

Optimizing the Sibelius 7 Application in Multicultural Art Learning Based on Learning Outcomes

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ABSTRACT

This research is a development research that produces integrated teaching materials with the Sibelius 7 application as an effort to optimize multi-cultural art (music) learning based on learning outcomes. The use of the application is certainly an alternative to fulfill the artistic competence of students as prospective teachers. The context of students who come from cultural diversity is the basis of thinking for researchers to create teaching materials that can cover various arts and cultures in Indonesia. The resulting product has gone through the stages of testing the validity, implementation, and effectiveness. With the tests carried out, the resulting E-Module is valid (feasible in content and appearance), implementative (easy to use by lecturers and students), and effective (can improve the process and student learning outcomes). The development model used is a 4D model which emphasizes the need for learning outcomes. In the define stage, needs analysis, concept analysis, course learning achievement analysis, usage analysis, and analysis of cultural diversity are carried out. The development stage is carried out with 3 main activities, namely: validity test, implementation test, and effectiveness test. Then, in the final stage, the product is disseminated on a wider scale

Keywords: *Learning Outcomes- Multi-Cultural Art- Sibelius 7.*

1. INTRODUCTION

The educational paradigm in Indonesia has undergone fundamental changes in a very fast period of time. Education actors are no longer focused on all aspects that students can know, but rather lead to skills that students can do after getting a learning process. Changes in the orientation of learning outcomes that were previously measured through competence and competency standards have turned into learning outcomes (Solikhah, 2015). In the concept of learning in higher education, the basis for thinking about learning outcomes refers to program learning outcomes, not to subject learning outcomes. The learning outcomes of the courses emphasize everything that students have learned at the end of the lecture, the concepts and analysis of the lecturers, and are compiled based on the lecturer's perspective, while the learning outcomes of the program emphasize everything that students can do or show in a wider scope, the results student performance, and compiled based on student perspectives and field needs (world of work). This means that the learning outcomes of the program are the embodiment of actions/skills from everything that is known and understood by students in accordance with their skills and competencies so that

they can answer the needs and challenges of the field or the world of work. The change in the educational paradigm in the concept of learning outcomes-based learning certainly changes the substance of the curriculum which was centered on the learning process to become more concrete to learning outcomes that can reflect the goals, objectives and educational values to be achieved so that they can be implemented within the scope of the world of work (Sidiq, 2020). The development of a national labor qualification framework is, of course, very necessary to face competition and challenges in the national and international labor market. In the world of education, the presence of the Indonesian National Qualifications Framework has actually answered how a person's qualifications are in getting recognition in the world of work. KKNI is a level of competency qualification that can juxtapose, equalize and integrate between fields of job training in accordance with the work structure in various sectors (Perpres No. 8 Tahun 2012 Pasal 1 Ayat (1)).

Based on observations from the learning process in art-based subjects at PGSD FIP UNIMED, the curriculum tools have not been oriented to the things needed by an elementary teacher in teaching SBDP

subjects. Lecture material is still prepared based on theoretical needs and has not focused on learning outcomes. The use of learning resources and media that do not follow the development and needs of art in elementary schools has resulted in students not being able to produce information and skills that are in accordance with field needs. In the art-based lecture process at PGSD, it is very theoretical in understanding aspects of art without being followed by applicable practical methods. For example, in the music arts education course at PGSD, practical activities are only focused on singing activities and also free songwriting without being followed by understanding the elements of music (rhythm, melody, tempo, etc.) so that students do not have standards to measure the achievement of practical activities. which they do. In the process of music education lectures, of course, students must also be equipped with techniques for playing instruments and using applications so that they can support the relevance of theoretical understanding of their application in art practice in schools. The use of music applications can of course also increase students' competence in understanding aspects of musical literacy such as understanding and reading notation procedures, so it is important for prospective elementary school teachers to be able to identify some of the songs that appear in the theme book. This is a special competence that must be possessed by PGSD students to be able to realize art learning as a forum to encourage children to be creative and able to express themselves according to their development.

To support the concept of learning outcomes-based education in art-based courses, media is needed to improve students' understanding and competence so that they can meet field needs. The digital era brings both positive and negative impacts. For this reason, challenges arise in various fields. One of them is in the field of education or learning. Music learning is also applied and internalized as learning that encourages students to be creative and able to express themselves according to their development. According to (Jamalus, 1991) the purpose of music education for all levels of education is the same, namely: 1) To foster a sense of art at a certain level in each student through the development of musical awareness, response to music, the ability to express himself through music, thus enabling students/children develop sensitivity to the world around them; 2) Develop the ability to assess music through intellectual and artistic in accordance with the national culture; 3) Can be used as a provision to continue their studies to higher music education.

