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# Mobile Support in Ubiquitous Learning Systems

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**Abstract.** The very rapid development of technology requires us to keep pace with the times as it develops. These technological advances have made everything more modern, practical and efficient. This study aims to determine our perceptions of the use of mobile devices as a learning system. The existence of this mobile device makes the learning system more practical, besides that it can also be used anywhere. This research uses a qualitative approach with case studies. The results showed that: the impact of mobile devices is very influential and helps a lot in the learning system, the learning process becomes easier, and also broad. Through mobile devices students are easier to memorize and can be done at any time and can be applied everywhere.

## 1. Introduction

The advancement of technology and information is developing very rapidly which provides massive changes in various fields. In the world of education [1], technology and information are used to facilitate the learning and teaching process [2]. Because technology and information are considered to have a positive impact in terms of time, energy and cost efficiency. This is what encourages application makers to make aninnovation in the use of appropriate technology by creating applications based on mobile which can be downloaded via smartphone via google playstore. Understanding Applications according to the Big Indonesian Dictionary. The notion of application is the application of a system design to manage data using certain programming language rules or provisions.

The progress of science and technology has a huge influence in various fields of human life[3]. Education as an integral part of the human maturation process certainly on the one hand has a big share in the development of science and technology, but on the other hand education also needs to take advantage of advances in science and technology in order to be able to achieve its goals effectively and efficiently[4].

Use Mobile (HP) is no longer a secondary need, but a primary need that must be owned by individuals. Not only adults and teenagers who use cellphones, but also children can use them[5]. The role of parents is very much needed to anticipate the use of cellphones so that they are not used excessively, considering that this tool can release whatever information we want, if it is connected to internet facilities[6]. Where and whenever we can work, communicate, interact, create and disseminate data, information and knowledge very quickly and accurately, to various parts of the world, as long as it is connected to the internet. Advances in information and communication technology have now changed the way people perceive and act in spending time working and solving all their problems[7]. A new paradigm has emerged in society that expresses new changes in people's activities as a result of technological advances[8].

Researchers are interested in researching usage problems smartphone as a mobile device that is one of the learning systems. Previously, several studies that have been conducted regarding the use of smartphone mobile devices in learning systems, one of which was expressed by Novita Eka Tristiana and Rahmatika Kayyis with the title "Smartphone application as a medium for language learning", it can be concluded that the use of smartphones today has a very big influence on the system learning.

In addition, a similar research has also been carried out by Ruziana, et al, with the title "Analysis of the use of smartphones as a learning medium on learning outcomes of students of SMAN 1 Teluk Keramat" from this research It was concluded that: (1) Based on descriptive analysis, it was evident that the results of daily repetition of class XI students were 36 (64%) students who had completed and 20 (36%) students had not completed. If calculated using the percentage formula, the results obtained by students are 64%. These results indicate that the learning outcomes of class XI IIS SMA Negeri 1 Teluk Keramat in the sociology subject are in the high category. (2) Based on a proven descriptive analysis for use smartphone Class XI IIS students of SMA Negeri 1 Teluk Keramat are high, namely 69.8%[9].

Seeing the background of the problems at Madrasah Aliyah Lubbul Labbib Maron, Probolinggo, East Java, Indonesia, where the students' lack of interest in learning, especially in memorizing hadiths, is a problem. Because learning carried out in grade II is still monotonous, that is, teachers still depend on books. Where students are required to bring a book of hadiths when learning takes place. Sometimes the problem also arises from some students where they forget to bring a book besides that they are not able to memorize quickly. Lack of enthusiasm and enthusiasm when memorizing them makes them feel bored and bored. So that the learning system is not maximal. With this problem we are interested in researching and finding solutions so that students become easier to learn and easier to memorize. Namely by means of cellular support in learning systems anywhere.

The aim of this study is to describe cellular support in ubiquitous learning systems. Use of a mobile device or smartphone in supporting the student learning system, which cellular can be a tool for students to memorize the hadiths. We as researchers lead teachers and students to download the hadith collection application, which this mobile tool can be a learning medium so that it is easy to memorize and can be done anywhere without having to carry a book.

Madrasah Aliyah Lubbul Labib is one of the educational institutions that has an important role in various aspects of learning. To maximize the development of student stimulus, teachers must prepare ideas using cellular assistance so that students easily understand learning. Based on the observations of researchers at Madrasah Aliyah Lubbul Labib Maron Probolinggo, East Java, in the subject of Islamic religious education, especially in class II Madrasah Aliyah Lubbul Labib, among them students are

less able to memorize hadiths, due to the lack of interest in memorizing students. This happens because of the lack of interest of students in memorizing, besides that students often feel bored and bored while learning is taking place, students also often use the excuse of forgetting to bring a book of hadith and missing a collection.

In view of advances in technology, hereby researchers use cellular as a solution to help the student memorization process that can be used anywhere. With this cellular can be a solution so that it can help, and make it easier for students to memorize.

## 2. Cellular in the Learning System

Education in the current digital era is very fast, advances in technology are not only enjoyed by adults, elementary school-age children can also enjoy the results of current technological developments. Technology is widely used in the world of education, as a means and infrastructure for interaction between educators and students[10].

