

# Achieving Competency in Pencak Silat Courses Through the Application of Android Media

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**Abstract.** Effort to improve the quality of education from media, facilities and infrastructure as well as increasing human resources. The use of digital learning media has an important role in knowledge construction. The results of tests carried out on the application of media to pencak silat learning experts with the indicators of punches, sweeps, dodges, parries obtained an indicator of 85%. For material experts, 86% was obtained. Pencak silat media experts have an overall indicator of 87%. The conclusion is that the use of media is very feasible.

**Keywords:** Application of Digital Media in Learning Pencak Silat.

## 1. Introduction

Learning is the result of the interaction of various variables which have a relatively permanent impact on individual behavior, both cognitive, affective and skills. This interaction can occur in the classroom. The learning process in the classroom is a direct activity of a transformation of knowledge, attitudes and skills towards students. (Puji Utami, 2022). Utilization of educational technology both hardware (hardware, software, brainware is the application of scientific knowledge to achieve learning goals more effectively and efficiently. There are three basic principles in the development and use of technology in learning, namely: 1) System approach (system approach), 2) Oriented to students (learner centered), 3) Utilizing learning resources to the maximum extent possible and as varied as possible.

## 2. Exploratory approach

The exploratory approach is an approach that aims to explore different ideas, arguments and ways from students through a number of open questions and instructions so as to lead students to understanding a concept and solving problems. In this approach students become active explorers and lecturers act as guides and facilitators of this exploration. The purpose of exploratory activities is to encourage student involvement in solving problems broadly and comprehensively (Susilawati et al., 2017)

## 3. Development Concept

The development research method is a research method used to produce certain products and examine the effectiveness of these products. On the other hand, to produce a certain product requires needs analysis and to test the effectiveness of the product. Research and development is a process or steps to develop a new product. Essence, development is an educational effort both formal and non-formal develop a basic personality that is balanced, whole, and abilities as a provision on one's own initiative to increase, improve, develop oneself towards achieving dignity, quality and optimal human abilities and an independent person.

#### **4. Martial arts**

The essence of pencak silat is a sport inherited from the Indonesian nation which was originally used to face natural challenges and attacks by wild stars. The philosophy of pencak silat is to be humble, trengginas, tanggon have morals in behavior. Therefore, pencak silat is a way to instill character values and a tool for preserving culture from childhood to adulthood as one of the reasons for including Pencak Silat as a specialist subject in PKO. A PKO student must equip himself with all kinds of learning basic technical skills which will contribute later in developing his professional skills in teaching or coaching in clubs/colleges or schools. Learning can be carried out conventionally and can also be done through ICT assistance to simplify, speed up mastery, such as android.

Learning can be carried out conventionally and can also be done through ICT assistance to simplify, speed up mastery, such as android as technology in learning Technology ICT is believed can help students learn overcome the limitations of time, distance and large numbers of students. Apart from that, the benefit of using this media is that it encourages students and teachers to obtain more information, in addition to various other learning sources such as books or other media. So that it can improve learning abilities, learning is more interesting and not boring. In this way, it is hoped that all basic pencak silat technical material can be mastered by students with the help of Android media-based learning technology.

#### **5. Learning Media Development**

Digital learning media has an important role in knowledge construction, because by arguing knowledge is communicated to gain recognition and justification. Education that uses digital media has benefits in helping students to explore the educational process in the classroom that is currently taking place (Nur Wahyudi et al., 2021). The aim of developing Android-based media is to increase competency in pencak silat skills course.

#### **6. Research methods**

This research uses exploratory qualitative research. Qualitative research with research development from Borg and Gall generally prioritizes scientific narratives as a form of exploration of research results (Muh Fitrah, 2017). The main data sources are media experts, learning experts, media experts and PKO Unimed students. The scores obtained in each of these steps can be obtained by using a data questionnaire to analyze of media experts and material experts and student responses to Android-based learning media.

