

# Effectiveness, Efficiency, Attractiveness Development of the Cricket Learning Media Based on Mobile Learning on the Sport Cricket Team of State University of Malang

Johan Christianto<sup>1</sup>, Wasis Djoko Dwiyo<sup>2\*</sup>

<sup>1</sup> Department of Physical and Health Education, Faculty of Sport Science Universitas Negeri Malang, Malang, Indonesia

<sup>2</sup> Department of Physical and Health Education, Faculty of Sport Science Universitas Negeri Malang, Malang, Indonesia

\* Corresponding author Email: [wasis.djoko.fik@um.ac.id](mailto:wasis.djoko.fik@um.ac.id)

## ABSTRACT

This study aims to develop media-based learning Cricket on mobile learning. The method used in this research is the Research and Development approach by Darmawan. The subjects are the players and members of the cricket sports team of the State University of Malang. The instrument for data collecting is in the form of observations, and questionnaires. Data analysis techniques in this study were descriptive percentages used to process qualitative and quantitative data. This study has validated by 2 experts; 1 cricket sports learning expert and 1 media expert. The average score by the cricket sports learning experts is 92%, media experts give 100 %, and group trials give 89%. Then the product effectiveness test has a value of 85%, efficiency test with a record time of 43 minutes, and product attractiveness test with a 90% percentage result. Cricket learning on the cricket sports team at the State University of Malang. Therefore, the product is declared feasible and valid to be used for cricket learning in the cricket sports team of the State University of Malang. With these results, this product is considered in the excellent criteria. This product, cricket learning media from Malang State University cricket sports team, is suitable to be used in the learning and training process.

**Keywords:** Learning media, Mobile learning, Cricket sports.

## 1. INTRODUCTION

Physical education is a learning process formed to improve fitness, develop motor skills, active life knowledge and sportsmanship through physical activities. In a physical activity it will work well if you practice various basic techniques in games and sports, especially in cricket sports, as well as all forms of values contained therein. Based on competency standards and basic competencies, physical education and health are an integral part of overall education, it aims to develop aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of patterns healthy life, and the introduction of a clean environment through physical activities. Learning media is something (it can be a tool, it can be a material, it can be a

condition) that is used as an intermediary for communication in learning activities [1]. There are three concepts used namely the concept of communication, the concept of the system, and the concept of learning. The notion of media in the teaching and learning process tends to be interpreted as geographical, photographic, or electronic tools to capture, process, and rearrange visual or verbal information [2]. More clearly it can be interpreted that the media is a tool used to convey or deliver learning messages. According Learning media is all ses ne to distribute inf o r masi of resources to the recipient information [3]. The learning process is also essentially a communication process, so that the media used in pembe l teaching is called a medium of learning. Learning is a process of communication between teachers, students, and learning media.

Communication will not take place without the help of a means of delivering messages or the media. The message to be communicated is the learning content that is in the curriculum that has been presented by the teacher to students in the learning process. The media comes from Latin which means between or intermediaries, which refers to something that can connect information between the source and recipient of information [4]. An interactive multimedia is a combination of various kinds of communication channels into communicative experiences and has an integrated cross-channel language and interpretation does not exist [5]. It combines text, graphics, audio, moving images (animated videos) into a single unit with appropriate links and tools so that multimedia users can navigate, interact, create, and communicate [6].

Advantages of using interactive multimedia in teaching include: 1) The learning system will be more innovative and interactive, b) Educators will always require a creative innovative in seeking a breakthrough study, c) could combine text, images, audio, music, animated image, or video in a unit that supports each other in order to achieve the learning objectives, d) adding motivation for students during the teaching and learning process to obtain the desired learning goals, e) able to visualize material that has been difficult to explain just by conventional explanations or teaching aids, f) train students to be more independent in gaining knowledge and knowledge. Interactive multimedia gives a new nuance in obtaining information through reading activities.

Multimedia-assisted reading can provide several benefits, namely making reading more dynamic by giving a new dimension to words. Especially when it comes to conveying meaning, words in multimedia applications can be triggers that can be used to expand the scope of text to examine a particular topic more broadly. Every information processing should be based on a communicative visualization flow chart [7]. The goal is that the flow and the path of the process of making a product that will be developed can be easily understood and passed and followed by the user as a whole and meaningfully. Instructional materials consist of knowledge, skills and attitudes that must be learned by each student in order to achieve predetermined competency standards.

Mobile learning is related to learning using mobile devices such as mobile phones, laptops, and PDAs [8]. Along with the development of information technology and communication technology, the development of information processing capabilities on mobile devices increases with applications such as games, social media, and so on. Mobile learning is a facility or service that provides information through electronic media to learners and educational content that is able to help learners to achieve learning objectives without regard to

location and time. Cricket is a sport that is played in the field of grass that leads to positive mental development and prioritizes: Honesty, justice, respect or respect for opponents and referees' decisions [9]. Cricket games are played by eleven people in a team, and the duration of the game is not limited by time, but uses over (transfer). For example in the game there is team A guarding the ball and team B hitting the ball, the task of team B is hitting the ball as much as possible to collect as many scores as possible and team A is bowling and guarding the ball to hold team B collecting as many points as possible until completion.

The development of instructional media is very important in a learning process, especially cricket sports, so the learning media developed in the form of this application will become easier so that players and old members and new members who enter the team are not easily bored in doing exercises. One way to overcome that boredom is to provide different media in learning cricket. Responding to this, the researchers conducted a needs assessment of 20 cricket sports team students at the State University of Malang by distributing needs analysis questionnaires and obtained the following results: (1) 63% were rarely given cricket learning, (2) there were 60% less students mastering cricket learning, (3) 90% need cricket sports learning, (4) 90% stated that they really need cricket sport learning, (5) 100% of students stated that they really need mobile learning media to support the course of cricket learning.

