Comparison of E-learning and Direct Learning Impact on Cello Major Learning During the Covid-19 Pandemic

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ABSTRACT

The current Covid-19 pandemic has limited all activities outside the home. This condition encourages optimal use technology as an alternative option especially in the implementation of the teaching and learning process. It is not only economic factors that are affected even the education aspect is currently experiencing an adjustment in the learning process. 100% of face-to-face learning is replaced by online systems and assignments system. This research used a descriptive qualitative design, completed by textual and contextual studies. Data collection was carried out through literature study and observations. In this paper, the researchers compare the impact of e-learning and direct learning on the Cello Major course at Universitas Negeri Surabaya during the Covid-19 Pandemic. The results showed that direct learning provided more detailed accomplishments than e-learning, in the Cello Major course. The results of this research focus on four main discussion points. The first is in learning cello technique and the second is the tone production material. The third is the evaluation process of practical learning and the fourth is the duration of learning. All data results were obtained from direct and online practice test periods. Referring to these data, we can compare the level of learning effectiveness especially in Cello Major practice. So, it is necessary to evaluate in the future for adaptation in developing new methods in welcoming life in the new normal era.

Keywords: Cello, direct learning, e-learning, covid-19

1. INTRODUCTION

One of the developments in education is marked by the emergence of new findings and innovations in it. One of them is effective learning. This needs to be realized to undergo the difficult times of the current Covid-19 pandemic. The entire academic community encourages government programs to work and study from home. All are required to take full advantage of technology. Learning development program in form of e-learning is a form of quality improvement carried out to maintain the continuity of the learning process during this difficult time. Music Study Program is one of the study programs at Universitas Negeri Surabaya which has unique scientific characteristics. In music division, the competencies expected to be possessed by students are attitudinal competencies implemented in music appreciation, knowledge competencies implemented in material theory and musical concept, also skills implemented in students' expressions and creations in creating works of music. The courses in the Music Study Program are grouped into two, namely music

theory and music practical. The theory course has an average load of 2 Semester Credit Units, while practical courses have an average load of 3 Semester Credit Units. Instrument practice subjects consist of vocal, piano, guitar, strings (violin, viola, cello, contrabass), woodwind and brass sections, also percussion. The instrument practice course is a characteristic course, where this course is kind of specialist identity for students, in addition to equipping students in the form of sufficient skill capital to become professional music players in accordance with their major areas of expertise. Music teachers listen to students' performance during their weekly instrumental lessons and provide guidance and formative feedback to improve students' playing ability and technique [1]. As the same in Cello Major Course, Music Department, Universitas Negeri Surabaya

During the Covid-19 pandemic, Cello Major course was also included in the e-learning program, even though on the other hand, this course is a practical course that requires a long learning time intensity. Assistances during lecture hours are very necessary to convey techniques directly to students, as well as

questions and answers about techniques. In addition, to practice until they are able to mastery learning, students need at least 3-4 days, or even more to play a technical material. This subject is a practical course of the main expertise in the Music Study Program. Even though this subject is a practical subject, contextual elements of learning material must still be provided, namely by showing students how to tune-up instruments, maintenance, and also the position of playing instruments in detail. In accordance with its characteristics, Cello Major course really needs concrete examples of playing, so that students can understand structurally any given material. Those things that have been mentioned are the obstacles faced by both lecturers and students during the online learning process, where this also has an impact on learning outcomes achieved during one semester. It appears that there has been a decline in student learning outcomes as long as online learning lasts almost one semester; students are only able to absorb 40% of the material presented by the lecturer. Therefore, this article aims to describe which sectors are experiencing problems, as well as solutions that can be found to anticipate these obstacles. In order to optimize students' competencies, lecturer needs a kind of strategy.

2. METHOD

Learning music art is a learning activity that aims to develop awareness of art and beauty in a general sense, both in the domain of conception, appreciation, creation, presentation, and psychological, educational goals, for the positive personal development of students [2]. Learning music, Major Cello is one of them, also aims to form students' musical competences as a whole or comprehensively. There are 2 (two) approaches that can be used to analyze the differences in the impact of direct learning with online learning, namely from the textual approach and the contextual approach.

2.1. Contextual Learning

Contextual learning links learning material with real-world contexts faced by students every day, both in the family environment, society, nature circumstances, and work aspects, so that students are able to make connections between their knowledge and its application in everyday life, by involving The seven main components of learning, namely: constructivism, questioning, inquiry, learning community, modelling, reflection, and authentic assessment.

The meaning of constructivism is that students construct their own understanding from new experiences based on initial knowledge through a process of social interaction and assimilation-accommodation. The implication is that learning must

be packaged into a process of "constructing" not receiving knowledge. The essence of inquiry or investigating is the process of moving from observation to understanding. Therefore, in this activity, students learn to use critical thinking skills. Asking or questioning in contextual learning is carried out by both teachers and students. The teacher asks questions to encourage, guide and assess students' thinking skills. As for students asking questions is an important part of inquiry-based learning. A learning community is a group of people (students) who are engaged in learning activities and sharing experiences. In accordance with constructivism theory, through social interaction in this learning society, students will have the opportunity to construct their own knowledge. Therefore, working with others is better than learning alone. Modelling is the process of showing an example so that other people (students) imitate, practice, apply to other situations, and develop it.

