Optimizing Fruity Loops Studio Mobile Application In Learning Music Based On Character Education

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Abstract. This research is a development research that produces teaching materials that are integrated with the Fruity Loops Studio Mobile application as an effort to optimize music learning based on character education. The purpose of music education is to form a balanced student personality according to the needs of individual development. The Fruity Loops Studio Mobile application is an integrated system that contains creative components so that it can be designed as a learning medium with character education indicators. At the define stage, character education indicators analysis, application usage analysis, application content planning are carried out. Based on the results of the analysis then carried out the design stage. The development stage is carried out by carrying out three main activities, namely: validity testing, implementation testing, and effectiveness testing. After the product is declared valid, practical, and effective, the final stage is disseminated

Keywords: Fruity Loops Studio Mobile, Character Education, Music Education

1 Introduction

Education is an important aspect in life, where an educational process is carried out with a conscious and planned effort through a learning process with the aim of developing individual hard skills and soft skills competencies. The National Education System Law Number 20 of 2003 states that national education functions to develop capabilities and shape the character and civilization of a dignified nation in the context of educating the nation's life, aiming to develop the potential of students so that they become human beings who believe, fear God Almighty, have good character. noble, healthy, knowledgeable, capable, creative, independent and become a democratic and responsible citizen (Nuzulia, 2020).

The paradigm of education in Indonesia today is still more on the hard skill aspect (Logic, Analysis and Synthesis) so that it requires students to be skilled in the cognitive aspect. This is certainly not in tandem with the goal of national education that a learning process must also hone the character competencies of students (religious, honest, tolerant, disciplined, hard working, creative and independent), so that later they can become intelligent individuals and have superior personalities in the world. the middle of society. The reality of moral negativity is the impact of the poor implementation of character education in Indonesia. From the results of a survey on free sex shows that 63% of Indonesian teenagers have had free sex. Furthermore, data from the DKI Jakarta Center for Social Disturbance Control stated that the involvement of elementary, middle and high school students in brawls reached 0.08% or around 1,318 students from 1,647,835 students in the DKI Jakarta area. From this incident it was noted that 26 students died in brawls throughout 2011. (Kesuma, 2011).

ICIESC 2022, October 11, Medan, Indonesia
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DOI 10.4108/eai.11-10-2022.2325544

In the learning process in the formal education environment, the content of music art material can be used as a medium for transforming individual characters. Music education has a role in the personal formation of students who are balanced by taking into account the needs of individual development. It aims to achieve multi-intelligence consisting of intrapersonal intelligence, interpersonal, visual spatial, musical, linguistic, mathematical logic, naturalist, adversity intelligence, creative intelligence, spiritual intelligence, moral and emotional intelligence. In music education, musical activities from learning materials must be able to provide experience in developing conception, appreciation, and creation (Nulhakim & Berlian, 2020). These achievements must be contained in an effort to explore elements, principles, processes and techniques of practicing music in accordance with local wisdom of local culture (North Sumatra). Based on this, actually a music learning process really helps students in finding talents and developing them as students' personal identities. By applying the ideal art learning process, of course, educators can know the character of each student.

To support the creation of an atmosphere of character education in the realm of music learning, of course, an educator must be able to design materials and learning media that can foster moral values and creativity. Creative character will be built in individuals who have met the requirements of fluency (development of alternative ideas) and flexibility (concept of contribution to effective solutions) in problem solving even though it comes from the empirical experience of others. (Hidayah & Aprilia, 2019) . The development of creativity in individuals that continues to be developed can bring up creative ideas as the formation and introduction of stronger characters (Laksono, 2017).

Packaging the concept of music learning based on character education in a university environment is certainly not enough to only present concrete material without being equipped with effective learning media. Today, technological developments are certainly very helpful in the effectiveness of the implementation of the music learning process. Technological developments certainly have a lot of positive effects on the learning process. In the learning process, learning objectives and messages must be conveyed properly to students. Through the use of learning media, of course, it can enhance the quality of the learning process which in turn can affect the quality of student learning outcomes.(Raffiq, Qiram & Rubiono, 2017)

The use of music applications as an effort to develop digital culture is needed to maintain the existence of music education courses in the university environment. Through this music application, students are required to be able to spur creativity and artistic character so as to create a balanced integration between soft skills and hard skills. One application that can be used in the application of character-based music learning is Fruity Loops Studio. Fruity Loops Studio is a digital application that is used for the needs of recording, converting and creating audio. Fruity Loops Studio was developed by a Belgian company called Image-Line. In 2014, Fruity Loops Studio is one of the most popular audio applications around the world. This application has 4 editions for Microsoft Windows (Laksono, 2017). Image-Line also offers lifetime free updates, which means that buyers will get the next version of Fruity Loops Studio for free. Image-Line also developed Fruity Loops Studio Mobile for iPod Touch, IPhone, IPad, and Android users. With this application, of course, efforts can be made to motivate student learning effectively and efficiently. This application is an integrated system that contains a creative component so that later it can be packaged into learning media with character education indicators.(Andry and Tjee, 2019)