Based on the background of the problem presented, the researchers then developed a learning media based on mobile learning in which there are text, images, videos, and audio of learning material sports cricket. The purpose of this research and development is to develop mobile learning media based on Mobile Learning to help and facilitate students of Physical Education and Health at State University of Malang in learning cricket sports.

## 2. METHOD

This research method uses procedural development. The subjects used in this study were the players and members in the cricket team of Malang State University by using data collection instruments in the form of questionnaires or questionnaires. Using quantitative and qualitative data analysis techniques obtained from the processing of qualitative analysis methods using triangulation while quantitative analysis uses percentage descriptive. The steps of research and development of multimedia learning explained are as follows: (1) analysis of learning needs and curriculum analysis, (2) identification of the program, (3) making flow chart in accordance with the specified model, (4) making a story board description and flowchart detailed each frame and slide, (5) collecting graphic, audio and video material,

(6) programming combining all materials, graphics, audio and video, and (7) finishing the trial program [7].

The instrument used in this research development was a questionnaire or questionnaire. The questionnaire was used to collect quantitative data from the results of needs analysis, validation of instructional media experts, validation of cricket sports learning experts and product trial development of mobile learning media based on cricket sports learning.

The analysis technique used in this research and development is qualitative and quantitative analysis techniques. Qualitative analysis is used to process data in the form of sentences containing advice from learning media experts and cricket sports learning experts. Quantitative analysis is used to process data obtained from the distribution of needs analysis questionnaires, validation of learning media experts, validation of sports cricket learning experts, and product trials. To determine the achievements in this research and development, the used percentage calculation value (%) is then used to convert it into a qualitative form.

### 3. RESULTS

The results of the development will be presented data obtained from needs analysis, evaluation of learning media experts, evaluation of sports learning cricket experts, and product trial results.

#### 3.1. Analysis To Heal & Condition

Based on the results of the needs analysis evaluation obtained the following percentages (1) 63% are rarely given cricket learning, (2) there are 60% of students lacking mastery of cricket learning, (3) 90% require cricket sports learning, (4) 90% stated very need to learn cricket sports, (5) 100% of students stated that they really need mobile learning media to support cricket learning.

#### 3.2. Learning Media Expert

Based on the results of the validation of media experts obtained an average of 76 %, from these results the research and development of mobile learning media based on mobile learning on the cricket sports team of the State University of Malang can be continued at the next stage namely product trials.

#### 3.3. Cricket Sports Learning Expert

Based on the results of the evaluation of cricket sports learning experts, an average result of 92% was obtained , so that the development of cricket sports learning media based on mobile learning in the cricket sports team of the State University of

Malang can be used as a media for cricket sports . The results of the needs analysis above, the researchers conducted a question and answer kepada a builder and to members of the State University of Malang cricket that no media-based learning mobile learning. As a result, there is no mobile learning media that supports cricket learning and the lack of reference for getting cricket sports material.

#### 3.4. Product Trial

Based on the results of testing the products that have been done to the cricket team members of the State University of Malang showed that the average yield of 89%. So these results indicate that the product developed by researchers is in the very good category, so the product is declared suitable for use in the development of learning media for mobile learning based on mobile learning on cricket sports teams in State University of Malang.

### 4. DISCUSSION

The players and members of the Malang State University cricket team who still have shortcomings in gathering material and references from cricket sports. This can be seen when the writer makes direct observations and questions and answers about the material obtained from where and what media are used to provide material to the players and new members to join. There are five main elements or technologies in interactive multimedia, namely: text, graphics, audio, video, and animation.

Learning media is something (it can be a tool, it can be a material, it can be a condition) that is used as an intermediary for communication in learning activities [1]. It is basically an all materials (both, information, tools, and text) are arranged systematically, featuring the figure of the whole of the competence to be controlled by students and used in the learning process with the aim of planning and review of the implementation of learning. The function of the media in the learning process is quite important in improving the quality of the learning process especially helping students to learn [10].

Interactive multimedia is a combination of various media (formats / files) in the form of text, images (vector or bitmap), graphics, sound, animation, video interaction, and others that have been packaged into digital files ( computerized), used to convey messages to the public [11]. Mobile learning is related to learning using mobile devices such as mobile phones, laptops, and PDAs [8]. Learning is not enough to know about the uses, values and foundation, but also must know how to

use media, so that the delivery of material feels easier for athletes to understand. Because the media is very easy to be used as a medium of learning process [12].

The rapid development of technology is very fast and in all fields, one of the fields that can not be separated from technology is the field of education other than that technology is inseparable from daily life namely electronic telecommunications. Electronic telecommunications has the potential in learning or training and it is certain that in the future this media will be very used as a problem solving process and the learning process can be accessed through applications that are in the telecommunications equipment. The term mobile learning refers to the use of mobile phones such as PDAs, cellphones, laptops, and information technology devices that will be used in teaching and learning [12]

## 5. CONCLUSION

This research and development resulted in the development of mobile learning based learning media for sports cricket on the cricket sports team of Malang State University. The development of instructional media was assessed by expert testing and product trials to all members of the cricket sports team. It can be concluded that the development of cricket sports learning media is very valid to be used for coaches, coaches, and cricket sports teams of State University of Malang.

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