Therefore, in the process of teaching and learning music in schools, students must have musical experience, namely through listening, playing music, singing, reading music and moving to music, so that students can get a complete and comprehensive picture of song expressions. Through students' understanding of musical

elements such as rhythm, melody, harmony, form, and musical style and expression as part of the musical experience, it will instill and realize the need for music for students' lives.

2. 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, 2011). The stages of the 4-D model include: defining, designing, developing, and disseminating:

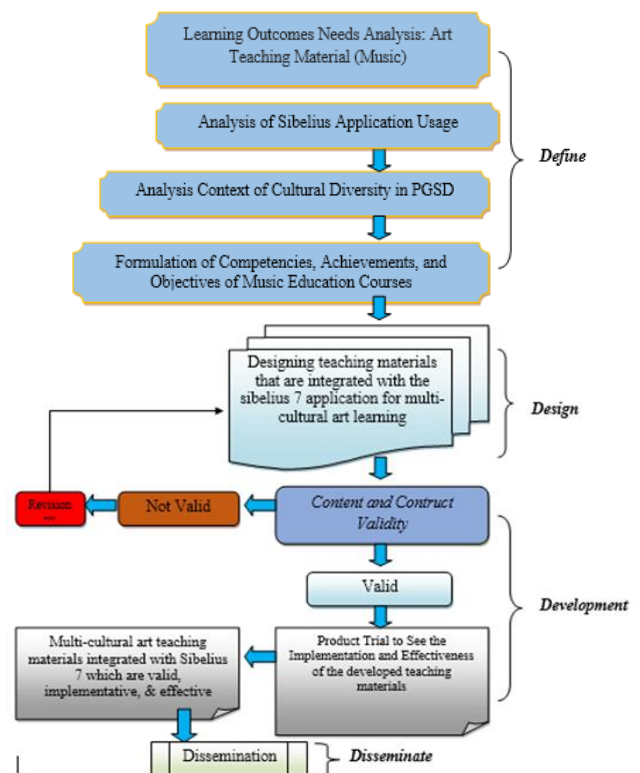


Figure 1. Procedure for Development of Multicultural Arts Teaching Materials Integrated Sibelius 7 Application

The research location is in the PGSD FIP UNIMED Study Program and all research activities are carried out online. 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 integrated teaching materials of the Sibelius 7 application developed. The stages of development in Figure 3.1 can be detailed as follows:

- The definition stage aims to define and analyze the following: (1) need analysis of learning outcomes: art teaching materials (music), (2) analysis of the use of Sibelius 7 to optimize art (music) learning, (3) analysis of the context of

cultural diversity in PGSD as a basis for art practice material, and (4) competency analysis

- The design stage is designing teaching materials according to the definition: needs analysis, usage analysis, multi-cultural analysis, and competency analysis
- The development stage includes: validity test, implementation test, and effectiveness test.
- 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 optimizing the use of music applications (Sibelius 7) as a strategy for implementing the music arts lecture process in accordance with learning outcomes and answering the need for implementing SBDP learning in elementary schools. Based on the needs analysis of learning outcomes, it can be seen that some of the formulations of learning outcomes that have been set in the lesson plan are not supported by appropriate teaching materials so that the content of the material is still in the form of understanding theory without being supported by aspects of applicable practical abilities and in accordance with elementary school needs.

Relevant to that in the process of music education lectures have also not been supported by optimizing music applications as one of the uses of digital media. Based on the survey results, as many as 30% of PGSD students come from various ethnicities, including Malay, Javanese, Minang, Aceh, and Papua. This becomes a problem when lecture content is only focused on aspects of North Sumatran local wisdom. Therefore, it is very necessary to be able to collaborate with multi-ethnic music art materials so that they can facilitate the content of musical materials for ethnic groups who do not come from North Sumatra. This initial stage process is carried out by discussing with several PGSD teams to answer the needs of lectures that are more implementable and support the fulfillment of learning outcomes that are relevant to field needs

3.2. Design

The design stage is carried out by designing music teaching materials that are integrated with the Sibelius 7 application. In the first stage the researchers made designs related to the cover, layout and content of the material. The results of the cover design and layout are as follows:

