Research Article

Learning Media for Physical Education Based on Articulate Storylane 3 for Football Material Senior High School

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ARTICLE INFO	ABSTRACT
	Introduction: The purpose of this study was to create interactive learning media for Sports and Health Physical Education material for high school football games. Interactive learning media focuses on student activities so that they can access media according to the needs of Core Competencies and Basic Competencies. Interactive learning media can be useful to help create learning that is not monotonous. **Objectives**: This study aims to develop a product in the form of interactive learning media based on the Articulate Storylane 3 application in football learning. **Methods**: This type of research is research and development with the procedural steps being a) Analysis b) Planning c). Development d) Implementation e) Evaluation. Quantitative data analysis techniques in this study used descriptive statistical analysis obtained through questionnaires given to media experts, material experts, teachers and students. **Results**: The results achieved from this research are the creation of interactive learning media for football games which have been assessed and analyzed by material experts, learning experts, and media experts. Based on the test results and assessments from experts, the interactive learning media for football games is included in the very good category and is suitable for use in learning Physical Education. This interactive learning media is equipped with a guidebook to make it easier for students and teachers to access this media. **Conclusions**: Based on the results of the research that has been done, it can be concluded that the Articulate Storylane 3 based interactive football game learning media product is feasible and can be used in high school physical education learning. **Keywords:** Interactive, Media, Footbaall

INTRODUCTION

Physical education is one of the subjects at the senior high school level which involves physical movement activities aimed at developing the physical, mental, social and emotional fitness of students. One of the scopes of material taught in Physical Education is the game of football. In its implementation students are expected to be able to achieve learning objectives in accordance with the Basic Competencies that have been determined including, a) Practicing the results of specific motion analysis, b) Practicing the results of specific motion analysis and Developing improvement plans.

Physical education is a subject that focuses on learning movement activities. This is a challenge for Physical Education teachers to be able to create remote motion learning so that the psychomotor aspects of students can be fulfilled in terms of process and results, so that the need for teacher creativity in conveying material through online media [1]. Learning media is an important factor in improving the quality of learning and is the impact of technological developments in the field of education which demand efficiency and effectiveness of learning [2]. The effectiveness of learning using media is of course also supported by the ability and accessibility of users, both teachers and students. In this case teachers and students are expected not to find obstacles and difficulties in the use of information technology-based media. As the controller of learning, teachers are required to be able to create conducive and not boring distance learning. Good learning media must meet several requirements such as being able to increase student learning motivation, stimulate students to remember what they have learned, activate students to be able to give

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responses, feedback occurs, and also encourage students to be able to do practices correctly [3]. One form of learning media is based on multimedia. In the context of learning, multimedia is defined as the use of various types of media in conveying messages or learning materials that can be received optimally and optimally by students who have different modalities [4]. Multimedia-based interactive learning media and distance information technology (online), is the answer to the problems of motion learning in physical education. Multimedia-based learning is a learning activity that utilizes computers to create and link text, graphics, audio, moving images (video and animation) by connecting links and tools that allow users to navigate, interact, create and communicate [5]. Learning media that are able to provide specific descriptions of motion in the form of videos that can be accessed by students so they can understand the purpose of the movement referred to in Basic Competence. Several interactive learning media platforms that can be accessed are Articulate Storylane 3.

OBJECTIVES

Identification of the problems in this study included 1) how to increase students' interest, motivation, and understanding of motion learning through online learning, 2) The need for interactive learning media that students and teachers can access online and offline to achieve learning objectives. The formulation of the problem in this study is how is the development of interactive learning media in the process of learning motion in Physical Education subjects for high school students?

The specific objective of this study is to develop interactive learning media as a tool for learning football subjects. With the development of this learning media, it is hoped that students, students, and physical education teachers will be helped in teaching the game of football. The urgency of this research is that Physical Education learning, especially in the Football Game scope, becomes more effective and efficient in achieving learning objectives.

METHODS

This research is a development research that aims to produce products in the form of interactive learning media. Research and development is a method or method used to develop or validate products used in education and learning [17]. The population of this study were students of class X and XI of senior high school. The sampling technique used random sampling. The stages carried out in this study: a) Analysis b) Planning c). Development d) Implementation e) Evaluation with the following description:

1) analysis

The analysis phase is carried out with initial observations. At this stage it is carried out to collect initial data in the form of needs from teachers as users of the product to be developed. Data collection can be done by measuring needs, studying literature, research on a small scale and considerations in terms of value [18]. The next stage is to conduct learning observations at schools and interviews with Physical Education teachers. Then carry out a literature study related to the problems studied and collect information related to interactive learning media to partners.

2) Planning

The planning stage is carried out by setting goals and development steps. At this stage, the steps taken are planning before developing learning media, including:

a) Curriculum Analysis

The development of interactive learning media must be based on the high school curriculum which includes competency standards, basic competencies, and indicators of achievement of learning outcomes in Junior High School Physical Education subjects.

b) create storyboard view layer

after analyzing the Learning Target curriculum for Football games, a storyboard was prepared as an overview of the product layer display of the resulting application. As an initial illustration of the shape of the display contents of the layer is an example as follows:

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Table. 1 Draft Product

Interactive Learning Media	
Opening	Prologue with the appearance of a footbal game
Basic Competencies	Football game
Teaching	Driblling, Passing, Shooting
Reference	PE Text book for 10th Grade senior high school
Evaluation	Ptactice test

3) Development

The development stage consisted of drafting the media according to the plan by inserting a storyboard on the platform layer and incorporating the substance of the material along with the video and voice over according to the curriculum used.

