DEVELOPMENT CONTENT AND METHOD OF MOBILE LEARNING FOR CIVIC EDUCATION SUBJECT

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Abstract: Civic Education is one of the compulsory lessons. Every student in Indonesia always studies this material from elementary to tertiary level. Civic Education has a goal so that students know Indonesia and build character to love the country. However, the content and learning model from beginning to end is almost identical, so it is easy to understand that the higher the level of education, students are not interested and consider it not necessary. Therefore, Civic Education requires innovation to make it more attractive, so they are enthusiastic about learning it, especially for high school students. If we pay attention to the content of Civic Education material, we chose a topic from the practice of daily life in the family, school, and community. We can make it more interesting if we use multimedia technology suitable for smartphones. The innovation approach with smartphones potentially for these problems because students were very familiar with this equipment. In this study, we developed an Android smartphone-based application to present subject matter interactively, so students are interested in self-study at home. We also designed this independent learning activity to stay under the supervision and guidance of the teacher. We designed the mobile application so that student interest to learn anytime. Also, they can learn in anywhere, whether there is an internet connection or not. Also, we add topics from everyday cases taken from the social and political issue, which as trending topics on social media for class discussion. From our experiments, we found something interesting, where more students began to dare to express opinions about the value of truth in attitudes in society. Most students seem to be more interested in learning deeper using the application to sharpen their opinions. We conclude that this learning innovation is more exciting and able to have a positive impact on students.

Keywords: Civic Education, Innovation, Mobile Learning.

1. INTRODUCTION

This paper discusses how to make innovations in learning using mobile learning so that students can learn effectively. Technology is always developing and creating amazing discoveries to support human needs [1]. Advances in technology provide much influence in various fields, especially in the field of education [2] [3]. The existence of technology in the field of education makes the community more creative to make education more advanced [4].

We must create innovation in teaching and learning, appropriate, exciting, and easy to understand, learning media. Various learning media are developing at this time, such as with books, television, computers, and mobile phones [5]. One of the most straightforward uses of media is learning by using media mobile [6]. According to Samuel, students in this millennial generation spend more time playing mobile phones so that many students today find it challenging to understand the lessons learned at school [7]. A researcher Sung concluded that using a mobile phone device in education is better than using a desktop computer [8] .

Learning media with mobile phones is called Mobile Learning [9]. Mobile learning defines mobile phones as learning media, devices, and wireless and digital technologies that students use when they study [10]. Another definition of mobile learning is wireless learning, which facilitates the idea of computing to apply by mobile learning aimed at providing flexible education [11] [12].

Mobile learning promotes the best of accessibility as the advantages. Mobile learning has easy access, whether it is a matter of time, place, or comfort of use [13]. with its mobile learning to learn where and whenever it gives a sense of freedom [14]. Mobile learning can stimulate motivation to recognize problems related to subjects [15] .

The purpose of this study is to increase the effectiveness and flexibility of students in learning civic education. Civic education is one of the educational programs or subjects required in the curriculum at each type, track, and level of education in article 37 sections 1 and 2 of Law No.20 of 2003 [16]. However, according to Sunarta, students consider that civic education is an easy and not important lesson, especially not included in the national exam. The mobile learning has led to a lack of interest, motivation, and activeness, and student achievement in civic education lessons [17].

To increase interest in learning Civic education to achieve better performance requires a new learning method. A teacher plays a role in directing students to use mobile learning as a means of learning or gaining more knowledge and can be done anytime and anywhere [18]. Mobile learning also makes it easier for teachers to monitor the learning process of their students [19]. The student gives more attention to the teacher; this means that the student can learn effectively [20]. From this study, we can develop a similar application for other subjects that have the same problems as civic education, such as sociology and history.