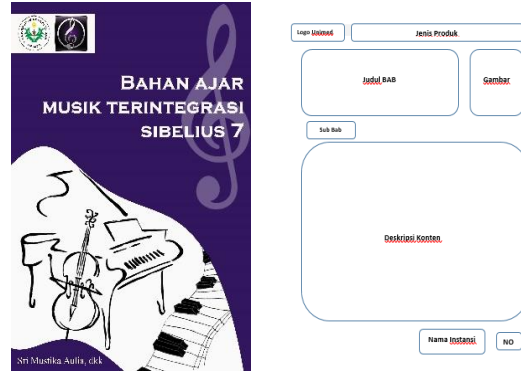


Figure 2. Cover Design and Layout of Teaching Materials

The next stage is to design theoretical and practical materials as a learning tool. The material designed is also integrated with the Sibelius 7 application. Strengthening of teaching materials both theoretical and practical will be carried out using the Sibelius 7 application so that students can also be skilled in making music materials independently. The forms of material in this teaching material are as follows

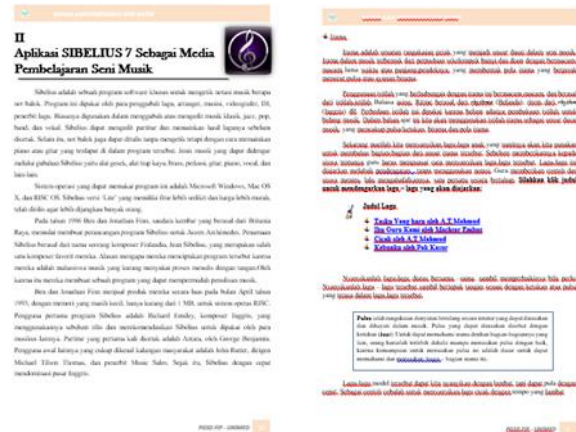
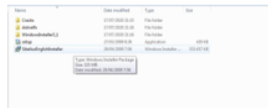


Figure 3. Examples of Theoretical and Practical Material Descriptions same width as the graphic.

Integrating material with the Sibelius 7 application as a form of optimizing applications in lectures in Music Arts Education at PGSD. The integration process begins with instructions for installing the Sibelius 7 application on each laptop. The link to download the application is included in the description of the teaching material and followed by the steps to install the Sibelius 7 application.

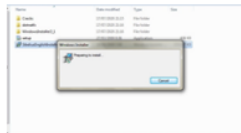
Pada bab ini akan dijelaskan secara terstruktur mengenai teknis dalam menginstall aplikasi Sibelius pada PC dan Leptop. Untuk memperoleh software Sibelius secara gratis maka silahkan [klik](#). Setelah masing – masing telah mendownload segala file yang ada di dalam link tersebut maka untuk tahapan *install* dapat dijelaskan sebagai berikut:

1. Setelah mendownload semua file didalam google drive, maka petakan masing-masing file dalam bentuk folder berikut:



Gambar 1. File Installer Sibelius

2. Selanjutnya klik file installer berikut untuk memulai install aplikasi pada leptop atau PC dan tunggu proses install sampai selesai



Gambar 2. Proses Instal 1

Figure 4. The Sibelius 7 application download link and steps to install the application on teaching materials

The teaching materials also attach several forms of assignments which will later be done in the Sibelius 7 application, including transcription of songs (rhythms and melodies) and making simple arrangements through adding chords and developing simple melodic harmonies. Teaching materials are also integrated with several YouTube videos as supporting materials.

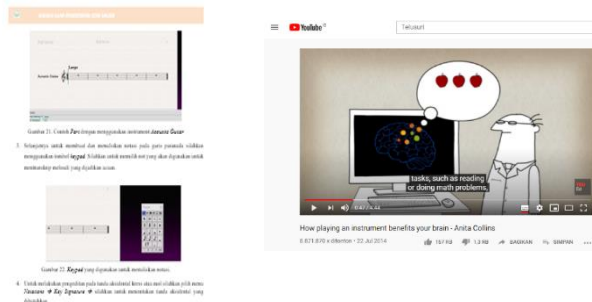


Figure 5. Examples of assignment instructions using the Sibelius 7 application and one of the videos integrated with teaching materials

3.3. Development

At this stage of development, it starts with validating the experts which includes the feasibility of the material, the feasibility of presentation and the feasibility of the language. From the results of the validation carried out to the experts, a score of 92% was obtained for the feasibility of the material, 95% for the presentation, and 90% for the feasibility of the language. Based on this, it can be concluded that the designed teaching materials are feasible for limited trials.



