

Use Of Android Based Applications In Physical Education Learning At Saintek Nurul Muslimin Vocational School

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Abstract

This research is motivated by researchers who want to develop an application product on an Android-based smartphone that can be used as an alternative medium for learning physical education in schools. This study aims to develop applications as learning media for physical education at SaintekNurulMuslimin Vocational School and to determine the feasibility of application products from the usability aspect in the physical education learning process. This research is development research referring to the Research and Development (R&D) model of the Borg & Gall model with 7 steps of implementing activities and product development, namely needs analysis, application development, expert evaluation, application revision, large group trial, final revision of the application, product end of application. The final result of this study resulted in an application product as a medium for learning physical education at SaintekNurulMuslimin Vocational School. The population in this study were students of SaintekNurulMusliminVicalional School. The subjects used in this study were 60 students of class XI. Data collection techniques with a questionnaire. The results showed that the level of use of Android-Based Applications in Physical Education Learning at SaintekNurulMuslimin Vocational School. are in the LESS category with a percentage of 65%.

Keywords: Physical Education, Learning, Android

Introduction

Education is a very important factor in human life, advanced civilization and modernization in this world are developing thanks to an education. With education, it is also expected that humans can develop their knowledge, skills, attitudes and creativity. In order to realize this education, it is necessary to improve the quality of human resources (HR) by educating students to have a desire to improve their quality by having a high curiosity or curiosity and a desire to be able to master the material and achieve.

The use of media in the learning process can make students more active in learning and pay more attention to the teacher when learning takes place. According to NunuMahnun (2012: 27) in the learning process, teaching media is a container and channel for messages from the source of the message, in this case the teacher, to the recipient of the message, in this case the student. The importance of development in this research is devoted to students, physical education teachers, schools and researchers. For students of this Penjas-pedia application, it is hoped that students can learn more easily through smartphone media.

For teachers, this Penjas-pedia application can be used as an alternative learning media in the learning process. For schools, the physical education application is a learning medium to support physical education learning process activities to be more effective and efficient. As for researchers, it is hoped that it can be an inspiration to develop better application products. The use of media in the learning process can make students more active in learning and pay more attention to the teacher when learning takes place.

According to NunuMahnun (2012: 27) in the learning process, teaching media is a container and channel for messages from the source of the message, in this case the teacher, to the recipient of the message, in this case the student. Starting from this, the authors are interested in conducting research with the title "Use of Android-Based Applications in Physical Education Learning at SaintekNurulMuslimin Vocational School.

Literature Review

Physical Education

Physical education is a learning process through physical activity designed to improve physical fitness, develop motor skills, knowledge and behavior of healthy and active living, sportsmanship, and emotional intelligence. The learning environment is carefully arranged to promote the growth and development of all domains, physical, psychomotor, cognitive, and affective for each student. (Samsudin, 2008:2). Physical education is an educational effort by using large muscle activity so that the ongoing educational process is not hampered by health problems and body growth. As an

integral part of the overall educational process, physical education is an effort that aims to develop an organic neuromuscular, intellectual and social area (H.AbdulkadirAteng, 1992).

According to Pangrazi and Dauger (1992) in AdangSuherman (2000: 20) state that physical education is part of a general program that contributes, especially to the overall development of children. Supandi (1992:1) Physical education is a process of systematic interaction between learners and the environment which managed through effective and efficient physical development toward completely human establishment. This thing then arranged systematically in teaching and learning activities form to meet the needs of learners physical, mental, and social growth and development. Based on some of the opinion above concluded that education is a learning process through physical activities which designed to enhancing physical fitness, develop motoric ability, knowledge and healthy lifestyle, also, active, sportive attitude, and emotional intelligence.

Learning

Learning is a progress and doesn't a result. Therefore, learning occurs in active and integrative proses with apply various form of action to get the goals. Ernest R Hilgard in (SumardiSuryabrata, 1984:252) stated that learning is an action process done on purpose, which then cause the change, whose circumstances are different from the changes brought about by the others. Gagne in his book The Conditions of Learning (1997) learning is a kind of change that show in behavior change, whose situation is different from before the individual in the learning situation and after taking a similar action. The change happens because of experience or practice. In contrast to changes immediately due to reflexes or instinctive behavior.

