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# DESIGN OF MOBILE LEARNING TO ENHANCE RELIGION LEARNING SUBJECT IN INDONESIAN SCHOOL

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**Abstract:** One of the fundamental lessons in the Indonesian education system is the study of religion. Religious studies are very important for human life, especially to foster the feelings of students who believe more in God and shape students into noble human beings. Religion is a compulsory subject; but in public schools, the allocation of religious lessons is only 2 hours. Time allocation for this lesson is very lacking. Also, the teacher seems less attractive to most students because the way of teaching is less attractive. Another situation, using a smartphone has a negative impact on teaching. We can see that students play more smartphones for things that have nothing to do with learning. This condition further reduces students' interest in studying religion. We innovate learning using smartphones. This research aims to answer this fundamental problem. We optimize the function of mobile devices to increase interest in studying religion outside school hours. We develop mobile learning systems specifically for religious learning, using feedback learning and the latest cellular technology. We specifically design mobile applications. We divide the material into several sections according to the learning design. Each section is presented using an interesting way on the cellular interface. Students can learn and do assignments in stages as homework. On the other hand, the teacher can monitor the learning progress of each student. The teacher can motivate students through mobile facilities if needed. The teacher can also provide additional lessons individually or classically if needed. An interesting result when conducting experiments is the emergence of many student questions about religion precisely when they study at home. This shows that this method is more effective for religious studies.

**Keywords:** Andorid Application, Learning Metodology, Mobile Learning.

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## 1. INTRODUCTION

This paper discusses how to increase student interest in religious learning using mobile learning. According to William [1], interest in learning is the interest of students in specific subjects as a factor that determines the success of student learning. According to [2], interest in learning material is a tendency to pay attention and remember some activities. High learning interest will result in high achievement, conversely, lack of interest in learning results in low learning achievement [3]. Motivation is closely related to interest; a student is interested in religious studies; he will try to find out more about religion [4]. Developing students' interest in learning is one of the techniques in developing student motivation [5]. One way to motivate students in learning is to associate learning experiences with student interests.

Islam is critical for humans to realize people who have noble morals and serve Allah SWT. In general, the Islamic religion develops the primary mission of humanizing humanity, which is to make humans able to develop all their potential so that they function optimally according to the rules outlined in the Qur'an and Hadith. If someone can develop to their full potential, then he can be called a complete human being [6]. Islamic religious subject is a process of learning, guidance, and training of students to become

Muslims who are alive and able to carry out roles and duties as Muslims [7].

The main problem in studying religion is related to interest. The use of social media is very influential on people's behavior. If we associate the influence of social media with religious lessons, the use of social media increasingly reduces student attention to religious subjects. Consequently, the interest in studying religion significantly reduced. Many students tend to spend their free time looking for entertainment using smartphones. This situation gives a negative effect on them. However, we see one way to increase interest in studying religion instead of by utilizing the progress of social media. The way we have developed is to create a mobile learning system to motivate students to be more interested in learning religion. We find that often students complain about saturated and non-innovative methods of religious learning. We understand, this situation causes students to be less interested and lazy to study religion. This research uses mobile devices as a learning approach to make it more efficient and more effective.

The use of smartphone based mobile devices on learning media is called mobile learning. Mobile learning is one alternative media in developing learning. [8] defines mobile learning as learning where students do not live in one place, or mobile learning is a learning activity that occurs when students use mobile for learning. The learning process with mobile devices came to be known as mobile learning or m-learning. [9]. Mobile learning is related to student

mobility, which means students can do learning activities without having to do it in specific physical locations [10]. Mobile Learning also has a role in sending electronic learning material on mobile computing devices so that it can be accessed from anywhere and anytime [11]. Mobile learning can be carried out in an educational environment, inside and outside the classroom [12]. The process of learning mobile learning or m-learning can also be through mobile devices such as tablets, smartphone dan handphone [13]. The advantages of using mobile learning are that it can be used online or offline [14].

The application of the mobile learning in this research is expected to generate interest in religious studies. One of the considerations of using mobile learning is that Islamic religious education can shape students' self-awareness as servants of God and simultaneously function as caliphs on earth [15]. If students understand religion more, their tolerance for the community will increase, creating excellent communication between communities. If the environment is peaceful, it will have an impact on the life of the state, even to the association at the international level.

## 2. METHOD

The experiments in this study aim to measure student interest in using mobile learning applications. The trial used a sample of 23 students from one school. Students who have an interest in learning have fascinating characteristics, curious, enthusiastic, and high activity. We measure these characteristics using questionnaires and activity data. Existing data and then process it using smart pls, to look for the relationship between learning characteristics and interests.

