



Analysis of application-based learning media development needs android on volleyball game

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Abstract

This study aims to analyze the need for developing learning media based on android applications in volleyball game learning. This research method uses a survey through filling out questionnaires distributed via google form. The number of respondents in this study were 110 students of physical education and health study programs. The results showed that 100% of students stated that they needed varied learning media, 92.7% of students needed smartphones in volleyball learning, 80.1% of students stated that smartphones made it easier for students to support the volleyball learning process, and 92.1% students need an android application for learning volleyball games. Based on the results of this analysis, it can be seen that the development of learning media based on android applications in volleyball games is needed for learning volleyball games, which can later be used as one of the learning media in volleyball games.

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INTRODUCTION

The Covid-19 outbreak has had many changes in the way we live and how we live in society, the impact of the COVID-19 outbreak has affected many sectors of human life, including the education sector. With these conditions, the habit of learning in the usual face-to-face learning process must be carried out by distance learning, must be replaced with new habits using on-line learning. This forces all special educators to change old habits into new habits (Zulfadewina et al., 2020). These changes also have an impact on learning activities for Physical Education, Sports and Health (PJOK) at every level of education. To be able to adapt to new habits, every educator must be creative and innovative in making learning media to support distance learning activities (Dwipayana et al., 2020). There are several things that affect learning during this pandemic, such as the participation or involvement of parents during the learning process at home and the use of technology used by educators as learning media in delivering material (Herliandry et al., 2020), so as to support physical education learning activities. and health, we need a media that can provide the learning needs of students at home.

The development of varied learning techniques can help educators to design learning creatively so that the learning process becomes innovative, interesting, more qualified and can improve student learning outcomes (Destriani et al., 2019). In line with this, an educator is required to be creative and innovative in the delivery of material. Based on the results of observations carried out during the learning process, which was carried out online through the media zoom, the researchers themselves are teaching staff and those who are in charge of volleyball game courses, so based on the results of these observations it can be seen that students need varied learning media at each meeting.

Taking into account the phenomena above, as educators, it is necessary to develop a learning media that can help achieve the learning achievement indicators. The selection of the right learning media development is believed to be able to help convey messages correctly, effectively, efficiently, to create and enrich the learning experience of students, to be able to present a picture of an incident as close or real as possible, and to be able to increase student activity and skills. The research conducted (Ardiansyah, E., Pratama, HG, & Sulendro, S., 2020), the research carried out was in the form of developing learning media applications on volleyball refereeing cues, so this

development was only limited to applications for volleyball games specifically on volleyball. refereeing material. Furthermore, the research developed (Fani, R. A., & Sukoco, P., 2019), this study developed learning media using adobe flash stored on a CD that used the teaching games for understanding style.

Based on the existing research above, it is necessary to develop application-based learning media that can contain material in volleyball games and is practically used for users, especially students. The learning media that will be developed in the form of an android application in volleyball game learning this application will contain several features that can be selected by the user such as a description feature in the form of writing (theoretical studies) of basic techniques in volleyball games, then features in the form of movement phases that made with a sequence of motion pictures for each basic technique, as well as a video feature that will explain the basic techniques in the game of volleyball.

The purpose of this research is to determine the level of need for whether an android application-based learning media in volleyball game learning is needed for students.

METHODS

This type of research is descriptive quantitative, using survey methods and for data collection techniques researchers use a questionnaire. The subjects of this study were students of the Physical Education, Health, and Recreation study program, Faculty of Teacher Training and Education, Sriwijaya University. This data was collected through the distribution of a questionnaire through a google form filled out via an online link with quantitative data types and closed questionnaires.

The number of respondents who filled out the google form was 110 students consisting of semesters 3, 5, and 7. Student participants who filled out the google form consisted of male and female students. The google form was filled in from June 3 to June 11, 2021. The data analysis technique in this study used a Likert scale. This questionnaire contains 15 statements that have been compiled by researchers that are used to find out how much students need to develop learning media based on android applications in volleyball game learning.

The data obtained is in the form of qualitative data which is used to determine the quality of the development of android-based learning media in volleyball games. Then the data obtained is

in the form of percentage results, with the following stages: The collected data is then analyzed in order to obtain coherent and easy-to-understand information. In terms of qualitative data analysis. The steps of data analysis used by researchers are as follows:

- 1) Collect all observational data in the form of field notes, interview notes, and discussion notes.
- 2) Sorting and collecting data into categories.
- 3) Perform data analysis
- 4) Carrying out the synthesis process, namely processing the entire data to formulate the achievement of research activities
- 5) Making the final conclusion.

