Android Learning Design to Increase Interest in Learning Music

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Abstract. This present research develops an android-based learning design to increase interest in learning music. Technology that has penetrated education can be used as an alternative to achieve learning goals. Music, as one of the lessons taught in school, can help students to increase their creativity. However, many students are less interested in learning music in this situation. Android-based learning design will help students increase their interest in learning music. This application design can attract students' attention, making them more enthusiastic and interested in learning music. The application uses Smart Apps Creator, which a teacher can operate to create a learning design interactively. This research was conducted at a State Junior High School in Yogyakarta with a sample of 50 students. The research was conducted in classes VIII-A and VIII-B. The regression test with the f test calculated the results of the obtained data. The calculation of the F test obtained a significant level of $0.03 < 0.05$, which means that using an Android-based learning design can increase students' interest in learning music.

Keywords: Android · Learning Music · Android Learning Design

1 Introduction

In this modern era, technology has developed rapidly and is getting better, and it does not escape the world of education which is increasingly advanced and developing. The learning process has begun to use technology extensively in teaching and learning activities, especially in the face of the Covid-19 pandemic [1]. Although using technology, education still follows quality learning objectives according to the community's needs [2]. Student-centred education will provide effective results by adjusting the way of learning and students' interest in learning [3, 4].

The interest that occurs in students comes from feelings of love and pleasure for the activities carried out [5]. Interest arises in every human person and will have a good impact on learning outcomes [6]. A student who likes learning will make an effort in the learning process so that the lesson can be accepted by students well and produce good achievements [7]. The direct involvement of a student in learning will facilitate the continuity of the activity [8].

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There are so many types of subjects at school, one of which is music. Music is a reflection of mood and emotions [9]. Since we were babies, we have been treated to various songs [10]. Mixed and matched music, rhythm and movement can support children's development [11]. In lessons at school, music lessons are held as additional lessons to develop students' attitudes and abilities in being creative and appreciating art [12].

Learning the art of music for students in class has not been going well since the COVID-19 pandemic. The problem can be seen in students' lack of interest in listening to online lessons reduces music learning results. This encourages the formulation of the problem: is there a difference in the learning interest of class VIII students towards learning music using the Android application? This study aimed to determine students' interest in learning music using an Android application.

Students' attention regarding the material presented by the teacher online is now starting to fade. This attention is related to student interest in learning during this pandemic. Interest in learning with students is necessary for undergoing the online and offline teaching and learning process [13]. The impulse that arises as an interest in learning the art of music affects students to carry out learning activities well compared to undergoing another activity is interested in learning. The desire to go through the learning process and encourage students to understand, explore and learn the art of music from within students is necessary to foster interest in learning music [14].

There are several indicators of interest, namely feelings of pleasure, interest, attention and involvement. Suppose a student has a feeling of pleasure in carrying out learning activities. In that case, the material presented by the teacher will be well received, and there will be no feeling of compulsion or rejection. With the feeling of pleasure, there will be a sense of interest in the material presented. Interest in the lesson will encourage students to pay more attention, such as repeating the lesson without anyone asking. When there is a sense of attention, students will do it wholeheartedly and be directly involved in learning activities [15].

Music is very influential in children's emotional, social, physical, language and cognitive development [16]. Music is not just a sound heard; some signs make it a melody in music [17]. Music has supporting elements, such as melody, rhythm and harmony [18]. Melody is a series of tones that are sounded in sequence. Tones that are played in sequence and played beautifully make for beautiful music. At the same time, the rhythm is the movement of the tone associated with the length and shortness of the notes. The sequence of notes will regularly move according to the short length of the note and the weight or lightness of an accent so that it can be heard well. Harmony is a blend that is comfortable to listen to from a piece of music. Harmony harmonizes the sound of music with the concepts and relationships of various instruments. A student learning music understands how to play a musical instrument and processes it into relaxing music [19]. By studying music at school, students also develop their inner talents to be more creative and become insightful in the arts [20].

Learning media can foster students' attention by activating students' senses and arousing students' interest in learning [21]. Learning media can be multimedia by uniting various formats in a learning media [22]. Interactive multimedia is the relationship

between humans and computers which is used as a learning model that can deliver messages from teachers to students [23].

In this study, researchers use Smart Apps Creator as a forum to create Android-based learning media [24]. This desktop application can create Android applications without a security code. Smart Apps Creator or SAC can make it easy to create an application without a programming language so that teachers or someone who does not have a background in information technology can create interesting and easy-to-understand applications [25]. Using Smart Apps Creator can make the material more interactive and more attractive to students [26].

2 Method

This research was conducted with a quantitative approach to describe the increase in students' interest in learning music in music lessons. This research is processing and presenting data using statistical techniques that help researchers determine results in exact form or numbers and provide treatment to students whose results are obtained from tests before and after special treatment. The different treatment here is the use of learning media with Android applications.

This research was conducted at a State Junior High School in Yogyakarta for class VIII students for the 2020/2021 academic year. The sample was in 2 classes, that is, class VIII-A of 25 students and class VIII-B of 25 students. The indicators used in measuring interest are pleasure, interest, attention and involvement in the Music lessons. The research instrument was a questionnaire with four answer options, namely: strongly agree (4), agree (3), disagree (2) and strongly disagree (1).

3 Results and Discussion

The research data were obtained from the pre-post written tests when given special treatment. The question of the instrument of interest in learning music consists of 10 questions. The research instrument test was carried out by conducting the validity and reliability tests on those questionnaires on 30 students. The validity test results on the instrument of interest in learning music indicated that ten questions were examined as valid. The reliability test was carried out using the Alpha Croanbach formula and obtained reliable results with an r count of interest in learning the music of 0.711, which means > 0.7, then it is said to be reliable. The following are the results of the instrument's validity test of interest in learning music (Table 1).