Learning is the main principle that must be considered in the use of media in every teaching and learning activity is that the media is used and directed to make it easier for students to learn in an effort to understand the subject matter[11]. Thus the use of media must be viewed from the point of view of student needs. This needs to be emphasized because often the media is prepared only from the point of view of student needs. Considering the functions and functions of cellular phones, especially smartphones or those based on Android, are not only a medium of communication, but many other features such as office, video, ebook, digital book reader, and so on. For this reason, the writing is interested in conducting research related to these problems[12].

As prospective educators must also know the learning system as for the understanding of the learning system according to Hamalik in Sanjaya, "the learning system is an organized combination that includes human elements, materials, facilities, equipment and procedures that interact to achieve a goal" we can conclude the learning system is a unit of method that is done in the learning process and with the system we can determine the learning media that will be used in learning.
In the world of education, the presence of information technology is one of the options for organizing educational programs[13]. The use of the internet in the form of web-based learning media is a form of e-learning which is currently being popularly developed by various educational institutions. Internet technology which is interactive, flexible, and is not limited to space and time is expected to be one of the superior learning media[14]. Cellular is a technology that can be utilize in the online learning process[15]. The use of mobile devices in education provides educators with the opportunity to reorganize learning and learning[16].

Using communication media not only makes learning easier and more effective, but also can make the learning process more interesting. By utilizing a smartphone with an android platform, enteractive multimedia teaching materials can be packaged in the form of an attractive and easy to operate application, besides that multimedia is more flexible, easy to go everywhere, students can access learning not only during the learning process but students can also access it outside of school anytime and anywhere.

Meanwhile, according to Thomson at this time with increasingly sophisticated technology, learning can be done without having to face to face between students and teachers directly, but there is an intermediary that can connect students with learning sources, the intermediary is called e-learning. E-learning is a teaching and learning process that uses electronic circuits to deliver content[17].

## 3. Research Methods

This research uses a qualitative approach with case studies. Researchers try to describe and analyze the use of information technology in the use of smartphone mobile devices in the learning system at Madarasah Aliayah Lubbul Labbib Maron Probolinggo East Java, Indonesia. Researchers in this case directly monitor and collect information related to smartphone use in the learning system. The data collection technique was carried out through observation and in-depth interviews, while the data analysis was carried out through three stages, namely: data reduction, data presentation and verification.

## 4. Results and Discussion

The results showed that the support of mobile devices in the learning system at Madrasah Aliyah Lubbul Labib Maron Probolinggo, among others:

4.1 The teacher of Madrasah Aliyah Lubbul Labib Maron Probolinggo, East Java, felt very helped by the presence of cellular support in learning. This makes it easier for teachers to teach and find information related to learning. This cellular support also inspires Madrasah Aliyah Lubbul Labib teachers to be creative in teaching so that students do not get bored when the learning process takes place, especially in terms of memorization. Teachers can discover new things with the help of cellular, increase students' enthusiasm for learning and do not feel bored and bored.

In addition, the Madrasah Aliyah Lubbul Labib Maron religion teacher also uses cellular assistance to evaluate learning by analyzing the goals or objectives to be achieved and used as guidelines for assessing the success or failure of implementing learning in schools. In this case, cellular support is very helpful because it can complement the needs of teachers and students in the learning process.

4.2 The researcher found that when the learning process of the Hadith Science subject in class II Madrasah Aliyah Lubbu Labib Maron Probolinggo, the use of cellular in helping the students' memorization process was very visible. Where students usually need one week to memorize, now with mobile assistance students only need three to four days. In this case students usually use an audio-audio listening system related to their memorization material.

Based on the results of student responses to the learning system using cellular assistance, there is an increase in student enthusiasm for learning. This increase occurred because cellular assistance in assisting the student learning process could reduce student boredom during the learning process. This response can be classified as very good in terms of cellular use in the learning system.

4.3 Results of interviews with Madrasah Aliyah Lubbul Labib Maron Probolinggo teachers with the support of smartphones in the learning process can improve learning so that it runs smoothly and pleasantly. According to the resource persons this learning media is different from other learning. Because from this mobile media teachers and students must be able to collaborate, where the collaboration is not only the teacher who is enthusiastic in learning but students also remember what they have seen and heard, so that learning can run actively and conducively.

4.4 Students of Madrasah Aliyah Lubbul Labib Maron Probolinggo actively use cellular to support learning activities because they believe in the superiority of cellular services their learning activities are supported efficiently and effectively. Also, to keep abreast of any existing information developments, cellular becomes a complete handle and the right medium to gain knowledge and learn new things wherever and whenever they need it.

One of the reasons that also strengthens Madrasah Aliyah Lubbul Labib students to use cellular to support their learning activities is the unlimited time to use, where all things they have accessed can be saved so that the next time they can access them again without writing.

4.5 Researchers also found cellular functions in supporting learning activities. Students of Madrasah Aliyah Lubbu Labib Maron, build a communication between their fellow classmates through group messages made with cellular assistance to be able to share information about learning activities and even materials and assignments they have to do.

The existence of this group becomes the student facilitator when they get additional assignments from the teacher, so that even though the teacher and students cannot make eye contact, the teacher can still communicate with students and vice versa, and students can also ask questions about lessons that are not understood directly even though not directly.

## 5.  Conclusion

Based on the results of the research above, it can be concluded that the use of mobile devices has a big influence on the learning system. The existence of this mobile device is very helpful in learning, as make it easier got information that related with system. Mobile devices also make learning systems more revised and practical everywhere.

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