RESULTS AND DISCUSSION

The data from this research is the result of the answers from the respondents, totaling 110 students who have filled out the google form that has been distributed to students who have learned volleyball game. So that students who fill in are students in semester 3, 5, and semester 7. The results of the answers from respondents will be used as a guide whether this research will be continued at the next stage of development. The following is presented in table 1 which shows the results of the answers from respondents, for more details we can see in **Table 1** below:

Table 1. Respondents' Answer Results

Statement	Alternative Answer	
	Yes (%)	No (%)
I am happy, learning only by using textbooks, modules, or textbooks to understand the lecture material	36,4	63,6
I like to learn using other media (audio, visual, or audio visual)	100	0
I am happy if the ball game lecture is presented using a variety of learning resources.	100	0
Learning by using media that can show how things work, pictures, or material in more detail/real is interesting to me	100	0
I have an Android Smartphone	100	0
I often use Android smartphones	98,2	1,8
I have been using Smartphone for a long time	100	0

I'm having difficulty in volleyball game courses	87,3	12,7
The learning place is equipped with a Wifi Network		60
More use of smartphones to view social media	98,2	1,8
I spend a lot of time looking at social media	65,5	34,5
The use of smartphones is a necessity in learning volleyball games	92,7	7,3
The use of smartphones facilitates the process of learning the volleyball game	80,1	19,9
Learning media in the form of android applications are needed by students	92,1	7,9
Android-Based Learning Media in the Learning Process of volleyball games will make learning more fun	68,2	31,8

Based on the **Table 1** above, it shows that students need the development of learning media based on android applications in volleyball games. The role of learning media greatly influences the interest of students in the learning process. Beny, B. A. N. (2020), in his research, 76% of students' interest in learning depends on the learning media provided. Based on this, it can be seen that the learning media is very influential on students' interest in learning. The results of the questionnaire distributed were 36.4% of students liked learning to use textbooks, modules, or textbooks in understanding the material, and conversely, 63.6% of students did not like to learn to use textbooks, modules, and textbooks. This is in line with research conducted by Tafonao, T. (2018), which explains that lecturers/teachers are required to use media in the learning process, increasingly sophisticated technology becomes an important means to achieve educational goals that are more effective and efficient. So that with the advancement of technology, educators must be able to use it as a support for learning activities.

The percentage results obtained are 100% of students like the use of learning media through audio-visual media, these results are in line with the results of research conducted by Hartati, H., Destriana, D., Aryanti, S., & Destriani, D. (2018), describing that learning using multimedia macroflash can improve passing learning outcomes for students who at the time of the pretest were in the good category by 5% and increased

to 25% and based on research conducted by Fuady, R., & Mutalib, AA (2018) explained the use of audio-visual learning media able to expedite the learning process and optimize the content of learning materials, based on these results it can be seen that learning using audio-visual can improve passing learning outcomes in volleyball games.

Android Application-Based Learning Media is something new in the world of education, this learning media is usually in the form of an educational application or application that contains learning materials and materials (Safitri, I., Pasaribu, R., Simamora, SS, & Lubis, K. , 2019). The use of smartphones as learning media will also provide new experiences for students and the use of smartphones as learning media will make it easier for students to learn, because of its simple form and wide access so that smarttrees are easy to use anytime and anywhere (Ahdan, S., 2020).

Destriani, D. (2018) based on research conducted on student interest in using e learning, this proves that there is an interest in students when using an application that can make it easier for these students to access learning resources, so the results of the needs analysis in this study show the results of 92.1% of students need an android application that can make it easier for them to find learning resources. Lorente-Catalán, E., & Kirk, D. (2016) in his research, he described broadly whether higher education levels or schools really need a form of assessment, especially in physical activity, which can later be used for evaluation activities for teaching staff.

Ngandhika, E. P., Rustiana, E. R., & Pramono, H. (2018) explained that interactive ball games can be packaged in learning, android-based learning media in volleyball games are needed for the learning process. so that students become active and happy in learning, it can be concluded that the development of.

CONCLUSION

Based on the results of the needs analysis data, it can be concluded that the android application-based learning media in volleyball game learning is declared necessary to be developed. The development of learning media based on android applications in volleyball games is expected to facilitate educators and students during the learning process and can increase students' motivation and learning achievement.

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