2. APPLICATION DESIGN

Table 1 shows the concept of learning innovation in the use of mobile learning [21] . This design is a learning concept from the old method to the new method using the application of the mobile learning concept. We reviewed the previous method by several aspects of instructional media such as materials, learning methods, and tools. The purpose of this application makes media learning with a new method in which aspects of it are also develop. In the previous method, the material divided into Factual Knowledge and Conceptual Knowledge where Factual Knowledge is the material definition of the book, and Conceptual Knowledge is the concept of the definition that exists in Factual Knowledge. In the new method, the material will be refined again into three parts, namely Factual Knowledge, Conceptual Knowledge, Procedural Knowledge where Procedural Knowledge is the addition of material with a real case of the explanation Factual Knowledge and Conceptual Knowledge.

Tabel 1 Architecture

Item	Previous method	New method
Material	Factual Knowledge, Conceptual Knowledge	Factual Knowledge, Conceptual Knowledge, Procedural Knowledge
Method	Face-to-Face	Blended Learning
Tools	Presentation Tool	Mobile learning

The previous method generally uses books for home study as well as classroom presentation tools for face-to-face activities. Students should read books before attending learning in class. The teacher will explain the material using a presentation device. This method is sufficient because the subject matter only covers the Factual Knowledge and Conceptual Knowledge domains. However, without realizing the students generally feel bored because just listening to the teacher's explanations. The new method uses the concept of blended learning and also enriches learning material. Blended learning combines independent learning activities using mobile learning as well as classroom discussion activities. The teacher uses discussion activities to discuss current issues. With this model, we hoped that students would not get bored quickly, because they are more challenged to think about how to solve the country's actual problems. We can use as discussion material in class with the theme of threats in Indonesia. An example that can discuss in class is the theme of threats in Indonesia. For example, with the emergence of the threat of riots between regions, the gap will become a tolerance between religions. With various materials as mentioned students can think to overcome this problem.

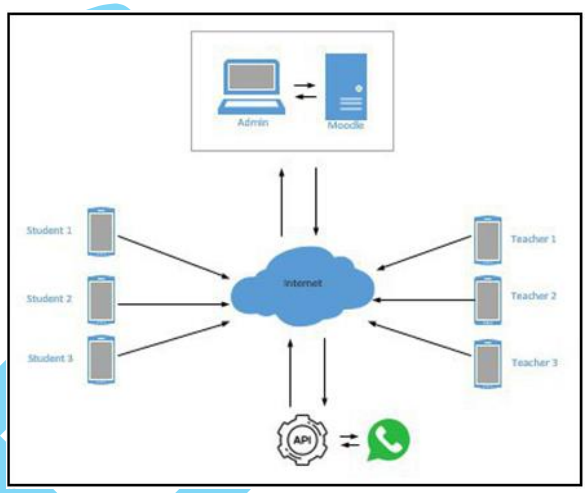

Figure 1 System Architecture

From the above conditions, we develop the design architecture in **Figure 1** as follows:
1. The admin who manages users and subjects.
2. Teachers can control, evaluate, and provide feedback to students, any place, and anywhereonline.
3. Students can access material, work on quizzes anywhere and anytime.

3. RESULTS

In this study, we conducted an experiment with 24 students of a high school. By using a questionnaire separately find out the level of convenience and level of attention of students. Table 2 and Table 3 show the results of the questionnaire.

Tabel 2 The Result of The Ease of Using APPS

No	Question	Percentage
1	Install the application easily	83,3%
2	easy access to the subject matter	87,5%
3	The subject matter is easy to understand	66,7%
4	remember content easily	70,8%
5	The application is easy to use	79,1%
6	Easily get teacher responses	70,8%

Table 2 shows the question questionnaire and the percentage of answers that agree or strongly agree. The purpose of collecting this questionnaire is to determine the level of ease of learning using mobile learning. While the goal in **Table 3** is to find out students' interest in attending class discussions. From this data, almost all students agreed that learning to use mobile learning is easy. Many students also agree after using mobile learning. They felt interested in being actively involved in class discussions.