This study refers to several relevant research results, including Mulyadin's research (2019) regarding the making of film music illustrations through the use of Fruity Loops Studio at SMKN 1 Sukabumi City. This study focuses on the use of FL Studio for making film music illustrations so that it can encourage students to be more active in creating new digital audio concepts. Furthermore, Hutagaol's research (2019) regarding Character Value Education through Angklung Music Learning in Kindergarten Students, Mayjend Sutoyo SM Medan. The results of this study found that the angklung music learning method using the demonstration method can make the learning process more effective and develop students' character values. The next relevant research is the research from Saputra, Sudiarsa & Artawan (2022) regarding the Utilization of FL Studio as a Creative Process of Karawitan Art (Baleganjur) during the Pandemic in the Finger Art Community of Shidi Dipura Panti Pasek Gel Ge Br. Satan's Blowing. In this study, the use of FL Studio has a very large influence in helping the learning of Baleganjur Tabuh so that it becomes more active.

2 Research Method

This type of research is research and development (Research and Development). Development research is research designed in a structured and systematic way to develop a product through certain stages and evaluations to test the level of validity and effectiveness in using it. The development model used in this study is a 4-D development model (four D models) (Sugiyono, 2009). The stages of the 4-D model include: defining, designing, developing, and disseminating:

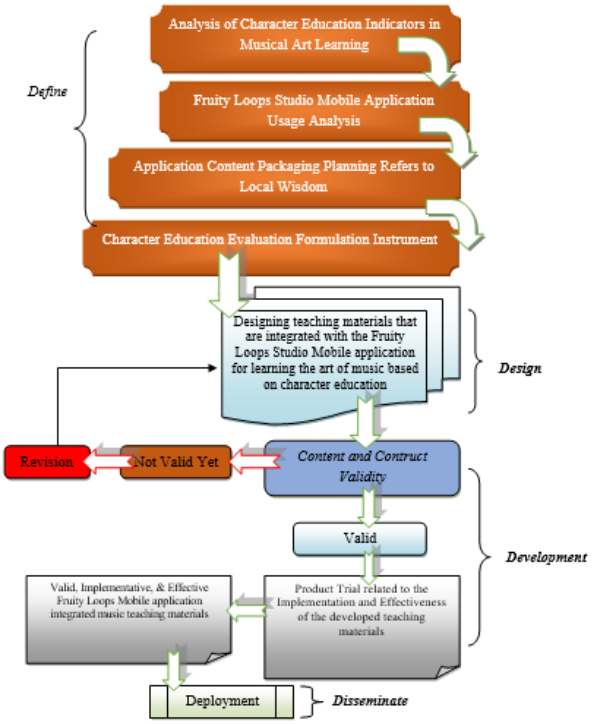

Fig. 1. The Procedure of Developing Integrated Music Art Teaching Materials Fruity Loops Studio Mobile Application Based on Character Education

The research location is in the Elementary School Teacher Education Program of Universitas Negeri Medan. The research subjects are 6th semester students of the 2020/2021 academic year. The object of research is the validity, implementation, and effectiveness of the developed teaching materials. The stages of development in Figure 1 can be detailed as follows:

1. The definition stage aims to define and analyze the following: (1) analysis of educational indicators in learning the art of music (2) analysis of the use of fruity loops studio mobile applications (3) content planning for the application of local wisdom.The design stage is designing teaching materials according to the definition: needs analysis, usage analysis, and competency analysis
2. The design stage is designing teaching materials according to the definitions: needs analysis, usage analysis, language structure analysis, and competency analysis (CPL Study Program and CPMK).
3. The development phase includes: validity test, implementation test, and effectiveness test.
4. The dissemination stage is disseminated on a wider scale, both in other classes at UNIMED and at other universities.

3 Results and Discussion

3.1 Definition

This research begins by conducting a needs analysis on the use of teaching materials used in the lecture process in music education courses in the Elementary School Teacher Education Program. Needs analysis is carried out as a strategy to develop innovative teaching materials that are integrated with digital applications. Fruity Loops Studio Mobile is an alternative music application that can help students to make simple compositions, so that later students can design musical compositions that are sourced from local potential. To see these needs, the researchers used a questionnaire containing questions with reference to the indicators of character education in learning the art of music and the use of digital applications.