From learning definitions above concluded that learning is business process carried out by individuals to get a change in attitude as a result of experience in interacting with their environment, and the change of attitude is not a result from development process. In other word, learning is an activity or activity that is intentionally carried out by individuals so that changes in self-ability occur, as a result of individual experiences in interacting with their environment.

Android

Android is a Linux-based software that is now not only used in the world of entertainment and work, but also in the world of education. Now, information and communication technology has penetrated in education. It is possible that later Android will be used in the teaching and learning process in an educational institution.

We know that the development of information technology is currently very rapid, because the Indonesian people are consumptive towards technology and because of the need for technology in terms of education, the world of work and industry.

Technological needs in terms of education, the world of work and industry. But it is much more influential in terms of education as it is today. In addition, the influence of android with the world of education in Indonesia today is in terms of learning and the ease of communicating, browsing and also sending email for educational purposes, where tasks or any material are widely available on the internet and it is easily accessible by android users. The Covid-19 pandemic that emerged last December 2019 had an impact on all fields, including the field of education. All indoor and outdoor activities in all sectors are temporarily postponed to reduce the spread of Covid-19, so schools in a number of regions in Indonesia are still using online media. The Ministry of Education and Culture issued Circular Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Covid, which states that the learning process is carried out at home through online/distance learning. Currently, the alternative form of learning that can be done during the Covid-19 emergency is online learning. Therefore, departing from the government's policy, physical education teachers have difficulty in carrying out the learning process. Physical education is carried out in practice which is required not only to communicate but there is a process of teachers in direct contact with students. This is usually related to the correction or correction of movement techniques carried out by students.

Research Purposes

The purpose of this research is to find out "The Use of Android-Based Applications in Physical Education Learning atSaintekNurulMuslimin Vocational School."

Method

The type of research used by researchers is a type of research and development known as Research and Development (R&D). According to Sugiyono (2015: 407) explains that research and development aims to develop a product that already exists but can be tested for feasibility and effectiveness. The research and development model used refers to the Borg and Gall model (Sugiyono, 2015: 409).

The reason for using the research and development research and development model proposed by Brog and Gall is because this model is a general model and can be applied in all development research and when conducting research with this method, can be obtained the results of a development research that is really valid to make a research development through several medium validation materials and learning process. The following are chart for compiling development research according to Borg and Gall.

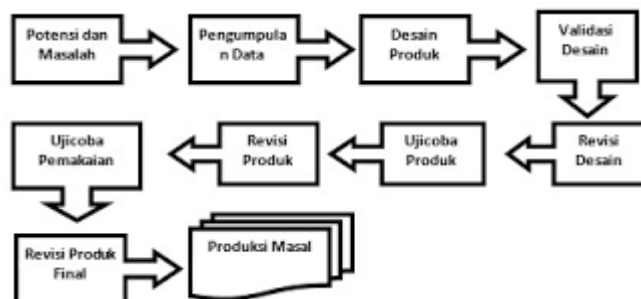


Figure 1. Borg And Gall Steps.

In this research data collected through filling out a questionnaire. IttoTuryandi (2019: 110) explained that questionnaire is a list of statements or questions which send to respondents, in directly or indirectly (through mail or intermediary). Each question has five answers alternative which chose based on Likert scale. In accordance with the type and source of data, the methods used in data collection in this study are: by using the method of distributing questionnaires. Questionnaires are distributed via Google Form to students who will be sampled. The data collected in this study were then analyzed by using the technique of calculating the average.

The type of quantitative descriptive research used in this study was used to obtain in-depth, clear and comprehensive information about the learning motivation of students of SMK SaintekNurulMuslimin. Besides, with this quantitative descriptive approach students can express the situations and problems they face and often become obstacles in this learning activity. Mulyadi (2011: 127) stated that Quantitative research is a research approach that represents positivism.