The application on the Android-based learning design comprises a main menu and material menu, which can be seen in the following Fig. 1.

a. Main Menu

On the main menu is the opening screen for the Music Time application. Then immediately change to a menu of choices (Fig. 2).

b. Options Menu

A selection menu appears with a choice of material menu, musical instruments and exercises menu for students. If students want to listen to the material from the teacher, they can choose the material menu (Fig. 3).

Table 1. Validity test of interest in learning music

Number of Questions	R Count	Remarks
1	0.455	Valid
2	0.444	Valid
3	0.622	Valid
4	0.632	Valid
5	0.486	Valid
6	0.621	Valid
7	0.677	Valid
8	0.551	Valid
9	0.434	Valid
10	0.543	Valid

Fig. 1. Main Menu

Fig. 2. Options Menu

c. Material Menu

If students enter the material menu, music material will be presented according to the syllabus (Fig. 4).

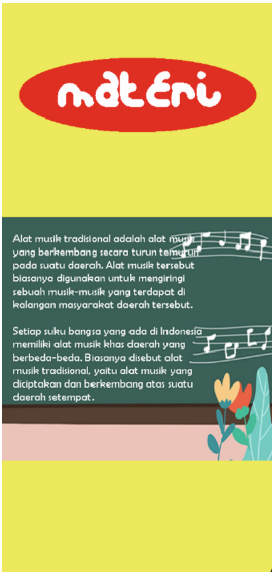

Fig. 3. Material Menu

Fig. 4. Musical Instrument Menu

d. Musical Instrument Menu

Students can also listen to learning videos that match the selected musical instrument, so students don't get bored and have additional information (Fig. 5).

e. Exercises Menu

Students can work on questions on the exercises menu. If you have finished working on the questions, students will get points for answering the questions.

In this research, a pretest and posttest were conducted to see an increase in interest in learning music in class VIII, indicating an increase in interest in learning music. Class VIII-A obtains 33.17 in the pretest and 55.43 in the post-test which shown in Fig. 6. Meanwhile, class VIII-B obtains 35.21 on the pretest and 57.85 on the post-test. This result shows increased interest in learning music in classes VIII-A and VIII-B.

In the data analysis test, the normality test was carried out using the One Sample Kolmogrov-Smirnov formula, resulting in the value of Asymp.sig (0.3) $>$ 0.05 means the data is normally distributed. Furthermore, the hypothesis test uses the product moment correlation formula. The hypothesis test results show a sig value of 0.032, which means a sig value $<$ 0.05. Thus, with a value of sig $<$ 0.05, it can be said that there is a significant relation between students' interest in learning music. The calculated R-value of 0.32 $>$ 0.279 indicates a significant relationship with students' interest in learning music (Table 2).

A regression test was performed with the f test. From the calculation of the F test, a significant level of 0.03 $<$ 0.05 is obtained. The Android-based learning design influences the variable of students' interest in learning music. From the result of the F test can be concluded that there is an effect of using an Android-based learning design affects

Fig. 5. Exercises Menu

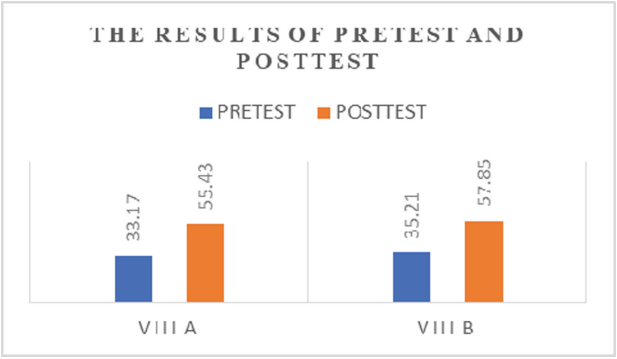

Fig. 6. The results of the pretest and posttest

Table 2. Hypothesis Test

		Interest in Learning Music
Android-Based Learning Design	Pearson correlation	0.320
	Sig.	0.032
	N	50

students' interest in learning music. This means using an Android-based learning design can increase students' interest in music.

Android-based learning design can be run on students' devices very easily. This application can be accessed anywhere and anytime. Several advantages are obtained by using this Android-based application, such as this application can be used personally and flexibly, can train students to be independent in learning, and is easy to use as a learning resource. This interactive application design can also encourage students' interest in learning music so that students are happier playing music.

In online learning activities, a teacher can deliver music material to students with the help of an Android application. Using the application as a teacher's tool to convey material will make it easier for students to understand musical material and increase interest in students so that many students will be interested in the lesson [27]. Previously, when the music lesson occurred when observed in grades VIII-A and VIII-B, the students were not enthusiastic about learning activities.

However, by evaluating student learning interest questionnaires before and after using this application, the results showed that by using this android-based application, students felt helped and had an increased interest in learning music. So it can be said that students need an Android-based learning design to increase interest in learning music. Android-based learning design can be used anywhere and anytime to attract students' interest in learning music. It was concluded that there was a positive and significant relationship between android-based learning designs and students' interest in learning music. A positive relationship can be interpreted that if a student has a large influence on an Android-based learning design, the influence on interest in learning music is also large. With the attractiveness of subject matter with interest in learning music, students will grow serious about learning and be able to improve student learning outcomes.

4 Conclusion

In line with the research results, it is found that there are differences in students' interest in learning music using Android-based learning design. The existence of an interest in learning music that arises in students can help them trigger their desire to learn music. The interactive learning design helps students understand the material and evaluate the material being taught. The importance of students' interest in learning music helps them develop their creativity and improve their musical learning results. Hence, the use of Android-based learning design helps to build a personal desire to carry out music learning activities and ultimately can lead students to have a positive interest in learning music.

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