Based on the analysis of the learning needs of music education, it can be seen that the use of music teaching materials in the the Elementary School Teacher Education Program has used teaching materials that are integrated with digital applications but are still limited to applications related to achieving musical literacy. It is necessary to innovate teaching materials that are integrated with the application of making music compositions as a medium for student creativity. Based on the needs questionnaire analysis, it can be seen that most music education lectures are conducted in the form of group practice. This of course can be the basis for developing character education indicators in the developed teaching materials. This initial process was carried out by discussing with the Art Lecturer Team at Elementary School Teacher Education Program to answer the needs of lectures that were more applicable so that they could support student creativity and develop character education values in learning the art of music.

3.2 Design

The design stage is carried out after the definition stage is completed. At this stage the researcher makes a cover design, layout and content material that is in accordance with the practicum module. The cover design and layout designs can be seen as follows:

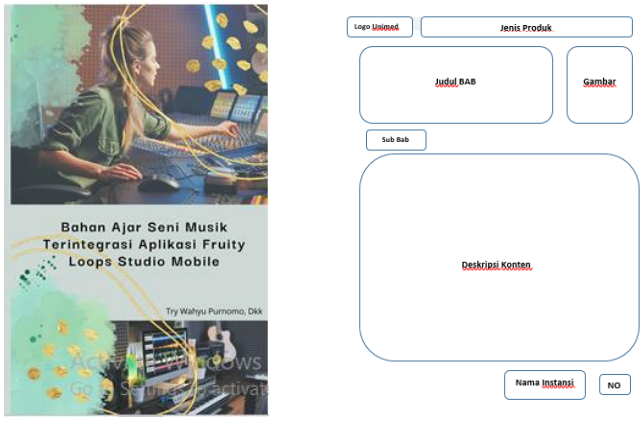

Fig. 2. Cover Design and Layout of Teaching Materials

The next stage is to design theoretical and practical materials as learning tools. The material designed is also integrated with the Fruity Loops Studio Mobile application. Strengthening teaching materials regarding musical composition and chord applications will be carried out using the Fruity Loops Studio Mobile application so that students are also skilled in making simple compositions independently. The forms of material in this teaching material are as follows:

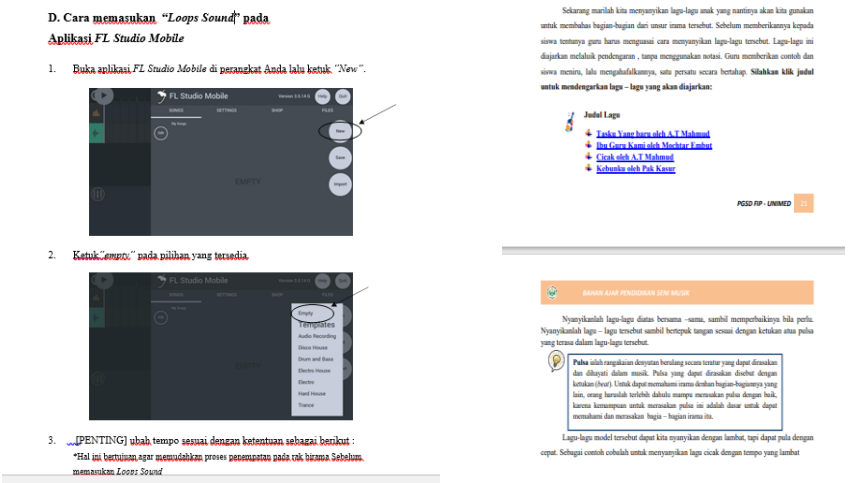

Fig. 3. Material Description According to the Layout of Teaching Materials

The production of teaching materials was continued by integrating with the Fruity Loops Studio Mobile application as a form of optimizing music applications for music composition materials. Integration begins with instructions for installing the Fruity Loops Studio mobile app on each smartphone. In the material description section of Fruity Loops Studio Mobile, the application download link and steps to install the application are also included.

