Digital application in teaching musical traditional instrument for children

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Abstract. The lack of learning media in the art of music in elementary schools is a barrier for teachers to teach the art of music. When learning music, students are often confused because they do not know the shape and sound of the instrument. This paper aims to analyze the use of Saron Digital as one of the media solutions for learning music that can be used by teachers to be taught in elementary schools. This research method is carried out through the following stages: (1) introducing the Saron Digital application; (2) introducing the Saron Digital application feature; (3) use of Saron Digital applications; (4) study Saron using the Saron Digital application; (5) evaluating the learning process. The research subjects were grade 3 students in one of the elementary schools. The research subjects were 15 students. The results showed that using students from the Saron Digital application that did not know became aware of the shape and sound of Saron musical instruments. It can be concluded that technology can facilitate learning, teachers do not need to worry about the lack of learning media for the art of music.

1. Introduction
Problems in teaching music education in elementary schools are usually found in facilities, students, and teachers. In terms of facilities, in every elementary school it is usually always lacking even there is no musical instrument to be introduced or taught to students so that it inhibits the learning of music in elementary school. The problem with the teacher is usually the teacher only gives a theory of traditional musical instruments such as Saron (traditional Indonesian musical instrument) without carrying the actual musical instruments so that learning becomes less meaningful. Problems for students usually students are less interested in learning the music education in elementary school because the teacher only gives the theory and lack of music education facilities in elementary school.

Art can give children the scope to find themselves with freedom, originality, much without words and a lot of time, without reference to pencils and paper [1]. Music is very important for education in elementary schools, because, on the other hand, music education is used as a key element of personality, logic, and social affective components [2]. Media is one of the important aspects of teaching and learning because learning with models and media is interesting and equipped with ideas, students receive more information on learning in order to achieve learning goals and the development of learning media must be adapted to professional examples and future students [3]. Using various media can change classrooms, encourage student involvement, and help students understand very difficult concepts [4]. Nowadays, teachers can use technology as a learning medium. The use of cellular technology has increased rapidly in recent years. Emerging from current cellular technology, cellular learning, or m-learning, is the beginning to provide extraordinary opportunities for education [5]. In elementary school,
the introduction of traditional musical instruments such as Gamelan is usually done. Gamelan music is an Indonesian national identity, which is also a product of high traditional music [6]. Today, traditional music attracts people in several aspects because of the importance of national heritage archiving [7].

Saron is a traditional musical instrument taught in elementary schools, because Saron musical instruments at school, the teacher only explained what Saron was without Saron's musical instruments. Saron Digital can be used to launch traditional musical instruments in elementary schools. The use of Saron Digital application is interactive multimedia learning that can build mobile-based interactive learning. Learning systems can be used to study, and provide accurate information to explore, and provide material via mobile devices [8]. Learning tools use a touch of technology that is relevant to the needs of learning media to improve student performance [9]. Students can also learn Saron instruments more quickly by using Saron Digital is one of the media to introduce Indonesian culture to the outside world, especially in the field of traditional musical instruments [10].

The purpose of this study is how well the use of android-based media is like the Saron Digital application in learning music education in elementary schools. The expectation is that students can recognize and like traditional musical instruments.

2. Methods
This research is carried out through the following stages: (1) introducing the Saron Digital application; (2) introducing the features of the Saron Digital application; (3) use of Saron Digital applications; (4) study Saron using the Saron Digital application; and (5) evaluating the learning process. The research subjects were students at one of the elementary schools in the province of West Java, Indonesia. The research subjects were 18 students consisting of ten female students and eight male students.

3. Results and discussion

3.1. Introducing the Saron Digital application
Saron Digital is a Saron musical instrument that is used as an Android based application. Saron Digital application is easy to access because it is already available in the playstore so we only have to download it. Figure 1 which shows the Saron Digital application.

![Figure 1. Display of Saron Digital application.](image)

3.2. Introducing features of the Saron Digital application
Students look easy to understand this application because its features can be done directly or can be demonstrated. The features contained in the Saron Digital application consist of information from the Saron Digital application, then there is a file whose contents consist of a save song to store song results, save settings, settings from the Saron Digital application, load song, load MIDI, load settings and cancel, as can be seen in Figure 2 and 3 below.
3.3. Use of Saron Digital applications

How to use the Saron Digital application is very easy because we only need to click the appropriate tone of the song that we will play through Saron Digital. After we play the song through Saron Digital we can immediately save it.

3.4. Learning Saron uses the Saron Digital application

Learning is designed to be carried out in two stages, namely the stage of studying the Saron Digital application and trying to play Saron instruments using the Saron Digital application. The purpose of each stage can be seen in Figure 4 below.

![Figure 2. Tempo in the Saron Digital application.](image)

![Figure 3. Features of the Saron Digital application.](image)

![Figure 4. Stages and objectives of learning design.](image)
3.5. Evaluating the learning process
At this stage, researchers evaluate student learning outcomes, and students show the results of Saron learning using the Saron Digital application. These results were analyzed mainly in developing the way students learn Saron, and also analyzing their ability to play Saron instruments using Saron Digital. The results of developing angklung learning methods can be seen in Table 1 below.

| Assessment | Condition | Implication |
|------------|-----------|-------------|
| Student knowledge about Saron musical instruments using the Saron Digital application. | Students can easily find out the Saron musical instrument. | The problem of students not knowing the shape and sound of the Saron musical instrument is solved with Saron Digital. |
| Use of the Saron Digital application. | Students can easily use the Saron Digital application. | The problem is that students never play Saron instruments completed with Saron Digital. |

4. Conclusion
Saron Digital can help teachers to teach traditional Saron instruments in elementary schools. Through the Saron Digital application students who were not aware of the form and the sound of Saron instruments now became aware of it.

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