The advantage of using SmartPLS is that the analysis method of the SmartPLS the approach is considered reliable because not based on assumptions. Questionnaires are data collection conducted by giving questions or written statements to respondents [16]. Respondents are asked to choose answers that disagree, not agree, neutral, agree, and strongly agree. Activity data obtained from observations as many as the number of student clicks.

To find out low or high interest in learning experiments were carried out on students. Trial of students for three months using the application. Then, analyzed to be able to know the level of student interest in learning. High interest refers to the amount of knowledge that increases while low learning interest refers to lack of knowledge.

Figures 1 and 2 explain the architecture, which consists of three concepts, namely the first concept of the teacher module, the second concept is the server, and the third concept is the student module. The first teacher module or concept has the same relevance as the three student module concepts. Moodle architecture makes it easy for teachers to be able to

know the level of student interest in learning. The advantage of architectural design is that students can study outside class hours anytime and anywhere, students also easily download material and save on smartphone media so students can study at home with material that downloaded in offline mode.

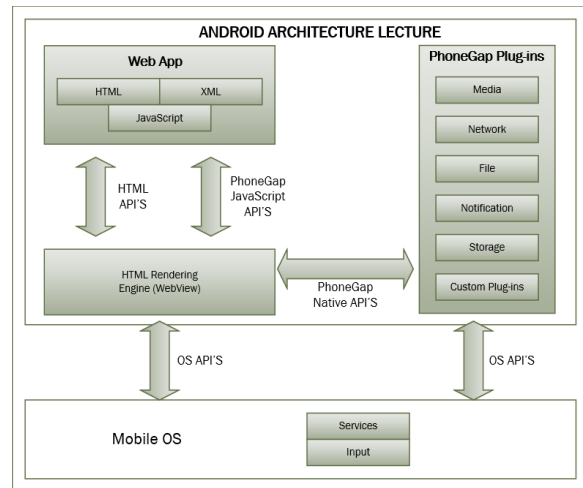


Figure1: Android Architecture Lecture

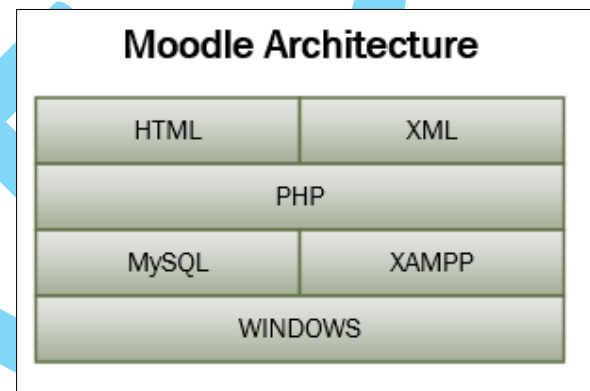


Figure2: Moodle Architecture

## 3. RESULTS

Figure 3 explains the results of calculations using Smartpls. We obtained data from a trial on 23 high school students for three months. K1, K2, and K3 are independent variables that show students' interest in learning material using a mobile device, as well as students' interest in learning to use a mobile device. P1, P2, P3, P4, and P5 are independent variables that show the display effect on the user. Display effects include the level of ease felt by students in understanding content, the use of comfort colors, and the appropriate text size. A1, A2, and A3 are ease of use of application module facilities such as ease of use. This variable also shows module flexibility concerning time; the student can use this module in anytime and anywhere. M1, M2, and M3 are student motivation variables while using the application, whereas T is an indicator of

student completeness after using the application module.

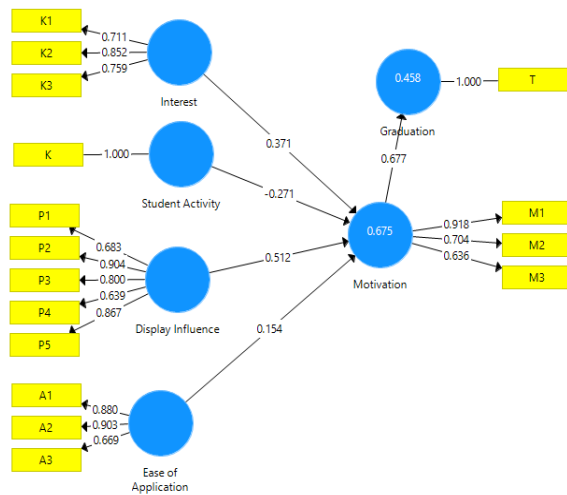


Figure3: PLS Model Calculation

#### 4. DISCUSSION

The initial purpose of this research was to increase students' interest in studying religion. High motivation can increase interest during learning, and by using mobile learning can accomplish it through the learning system. Can the tool increase motivation? Can be seen from four variables, namely interest, the influence of appearance, activity, and the effect of ease of tool. From Figure 3 it can be seen that what influences the most significant motivation is the appearance of the application, while the negative effect is an activity, it means that the activity has not shown that students have not motivated. However, seeing figure 4 motivation has grown and influenced learning success.