Tabel 3 The Result Of Interest Discussion in Class

No	Question	Percentage
1	Interesting discussion	83,3%
2	interest in attend learning in class	83,3%
3	Curious about the issue	95,8%
4	Prefer to listen	66,7%
5	Want to give opinions	79,1%

4. DISCUSSION

The initial purpose of developing this application was to facilitate students in learning citizenship education. Because, when studying at school, students have limitations in learning citizenship education. This experiment has shown that students find it easier to learn citizenship education using mobile learning. Besides, those students feel comfortable because the student feels easy to install the application on their smartphone. The convenience of the mobile app made students interested in using this application. Moreover, they can access the material anytime and from anywhere.

The system in this study is straightforward for students to understand the material. However, this application system has not been able to improve learning outcomes; this is due to the learning method using mobile learning does not have much difference from conventional learning methods. The significant level is only 0.1% higher when learning to use mobile learning. From the previous student's average grade, 85.5% rose to 85.6%. However, if we compare student grades one by one, we might get different results. The overall experiment result shows that students learn differently.

Based on our research, the thing that is an advantage of mobile learning is that it makes students interested and involved in class discussions. Students are interested in discussing because they understand the concepts learned using mobile learning. It also prepares students interested in addressing social issues, politics, and the state.

This system has many advantages; however, this system is not yet capable of teacher habits. As we know the rules and curriculum are very binding on teachers; this, of course, dramatically shapes the daily activities of teachers. We find it easier to change student habits rather than the teacher. We give students freedom in they will use smartphone learn. Students may study at any time and from anywhere. Even though the teachers must also supervise students when they are learning.

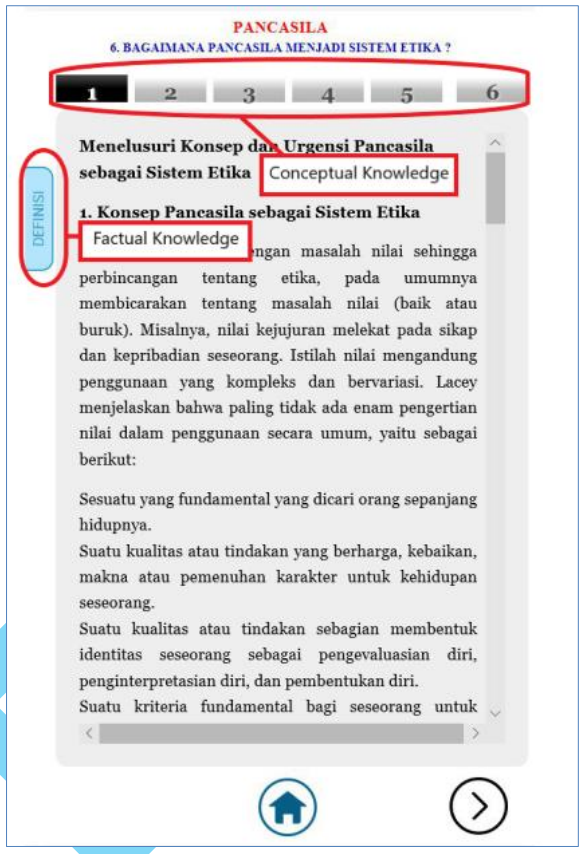

Figure 2 Layout of Factual Knowledge and Conceptual Knowledge

Based on the method that must be applied, it can facilitate the teacher in teaching. Teachers usually teach in several classes, therefore it is difficult for teachers to teach optimal lessons to students in a class. However, with the help of mobile learning, the teacher will help monitor and evaluate each student. With this application, the teacher can also assess his students. Based on trials conducted on teachers, this application can motivate students in learning citizenship education. Also, teachers believe that using this application is more promising than using conventional teaching methods.

Figure 2 is an interface design of student modules that consists of factual knowledge and conceptual knowledge. On this page, students can access and understand the material in the form of facts and concepts from civic education subjects according to the theme of the material. While **Figure 3** is the interface of the student module that contains procedural knowledge. This page requires students to answer the questions posted. Student answers will

automatically be sent to the server and will appear in the teacher module. This question becomes the subject of discussion as well as procedural knowledge.