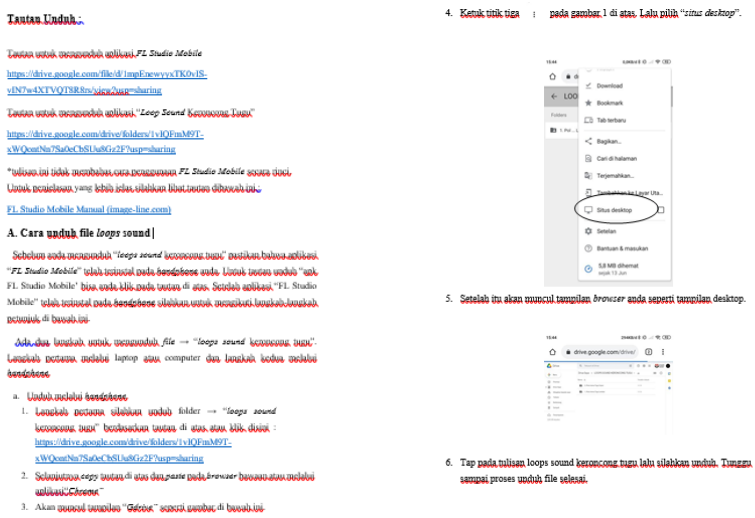

Fig. 4. Fruity Loops Studio Mobile Application Install Guide

The teaching materials also describe assignments that will later become project assignments that will be carried out by students. The assignment description will be strengthened by character education indicators such as cooperation, tolerance, discipline, and mutual respect so that later student personality will be formed that reflects aspects of good morality. The forms of projects carried out by students include the concept of chord and melody collaboration, as well as making simple compositions. The forms of examples of simple compositions designed are as follows:

Fig. 5. Chord and Melody Collaboration Example

3.3 Development

At this stage of development with validation in accordance with the material used and the right media. From the results of the validation carried out to the experts, a score of 3.50 was obtained for the material (Very Valid), 3.15 for the media (Valid). Based on this, it can be said that the designed teaching materials are suitable for limited trials. From the results of the validation carried out, the material expert stated that the instructional material for making music compositions should be simpler so that students can directly apply it to the material later. Media experts said that the cover should be made more attractive in order to reflect the characteristics of the elementary school. Furthermore, media experts provide input so that all the links listed in the open material can be well integrated.

Fig. 6. Media Eligibility Validation Activities carried out to Putra Afriadi, S.Pd., M.Pd

Fig. 7. Material Eligibility Validation Activities carried out to Anada Leo Virganta, S.Pd., M.Pd

Furthermore, research activities are carried out by conducting product trials to several research samples. The research sample involved in this stage amounted to 20 people, all of whom were the Elementary School Teacher Education Program students. The pilot phase is carried out by coordinating with the research samples to share information about the research objectives. The research stage will be continued when students start lectures.

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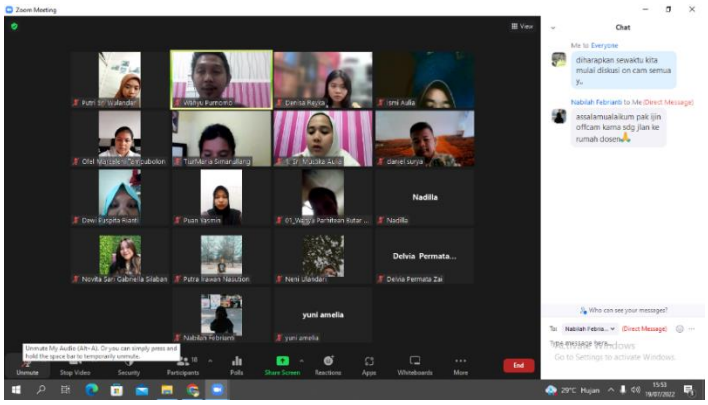

Fig. 8. The Process of Equalizing Perceptions Before the Trial Stage

The practice process begins with stimulating students to create song lyrics that are in accordance with the characteristics of students in elementary school. The song lyrics created must describe morality lessons and also character education so that they can become positive learning media for children. Through lyrics, students learn to compose words that are aesthetic but still meaningful and contain educational values.

Fig. 9. The process of making music compositions using Fruity loops studio mobile

The next process, students are invited to try to sing from song lyrics that have been made previously. The results of student expression and imagination will create varied melodies so that a creative process will be created. In the next stage, students try to make pieces of the melody into the Fruity Loops Studio Mobile application in stages. By using the Fruity Loops Studio Mobile application, students can of course design simple musical compositions for learning needs in elementary schools.

3.4 Disseminate

Planning for the deployment phase will be carried out during the 2021/2022 semester lecture process. This practicum module aims to be used in the music learning process so that it can improve students' musical understanding and competence

4 Conclusion

Planning for the deployment phase will be carried out during the 2021/2022 semester lecture process. This teaching material aims to be used in the music learning process so that it can improve student competence in using digital devices in the field of musicis carried out in groups as an implementation of the Team Based Project concept. The use of the Fruity Loops Studio Mobile application certainly does not only affect the creativity of students in making music compositions for the needs of learning in the classroom. More broadly, FL Studio Mobile can be developed as a forum for student character formation through the creation of educational lyrics and a collaborative process in working on a music composition project.

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