VII junior high school.

The results of the percentage of product feasibility obtained from material experts, media experts, and responses from students. The percentage obtained from the material expert validation of 90% is included in the "very good" classification, the results of validation from media experts are obtained at 86.6% including the classification of "very good", and the response of the student assessment obtained a result of 91.3% including the classification of "very good". The highest score can be obtained from the students' response because the complete material display is in accordance with the core competencies, basic competencies, and learning objectives. Android application media is very helpful for digesting or receiving subject matter and interesting video

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displays make students not bored or bored when presenting application media. While the lowest score is obtained from media experts because the video media still has some shortcomings for the display at the end and the title is not quite right.

The data obtained from material experts, media experts, and learner responses show that the learning media on smartphones based on android applications fall into the classification of very feasible or can be used as a reference in delivering football material during the learning process.

CONCLUSIONS

This research and development has produced Physical Education Sports And Health Learning Media for soccer material on smartphones based on android applications for Class VII SMP, based on the results of research and discussion, conclusions can be drawn: (1) The product produced from this research is an android-based application that aims to facilitate learning activities at school. The application developed has passed several stages of making including making storyboards, validation of material and media experts, small-scale and large-scale trials and practicality tests. (2) The results of the validation process given by material experts to assess the content of the android-based Physical Education Sports And Health application in terms of aspects of learning strategies and aspects of material content are stated in the very good / very feasible category, while in the media expert validation process on the assessment of the appearance design aspect and the programming aspect the results are included in the very good / very feasible category. Small group and large group trials that have been conducted on seventh grade students obtained results in the very good / very feasible category. (3) The product of research and development of Physical Education Sports And Health application of soccer material on smartphones based on android applications is declared practical to use based on the results of small-scale practicality trials obtained a value of 92.3% in the very good / very feasible category. While on a large scale practicality obtained a value of 90.2% very good / very feasible category. For teachers, it is hoped that the Physical Education Sports And Health application of soccer material on smartphones based on this android application can be used as teaching material and to make it easier for teachers to convey learning material to students. For researchers to be able to always update features and materials so that they can develop better.

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