Figure 6. Language Eligibility Validation Activities carried out to Faisal, S.Pd., M.Pd

Furthermore, research activities are carried out by conducting product trials to several research samples. The research sample who took part in this stage was 10 people, all of them were PGSD FIP UNIMED students consisting of 2 people from Batak ethnicity, 2 people from Malay ethnicity, 2 people from Javanese ethnicity, 2 people from Minang ethnicity and 2 people from Aceh ethnicity. This product trial activity was carried out fully online and in its implementation was assisted by two students who acted as the research team. The process of product testing activities carried out as many as 6 meetings. The first meeting was to socialize about the product of teaching materials used and explain about Sibelius 7 as an application to strengthen the concept of theoretical and practical material.



Figure 7. First Activity Submission of research objectives and introduction to the Sibelius 7 application

The second activity of product testing was carried out by installing the Sibelius 7 application on each of the research sample laptops. This activity is also carried out online through the Zoom Meeting application. On the third day, the product trial activity was carried out by transcribing traditional song melodies according to their respective ethnicities. All song files are stored in google

drive and the download link is included in the teaching materials so that students only need to access the link in the teaching materials. The activity continued by providing an understanding of the use of Sibelius 7, starting from making the initial score, selecting time signatures, key signatures to making notations using the keypad feature on Sibelius 7.

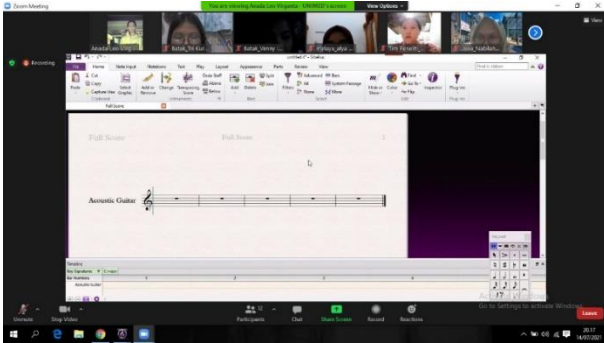


Figure 8. Third Activity Technical Use of the Sibelius 7 Application.

The assignment to transcribe the melody was given for three days until the next meeting. At the fourth meeting, the research samples conveyed their progress of melody transcription as well as some of the obstacles in using the Sibelius 7 application. Then at the fifth meeting the participants were asked to complete the entire series of melodies and presentations on the background of the song that was transcribed. The research sample was asked to explain the meaning of the song that was transcribed and what educational values were contained in the song according to their respective ethnicity.

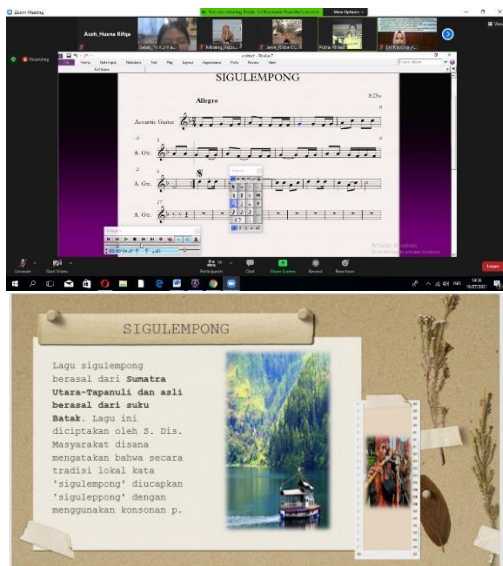


Figure 9. Activity Five Research examples explain the transcription of the Sigulempong song and the meaning of the song.

In the sixth activity, the research sample added song chords as a form of arrangement of songs that had been selected based on the ethnicity of their respective regions. Each participant has completed the addition of chords very well so that later if he works as a teacher he can design SBDP materials, especially innovative music for students.



Figure 10. Part Fix Results using Chord

3.4. Disseminate

The distribution of the product at this stage of this research has not been carried out thoroughly. Planning for the deployment stage will be carried out during the 2021/2022 semester lecture process so that it can be used for the lecture process.

4. CONCLUSION

The optimization of the Sibelius 7 application which is integrated in the form of digital teaching materials certainly provides significant benefits for the music education lecture process at PGSD FIP UNIMED. Optimizing the Sibelius 7 application certainly adds to the competition for students as prospective elementary school teachers to be able to make teaching materials in the form of music and simple songs so that they are suitable for learning needs in elementary school. Teaching materials that contain multi-cultural content are also a strategy to facilitate students with ethnic diversity to be able to learn music from their native regions.

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