Interest and enthusiasm in learning already exist in students but further enhanced, so that it can foster student learning motivation by promoting student learning awareness. According [17] that student motivation has a positive effect on learning achievement. According [18], learning motivation influences student achievement, and students who have higher motivation will have better learning outcomes than students who have lower motivation. To increase motivation for students' can use diverse learning methods. Students who have high motivation will do activities that are more enthusiastic and responsible. Learning motivation is one of the factors causing high and low learning outcomes [19]. In the opinion of [20] revealed that the weakness of motivation or the absence of learning motivation would weaken learning activities.

Following the original purpose to increase interest in learning by using mobile learning. The conclusion is that this tool can attract motivation, but student interest is only limited to appearance.

However, overall, the model affects learning outcomes 67.7 percent, the rest by other factors not yet known, this shows that the learning model has not run fully because the teacher has more roles. The teacher's role is not optimal because the activities have not been able to show a direct influence on the results. This is likely to influence the way teachers manage learning patterns. If the optimal learning pattern then motivation tends to increase, activity increases, and learning outcomes will improve.

The role of the teacher is like an example for students. The teacher must have more knowledge and science to be able to convey his science to students because the teacher is the source of student learning. The teacher is also considered the second parent in the school because students are taught to write, read, and count. Teachers have many obligations in carrying out the learning process starting from planning learning, design learning, implementing learning processes, and carry out learning evaluations.

According to Silverius, that the teacher is a central figure in education in an educational effort to prepare the nation's successors in the future. Of the several factors that influence the learning process and student learning outcomes, the teacher factor that gets the most attention first, because good or bad, curriculum implementation ultimately depends on the creativity and activities of the teacher. Therefore, teachers must be professional in carrying out their duties .

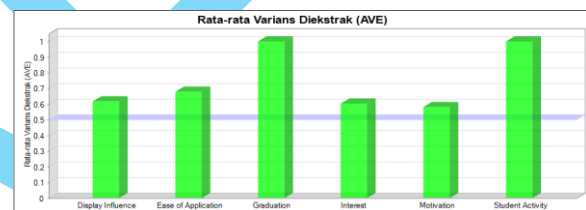


Figure4: Data Average

Figure 5 shows the ease of learning architecture using mobile learning with the WhatsApp chat application. WhatsApp is an application that is currently very popular among people. The advantage of this system is easy to use; using this system, we can send pictures, files, and photos in a simple manner. With the WhatsApp chat application making communication between teacher and student easy, so the teacher can guide and supervise students without having to come face to face. Students can also communicate with teachers to ask questions if they have difficulty when doing assignments or to discuss learning in general with class groups or privately with teachers outside class time. With the WhatsApp chat application, students can increase their interest in learning and discussion for students anytime, anywhere.

The conclusion is that the use of the WhatsApp chat application in mobile learning as a

learning medium makes it very easy for the learning process and student learning outcomes. Because in the learning process students must learn independently, although they still under the supervision of the teacher. Besides teaching, a teacher also as a motivator, so that the initial objectives of learning can be as expected.

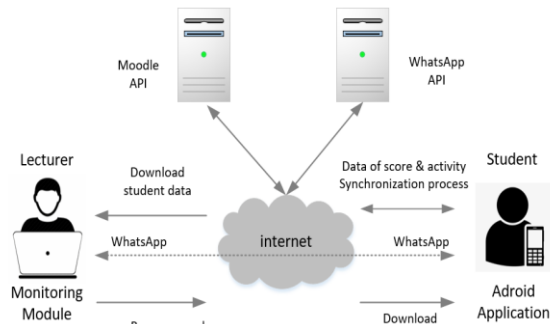


Figure5: Network Mobile Learning

## CONCLUSIONS

The interesting thing in testing this system is how this system encourages interest or motivation to study religion, as known interest in studying religion is decreasing. Interest is a feeling of pleasure or pleasure in something that is occupied. Low or high learning interest will affect learning achievement. Factors that influence high learning interest are support or motivation from parents and teachers, while the factors that influence low learning interest are oneself who feel lazy, not interested in certain subjects, and environment that is not supportive. One way to increase student interest in learning is with simple learning methods, interesting, and easy to understand so students are motivated in learning to get optimal results. This mobile device based learning system has more benefits for teachers. This system makes it easy for teachers to observe student interest in religious learning. This system also makes it easy for teachers to approach students personally through social media to provide guidance, understanding, and motivation. Ease of providing personal motivation for system features in religious learning, because motivation is the beginning of a student willing to study religion. For the student, This system has not provided maximum impact although it is able to make it easy for students to study outside of class hours anytime and from anywhere.

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