Figure 3 Procedural Knowledge

The teacher module in **Figure 4** has access to monitor student's activity using mobile application. The teacher can see a list of students, WhatsApp id (phone number), student answers, and student scores. The list of students has a WhatsApp link for private communication. By using this feature, a teacher can monitor student learning activities, including being able to correct student answers. This application also makes it easy for teachers to provide feedback and motivate students personally to use WhatsApp.

With the advantage of the application, we shift the main teacher activity from classroom to virtual room. There are two primary teaching responsibilities, and those are finding less motivation and student understanding. A teacher can give particular attention to each student. A teacher can give guidance or motivation for every student. If a teacher found some similar problem, either less motivation or understanding, a teacher can conduct group discussion in the classroom. This show how feedback learning or GFLM working. We believe this method is effectively working if a teacher willing to change their main activities. The teacher must more attention to monitoring, evaluating, and guiding the students rather than just teaching only. We found three central concepts of this system which make the learning more engaging, and those are the full meaning content (factual, conceptual, procedural), the advantage of technology (mobile application), and the appropriate method (GFLM).

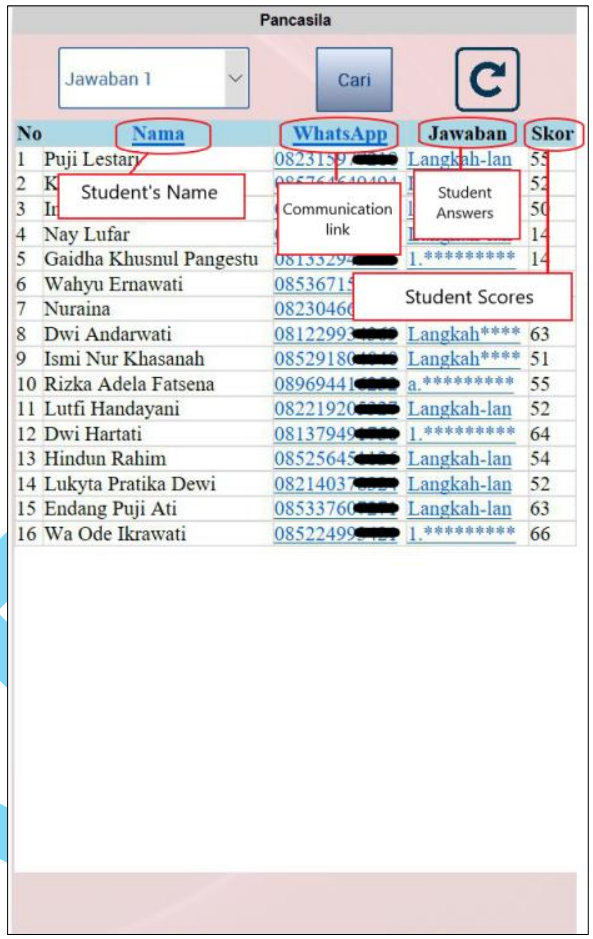

Figure 4 Teacher's Module

CONCLUSIONS

This development resulted in media research civic education using mobile learning. By using this media presentation of the material in the learning process is carried out. Although the results do not change the value of knowledge, there is progress in increasing learning activities. Learning media using this application is appropriate for students to use as independent learning tools. Moreover, the teacher and students can communicate using the "WhatsApp" message application while studying. Of course, this can help teachers in controlling student learning activities when outside school hours. The teacher can also see student learning activities and see the results of the quiz done by students. When the value of low student, the teacher can send a message to the students.

ACKNOWLEDGMENTS

This research is part of Self Directed Learning (SDL) research development using Gamma feedback Learning Model (GFLM). We would like to thank the Ministry of Research, Technology and higher Education of the Republic of Indonesia for funding given based on the decision of the Director General of Research and Development No. 7/E/KPT/2019. We appreciate the dean of the medical school also dean of the Information Technology department, University of Muhammadiyah Yogyakarta that has supported this research in providing additional funds and research equipment.

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