After the product draft is completed, an assessment is carried out by media experts and learning experts for the level of conformity of the product with the material. All input from experts is used for product improvement.

4) applicability

After product improvement is in accordance with expert input, the product is used in Physical Education learning with a sample of students and collects student input related to the product they have used. Student input and responses regarding the products used focused on content aspects, display aspects, and accessibility aspects.

5) evaluation

At this stage all input from experts and students was collected to then conclude the usefulness of the product and the suitability of the product with learning to play football in Physical Education.

The types of data in this study are quantitative and qualitative. Quantitative data is in the form of a Likert scale questionnaire regarding product feasibility based on the results of the material test and design test, as well as the level of attractiveness, convenience, and usefulness. While the qualitative data were obtained from observations about learning, input, responses, criticism and suggestions through open questionnaires.

Data collection in this study was carried out using instruments in the form of questionnaires, observation sheets, and tests.

The following is the lattice of the instruments used in this study:

Table 2. Research Instruments Lattice

Jenis	Subjek	Kisi-kisi instrumen
Pre Research	PE teacher	Learning Observation sheets
Expert test	Multimedia Expert Material Expert	Questionnaire of the suitability of the design with the planned specifications
Field Test	Students	Questionnaire on the attractiveness and ease of use of the media

Quantitative data analysis techniques in this study used descriptive statistical analysis obtained through questionnaires given to media experts, material experts, teachers and students. The expert validation questionnaire uses a Likert scale which has 4 answer choices according to the question content. Each answer choice has a different score, namely very good = 4, good = 3, not good = 2, very bad = 1. The steps in data analysis include: collecting raw data, scoring scores, the scores obtained are then converted be rated on a 4 scale.

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Table 3. Conversion of Research Scores

No	Score	Kategori
1	X ≥ Mi + 1.Sbi	Very Good
2	Mi + 1.Sbi > X ≥ Mi	Good
3	Mi > X ≥ Mi − 1.Sbi	Bad
4	X< Mi - 1.Sbi	Very Bad

Information:

X = Respondent score (score achieved)

Mi = Mean ideal = 1 2/(ideal maximum score + ideal minimum score)

Sbi = ideal standard deviation

Sbi = 1 6/(ideal maximum score – ideal minimum score)

RESULTS

The results achieved from this research are the creation of online-based interactive learning media products using the Articulate Storylane 3 application. This interactive learning media complies with the Competency Standards and Basic Competency of Physical Education with football game material. This media contains analysis of specific movements, variations, and combinations of motion variations in football.

Based on the results of the assessment of material experts, media experts, PJOK teachers, and students, the following data analysis was obtained :

Table 5. Classification of Research Results

Aspect	Very Good	Good	Bad	Very bad
	X≥Mi+1.Sbi	Mi+1.Sbi>X>/Mi	Mi>x>Mi-1.Sbi	X<Mi-1.Sbi
Learning Aspect	√	–	–	–
Media Aspect	√	–	–	–
Material Aspect	√	–	–	–

Based on the calculation of the conversion score of the assessment, this interactive football learning media is very good and suitable for PJOK learning.

DISCUSSION

a. Product analysis by Learning Experts

An assessment carried out by a learning expert, namely a Physical Education teacher at Senior High School that this Interactive Learning Media product was very suitable for PJOK learning. From the material aspect, this product is very good because it is in accordance with the Competency Standards and Basic Competences, which contains specific movements for football game in which there is a video and an explanation of the basic techniques of passing, dribbling and shooting. This can be seen in the material menu and video display on the media.

In addition, based on the PJOK teacher's assessment, the movements shown in the video are also very easy to learn and the delivery of the material is very clear. This is also equipped with a slow-motion display for each technical movement.

b. Product analysis according to Media Experts

According to media experts, this product based on Lecora Inspire is very interesting. This media is very interactive and can be accessed online by students and teachers. This is in accordance with the development of learning media technology. The appearance of this media is very attractive with the selection of colors and the use of appropriate contrast. The choice of font type and font size is very suitable so that the level of legibility is very good.

c. Product analysis according to Students

Based on the data collected from students through a questionnaire regarding product evaluation of interactive football media, this media is very interesting. From the learning aspect, this media is very suitable for the movement characteristics of high school students. The movements shown are simple and very easy for students to imitate. In addition, this media is also considered to be very helpful in learning interactions between students and teachers. And the display makes it easier to do the analysis.

Based on the media aspect, the appearance of the media is very attractive with appropriate color choices and easy access. The level of legibility is also very good because the selection of fonts and font sizes is appropriate.

Based on the results of the research that has been done, it can be concluded that the Articulate Storylane 3-based football Game Interactive learning media product is very good and can be used in learning Physical Education, Sports and Health at the high school level

Physical education, sports and health teachers at the senior high school level can use the interactive media of this Articulate Storylane 3-based Football game in PJOK learning at school as student digital literacy material.

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