## **7. Results of Expert Study in the Application of Android Media in the Pencak Silat Course**

### **7.1 Pencak Silat Expert**

Exploration of the use of android media that has been made in the achievement of competence has gone through expert tests with four statement indicators. After going through the continuous evaluation material indicators, 85% is obtained in the very decent category. Indicator Sweep material with a percentage achievement 85% with a very decent category. Next indicator Material avoids the achievement of the percentage 88% with a very decent category. Response material with a percentage 87% in the very decent category. The conclusion of the android media that is applied to student competency achievements is very useful.

### **7.2 Variables Of Learning Indicators For Experts In The Basic Materials Of Pencak Silat**

Exploration of the use of android media that has been made in the achievement of competencies has gone through expert tests with four statement indicators. After going through the continuous Basic Material Indicator, 85% is obtained in the very feasible category. Indicator Material Display Basic Material with a percentage achievement 87% in a very decent category. The next indicator is the Material of the Kick, the percentage of which is 86% with a very decent category. Presentation Material for Skills with a percentage of 85% in a very decent category. The conclusion of the android media that is applied to student competency achievements makes a very good contribution.

### **7.3 Learning Experts**

Exploration of the use of android media that has been made in the achievement of competence has gone through expert tests with four statement indicators. The learning indicator for Basic Materials after going through a continuous process is 86% in the very decent category. Indicator Learning Material Display Basic Material with a achievement of 88% in a very decent category. The next indicator Learning material for the achievement is 85% with a very decent category. Learning of Skills Material with a percentage 88% with a very decent category. Conclusion android media applied to student competency achievement learning makes a very good contribution.

### **7.4 Video Basic Materials Of Pencak Silat**

Exploration use of android media that has been made in the achievement of competence has gone through expert tests with four statement indicators. The indicator for the display of the Basic Material learning video after going through a continuous process was obtained 89% in the very feasible category. Indicator Learning Material Basic Material

video display with a percentage achievement of 87% in a very decent category. The next indicator is the display of the video. The learning material for the achievement percentage is 84% in the very decent category. Learning material Video display of Kick Material with a percentage achievement of 87% in a very decent category. Conclusion android media applied to student competency achievement learning makes a very good contribution.

## **8. Discussion**

Research that is relevant to this research is research carried out in pencak silat which has previously been developed to develop reaction speed (Sinulinggal, et al. 2018). These findings are in line with findings of Adibah Sahrani (2023) where the Multimedia-Based Pencak Silat Learning System Application Using Android makes it easier to learn single pencak silat art moves more interestingly using Android-based methods so that they can be accessed easily.

Apart from that, the results of this research are supported by interesting findings from Sriati Dwiatmini, et al (2023) by analyzing several Scopus journals regarding artistic pencak silat learning media published in 2021 to 2023 to find out the categorization of pencak silat learning media that has been carried out in previous research. Found that the categorization of pencak silat learning media into 2 (two) categories, namely learning mode and learning multimedia on the analysis of 30 scientific articles on the Scopus database published from 2021 to 2023, artistic pencak silat learning modes are carried out offline and hybrid. Meanwhile, the learning multimedia used in the pencak silat curriculum is based on augmented reality (AR), virtual reality (VR), artificial intelligence (AI) and the Kinovea android application.

The results of other research related to the development of pencak silat media were carried out by results of expert assessment have a mean score of 4.15 and categories as "good". Responses students received an mean score of 4.35, and categories as " good" (Aref Vai et al, (2019). It means that the product developed is fit for the student in the learning.

Other findings relate to the development of Android-based single style pencak silat learning media that is effective in improving pencak silat learning outcomes. The results of the expert assessment were concluded show significance  $< 0.5$ . Based on these results, it can be concluded that the Android-based single style pencak silat learning media is effective to improve learning single pencak silat moves. So that this learning media effective to use media for single pencak silat moves (Rian Triprayogo, dkk. (2020).

## **9. Conclusion**

Based on the findings above, results distribution of statement questionnaires given to martial arts learning experts with indicators of punching, sweeping, dodging, parrying material the use of media in learning pencak silat using Android can help increase the learning achievement abilities of Sports Coaching Education students. The four indicators, an average total of 86% of the indicators is obtained with the category very feasible to use. In general, every student has and uses a smart phone or Android smartphone to learn many things. It is

hoped that this development research can help students to be able to practice pencak silat also in other categories of pencak silat such as single stance arts, etc.

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