According to Albert Bandura, learning can be done by means of this modelling. An authentic assessment is intended to measure and make decisions about authentic student knowledge and skills. In order to be able to judge in fact, authentic assessment is carried out in various ways; for example, product appraisal, performance appraisal, portfolio, relevant and contextual assignments, self-assessment, peer assessment, and so on. In principle, reflection is thinking about what has been thought or learned, in other words it is an evaluation and introspection of the learning activities he has done. The reasons for the need to apply contextual learning are: (1) Most of the daily learning time at school is still dominated by the activities of conveying knowledge by the teacher, while students are "forced" to pay attention and accept it, so it is not fun and can't empower students, (2) Learning material is abstract-theoretical-academic, not related to the problems faced by students every day in the family environment, society, nature and the work aspects, (3) Assessment is only carried out by tests that emphasize knowledge, not assessing the quality and learning ability of students in authentic situations, and also (4) Learning resources are still focused on teachers and books. The surrounding environment has not been used optimally.

The philosophy of contextual learning is constructivism, which states that knowledge cannot be transferred from teacher to student like filling an empty bottle, because students' brains are not empty but already contain knowledge from previous experiences. Students not only "receive" knowledge, but "construct" their own knowledge through assimilation and accommodation and inter-individual processes [3].

2.2. Textual Learning

Text-based learning programs construct textual learning. The 'truth' is scientific theoretical truths that

are relative. Learning programs based on the context of experience will create contextual learning. The 'truth' is factual empirical truth which is related to real experiences about. If the two learning bases are combined, merged, and blended, it will construct as intensive learning. Scientific learning is learning based on scientific methods suggested in the implementation of the current curriculum [4].

This research is a qualitative design through an in-depth observation of a certain object with a certain time. In observing this phenomenon, researchers do not only seek and collect data but immediately classify data, process, and analyze it. The theoretical framework is built based on indicators in the field, not before the research is carried out or planned. This aims to make observations full and not hindered by the theoretical aspects planned by the researchers. Therefore, understanding and analyzing data is based on the researchers' accumulated empirical knowledge and experience.

3. RESULT AND DISCUSSION

Facing the current Covid-19 pandemic, both lecturers and students are required to be able to adjust to the learning process. Especially for a lecturer, the competence of lectures in teaching should always be adjusted to the development of policies that apply nationally [5].

Based on the textual approach as well as the contextual approach, there are 4 (four) aspects of Cello Major learning that have different impacts between the direct learning process and online learning, including:

3.1. Fingering Technique

In the classical method of teaching music, the teacher gives instructions and feedback on the performance of the student, commonly providing the student with feedback using imagery, for example, "sing as if through the top of your head" [6]. This statement shows that all instructions given by the lecturer should be able to be conveyed in detail so that students can reach the realm of visual imagination.

In the online learning process, students cannot see in detail the practical material from the lecturer, including the position of the left-hand finger. The lecturer in front of the laptop or Personal Computer camera, gives an example of a streaming practice, so the position of the lecturer's finger is only visible in one direction, though the student must know the position from behind and from the side simultaneously. So, students cannot absorb the material completely.

In contrast to direct learning, at the same time, students can see in detail the fingering position taught by the lecturer, so that the practical material is easily absorbed properly. Direct learning has one of the advantages, where students can practice immediately after the lecturer gives an example of each part of the material in detail, and can immediately be given an evaluation of what needs to be justified in each part, resulting in an effective and time-efficient learning quality; in addition to interest and willingness to learn students themselves.

3.2 Tone Production

The sound of music is perceived by a person as a special information space, which is one of the facets of comprehension of the spiritual content of the world, its beauty, which is reflected in the sound [7], where the aesthetic value of tonality and intonation is one of the important aspects in the musical process. However, this cannot be maximally achieved when online learning takes place. It is obvious that the development of musical hearing and musical thinking is faced with a number of problems, this confirms that the production of tones has its own complexity in the process of achieving it.

In online learning to practice musical instruments, what is very vital is the sound of the instrument. The results of the research survey showed that the sound produced by digital streaming platforms could not reach the low middle-frequency 50-500Hz. So, when the lecturer gives examples of bass tones, students are less able to hear the tone quality well. In the practice of producing tones, the quality of the tone that produced greatly determines the achievement of student practice.

