

# Learning Model of E-Learning Basic Music Theory for Elementary Students

Reyhan Swarna Medica\*, Yudi Sukmayadi

Universitas Pendidikan Indonesia

Bandung, Indonesia

\*medicareyhan@gmail.com, Yudi.sukmayadi@upi.edu

**Abstract**—Most teachers in elementary schools who teach music have no expertise in their field. This causes the students to have a lack of understanding related to the subject matter presented both in terms of theory and practice. This article describes an e-learning-based learning model on basic music theory for elementary students. The instructional media used is e-learning in the form of Santo Aloysius School's LMS (Learning Management System) platforms. The course material presented including numbered musical notation and symbols musical notation, sound recognition, and pitch. The objective of this study is to make the students have a better understanding of the difference between pitch based on numbered musical notation and symbols musical notation. The instructional media design process includes preliminary study, the stage of making the media in the form of music applications and scripts, and making the product. This e-learning model also included learning material videos, exercises, and quizzes, which can make the students practice their musical skills theoretically and practically in learning pitch, duration, and accentuation. Therefore, this e-learning model can help teachers teaching materials and provide solutions to the learning needs of elementary students.

**Keywords**—learning models, e-learning, basic music theory

## I. INTRODUCTION

The learning model is essential in the learning design because through the model, the researchers can measure students' needs to achieve the indicators that have been designed. In other words, learning is a system that aims to assist the student learning process, which contains a series of events designed and arranged in such a way as to influence and support the internal student learning process [1]. Learning model can be designed in various forms and made as interesting as possible so that students can understand the course material conveyed by the teacher. Learning is a process of interaction between students and teachers and learning resources in a learning environment [2]. Learning is one's effort to obtain a change, that is abilities that were previously unable to become capable, and thereby this teaching and learning activity must be used properly according to the designed curriculum, especially in the subject of music in elementary schools. Most teachers in elementary schools who teach music do not have expertise in their fields, thus making it

difficult for teachers who are not in their field of teaching. Art education is important to be taught starting from the elementary level so that students from an early age get balanced stimulation between the left and right hemispheres of the brain. If they can use the functions of both brain in a balanced manner, then they will become a human who thinks logic, intuitive, intelligent, creative, honest, and empathic [3].

Many students do not understand the basic music theory because the teacher explains the theories like they teach science lessons, which results in the students tend to be bored and do not focus on the subject material. This is related to the limited numbers of teachers who are consistent with their fields (music teachers), especially in elementary schools. In today's phenomenon, many ways can be done to make each subject is interesting to study, one of which is through e-learning (web-based learning). The advancement of technology and facilities such as cellphones and laptops can be used as a support in online learning. Web-based learning often has many benefits for students. Web-based learning can provide a fun learning process, has an element of high interactivity, enhance students' ability to remember more about the course materials, and reduces operational costs usually incurred by students if it is designed properly and appropriately [4]. The course materials in basic music theory is very broad and the focus of the course materials in the E-Learning Basic Music Theory is Understanding numbered musical notation (numbered notes) and symbols musical notation (symbol notes).

The numbered musical notation and symbols musical notation is part of the basic music theory, and are listed in the elementary school curriculum, namely understanding numbered musical notation and symbols musical notation. In the learning model that will be designed, there is knowledge about shapes, names, note values, exercises, and quizzes that are made in the music application. The platform used for E-Learning is in the form of the Santo Aloysius School's LMS (Learning Management System) platform, and it can use a computer or laptop, and cellphone. Based on the discussion that has been explained, this study focuses on the design of e-learning model for basic music theory aims to help the needs of teachers teaching materials, and provides solutions to the learning needs of elementary students.

## II. THEORIES

### A. Learning Model

Learning models in elementary schools for several types of lessons have almost the same steps and strategies because they base their teaching steps on the nature and character of their students. Children aged 6-12 years are in their dynamic age. Dynamic age is the age in which children are rapidly developing, both in terms of mental or psychological development and physical. Based on the study of psychological development from 6-12 years, the classroom management in elementary schools should theoretically follow these developments and are divided into two important parts, namely low-grade education or 1,2,3 (first grade to third-grade students) and high-grade education or 4,5,6 (fourth grade to sixth-grade students) [5]. This study focuses on the low-graders, where psychologically at this level the state of mind and feelings are still intact, so it is easy to provide understanding, especially music lessons and get optimal learning outcomes. Learning outcomes are internal capabilities which include knowledge, skills, and attitudes that have become the personal property of a person and allow that person to do something. It is not a single process, but a broad process shaped by the growth and development of behavior, where the behavior is the result of the cumulative effect of learning [1].

### B. E-Learning

E-learning consists of two parts, namely “e” which stands for “electronic” and “learning” which means learning. In simple terms, e-learning is learning using electronic devices. The benefits of the learning process using internet technology are increasing the learning competence of students, improving teaching skills and experience in the procurement of learning materials, overcoming problems with limited staff, increasing work efficiency [6]. The devices that can be used for E-learning are laptops or computers, and cellphones.

### C. Basic Music Theory

Music is the most abstract form of art (it is invisible to the eyes) but its effect is the most direct and concrete. It is a series of sounds that directly affecting emotions and feelings, like it or not, understand it or not, regardless of race, ethnicity, culture, ideology, or religion [7]. It is important to have an understanding of music for elementary school education related to the curriculum that has been designed, namely the basic music theory. The basic music theory is a study of the structure of the music which includes the analysis of the basic elements of music from the melody, harmony, rhythm, shape, texture, and function of each element [8]. Similar to other fields, the term that theory follows practice also applies in music. The basic music theory aims to introduce general concepts and terminology that will be useful in both playing and analyzing music [6].