Sugiyono (2017:80) The population is a generalization area consisting of objects/subjects that have a certain character and quality determined by the researcher himself to be studied or studied and after that a conclusion will be obtained from the research. The population in this study were all students of class XI SMK SaintekNurulMuslimin, namely 120 students. Sugiyono (2017: 81) argued that the sample is part of the number and characteristics possessed by the population. This definition is in line with the explanation of Siregar&Harahap, (2019: 64) which stated that the sample is part of the population that is expected to be able to represent the population in the study.

Samples were taken using the purposive sampling method. According to Sugiyono (2017: 85) Purposive Sampling is a sampling technique with certain considerations. based on the will and considerations of the author, where the sample was taken by 50% of 120 students so that a sample of 60 students was obtained.

Results and Discussion

To obtain data with a questionnaire to measure the level of motivation of students of Saintek Nurul Muslimin Vocational School towards the use of Android-based applications in learning physical education. The level of motivation of Saintek Nurul Muslimin Vocational School students towards the use of android-based applications in physical education learning. Measured by a questionnaire totaling 20 questions. After the data is obtained, the score is calculated and analyzed with the help of Microsoft Excel 2010 software, the minimum value = 35%; maximum value = 90% ; the average value (mean) = 65% ; with a standard deviation value = 0.145%.

Table 4.1 Recapitulation Results

Results of the Recapitulation of the Calculation of the Percentage of Motivation, Respondents' Answers to Negative Statements.

No	Quantity x Weight	Calculate Percentage	Percentage Yield
1.	360	$360/400 \times 100$	90%
2.	268	$268/400 \times 100$	67%
3.	263	$263/400 \times 100$	65.75%
4.	199	$199/400 \times 100$	49.75%
5.	305	$305/400 \times 100$	76.26%
6	197	$197/400 \times 100$	49.25%
7	311	$311/400 \times 100$	77.75%
8	324	$324/400 \times 100$	81%
9	309	$309/400 \times 100$	77.25%
10	312	$312/400 \times 100$	78%
11	202	$202/400 \times 100$	50.5%
12	198	$198/400 \times 100$	49.5%
13	213	$213/400 \times 100$	53.25%
14	236	$236/400 \times 100$	59%
15	346	$346/400 \times 100$	86.5%
16	237	$237/400 \times 100$	59.25%
17	226	$226/400 \times 100$	56.5%
18	140	$140/400 \times 100$	35%
19	302	$302/400 \times 100$	75.5%
Mean	65%		

Table 4.2 Analysis Recapitulation Results

No	Quantity x Weight	Calculate Percentage
1.	90%	Very Good
2.	67%	Enough
3.	65.75%	Enough
4.	49.75%	Very Less
5.	76.26%	Enough
6	49.25%	Very Less
7	77.75%	Enough
8	81%	Good
9	77.25%	Enough
10	78%	Enough
11	50.5%	Very Less
12	49.5%	Very Less
13	53.25%	Very Less
14	59%	Less
15	86.5%	Good
16	59.25%	Less
17	56.5%	Less
18	35%	Very Less
19	75.5%	Enough
20	72%	Enough
Average Percentage	65%	LESS

Discussion

Based on the results of calculations with data processing results from research answers from respondents, the conclusions that can be drawn from the results of this study are that the level of

using Android-based applications in Physical Education Learning at SMK Saintek Nurul Muslimin is in the LESS category with an average percentage of 65%.

Students must always be guided so that in the learning process the e-learning method can be used properly. In this case, the teacher acts as a facilitator to guide and direct what is learned in various subjects or in certain types of lessons being taught. Learners also benefit from a stunning android display, for learning using android this might make it easier for the teacher because the teacher acts as a facilitator and no longer talks at length with the lecture model.

Conclusion

Based on the results of calculations with data processing results from research answers from respondents, the conclusions that can be drawn from the results of this study are that the level of using Android-based applications in Physical Education Learning at Saintek Nurul Muslimin Vocational Student is in the LESS category with an average percentage of 65%. This shows that it is necessary to make an evaluation that needs to be carried out by students and physical education teachers so that in the future the use of Android-based applications in Physical Education Learning can be further improved so that the goals of an education itself can be achieved perfectly.

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