Table 1. The Low Frequency of the Cello

In addition, the dynamics of the sound generated through online live streaming cannot be conveyed properly, so that the results of practical learning cannot be optimal. In playing a repertory, showing dynamics is very important because it relates to the beauty of a song. Whereas in direct learning, students can immediately listen to the sound quality produced by the cello in detail, so that students can imitate the material well. Likewise by playing dynamics or interpretations in delivering songs. In direct learning, the lecturer can provide detailed examples of the dynamics according to the composer's wishes, so that students can clearly understand what they mean. The quality of learning can be monitored properly.

3.3 Practice Learning Evaluation Process

When musical symbols are introduced to succinctly reference particular types of musical configurations with their attendant musical concepts, musical thinking operates on a more abstract level not dissimilar to the that in the world of mathematical symbols [8]. This statement suggests that music symbols are not only limited to certain chord configurations or melodic contours, but their implementation even reaches a more abstract realm, one of which is regarding the aesthetic stage or the interpretation of the character of the song as a whole, which this cannot be. implemented in mathematical symbols that are concrete only. This shows that learning music (especially in this case is Cello Major learning), requires a complete or comprehensive evaluation of practice, which can be a reference for lecturers to observe the development of each student.

Giving a note mark in the practical direct learning process is very important to remind students to fix the position of the fingers and the dynamics of playing. Learning through online lecturers cannot directly monitor students; it is easy to forget, so it is not effective at every meeting.

While in direct learning, the lecturer can provide notes on each given material, for example in the practice of interpreting songs on the cello, in part II bar 106-110 must be played softly and wisely, the lecturer at that time also gives important notes on the song scores. Not only notes are commandments, the evaluation of each section is also written directly in the score so that students understand more quickly and easily in the learning process.

3.4 Study Duration

Music is a branch of art that expresses emotions, which is possible to reveal the relations between the sound of music and some emotions with certain principles [9]. This statement emphasizes that music is a combination of tone production and emotion processing that can be analyzed through various disciplines. Based on the complexity of these activities, the practical learning process requires intense mentoring, in which the duration of learning is one of the considerations.

Basically, the advent of the 'Internet Plus' era has provided many conveniences and possibilities for the in-depth reform education [10] So, the development and use of multimedia, especially in education is no longer something foreign in Indonesia [11]. Unfortunately, online learning with a long duration, according to the student survey results is not comfortable. There are various factors, including laptop devices and others that heat up easily, making the impression uncomfortable in learning. Besides, it requires a representative or adequate internet connection to produce good quality video streaming. Why is it important to pay attention, because not all residential students who easily maintain internet networks with a minimum quality of 4G. If an alternative is given to divide the material by segments; for example, one material in 60 minutes, then takes a break of 30 minutes, then continues again 60 minutes, the learning achievement is still not maximal; because the students; the mood is also considered by the lectures. In direct learning, this condition does not occur, because time can be adjusted according to the achievement of the material until students understand what the lecturer has taught. Lecturers can also intensively accompany students for the required duration. So that, learning will be effective and efficient.

By experimenting and observing through two stages, it is important to present a summary of the findings in a table. The results of the analysis were coded fT (fingering technique), tP (Tone Production), eP (Practice Learning Evaluation Process), dP (Duration of practice learning). The achievement rate is in percentage, as shown in the graph as follows:

Table 2. Summary of comparison of e-learning with direct learning
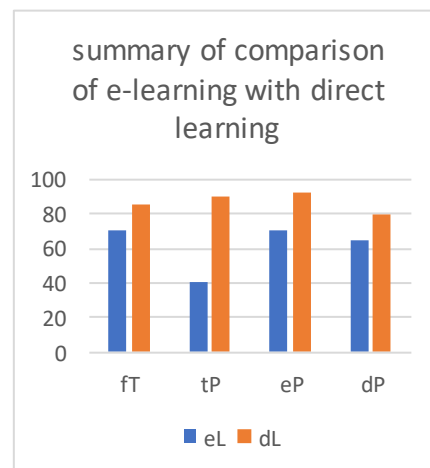
Based on the data from the research graph above, there are e-learning with code (eL) and direct learning with code (dL). Learning attainment is in the average rating of 10-100 in the form (%). The results of the analysis with the code fT (fingering technique) show 70% for the e-learning and 85% for direct learning; tP (Tone Production) shows 40% for e-learning and 90% for direct learning; eP (Practice Learning Evaluation Process) shows 70% for e-learning and 90% for direct learning, and dP (Duration of practice learning) shows 65% for e-learning and 80% for direct learning.

4. CONCLUSION

In conclusion, the data above is the result of a learning-process comparison carried out online and direct learning during the Covid-19 pandemic. Direct learning provided more detailed accomplishments than e-learning, in the Cello Major course. The results of this research focus on four main discussion points. The first is in learning cello technique and the second is the tone production material. The third is the evaluation process of practical learning and the fourth is the duration of learning. All data results were obtained from direct and online practical test periods. Referring to the data, we can compare the level of learning effectiveness especially in Cello Major practice. So, it is necessary to evaluate in the future for adaptation in developing new methods in welcoming life in the new normal era.

ACKNOWLEDGMENT

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