Rhythm is a patterned recurrence of stressed and unstressed, recurrence of hope, and fulfillment. In a broad sense, rhythm is the regular flow in music through time.

Aspects that build rhythm are beat, meter, and accent/syncope [5]. These aspects serve to provide a strong beat or weak beat or accent and syncope [8]. Rhythm is a sequence of movements that are the basic elements in art. Rhythm is formed from a combination of a group of sounds and silence with various lengths of time or short-length, forming a rhythm pattern that moves according to pulses in a bar swing. Pulses are a series of regularly repeated pulses that can be felt and appreciated in music. The pulses that can be heard are called beats [9].

The Cheve system or numbered musical notation is written music using numeric symbols, the numbers used are 1,2,3,4,5,6,7. Symbols musical notation is written music using sound lines and tone xylophone or tone codes [10].

## III. METHODS

The approach into this research is using the qualitative library development research. This system will enhance the writer in the process to produce the final result of the multimedia material for its common used such as training materials for teachers, learning materials, media, and management systems in learning. The final product of this research will be in a form of video production consists of movie clips, moving images, audio, and text by using the adobe premiere. In collecting data for the purposes of this paper, the authors concluded several stages of the process in making this multimedia. First, the author pre-research by observing the object of research, the data obtained by the author is processed as planning material for making media, the writer looks for data sources through several journals, then makes this interactive media as a learning media material.

## IV. DISCUSSION

Music lessons in elementary schools are a means of educating through music and changing children’s behavior through music. The learning model and approach is extremely important because learning in elementary school is a student center, the center is the students, and the teacher must design the most appropriate learning model for children. Today’s phenomenon using distance learning, a learning model based on the use of technological sophistication is needed. Learning music which is based on the learning of basic music theory using technological sophistication is great for children. Distance learning that is currently being developed strongly supports the e-learning model. The e-learning model is very actual, where children nowadays can use software such as cellphones and laptops. Therefore, it is very necessary to design e-learning instructional media to provide solutions to the needs of students and teachers.

The researchers conducted a preliminary study by collecting information related to music lessons, one of which is the Santo Aloysius school in Bandung, which is located on Jalan Trunojoyo no. 3, Citarum, Bandung. Based on interviews with music teachers who teach there, the teachers who teach SBDP (Cultural Arts and Crafts) at the school is the homeroom teacher, making it difficult for them because they do not have a

music education background to provide theories about music to students, and the limited number of music teachers is an obstacle nowadays, likewise in other schools. In general, the learning model of the basic music theory for elementary schools is the introduction of notation, both the introduction of numbered musical notation and symbols musical notation. In the introduction of notation, there are two things that the students must achieve to enter the level of understanding about notation, namely pitch, and the duration of accentuation.

This e-learning model is made in the form of a platform, namely the LMS (Learning Management System). LMS stands for Learning Management System, a global term for a computer system developed specifically for managing online courses, distributing course materials, and allow collaboration between students and teachers. The LMS will manage every aspect of the course, from student registration to saving test results, as well as receiving assignments digitally and staying in touch with students. LMS is the backbone of most e-learning activities, in this application, there are parts to make it easier for teachers to use e-learning. Among them are materials to provide a forum for teachers to incorporate their teaching materials, exercises, quizzes, webinars, and report cards. All data can be made in the form of text, audio, video, and HTML. The LMS application show in figure 1.

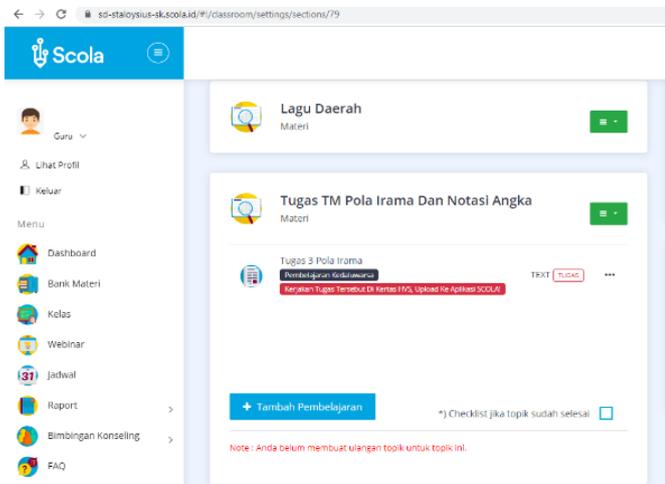


Fig. 1. Learning Management System Applications.

The topic of the course material is the basic music theory, and there is knowledge about numbered musical notation and symbols musical notation, the duration or short-length of the beat, accentuation or stressed tones, and the recognition of tonal sounds which aim to distinguish the pitches in musical notation. The process of making media to design the e-learning of the basic music theory is as follows:

- The Sibelius application is a software to make symbols musical notation, this application can create shapes/symbols, note values, and the notes on the staff. The researchers compile the material framework that will be made in the e-learning model, starting from the

stave which consists of 5 lines and 4 spaces, the key (clef) G, the notation, whole note (4 beats), half note (2 beats), quarter note (1 beat), eighth note (1/2 beat).

- The researchers make a drawing and numbered musical notation using MS. Word software with parrumation fonts.
- The DAW (Digital Audio Workstation) application is software for producing music in the form of VST (Virtual Studio Technology), MIDI, and audio tracks. This application is used to add beauty to the music in the video course material that will be made so that the video is interesting, and also to record the sound of the presentation.
- The Adobe Premiere application is an application for editing videos, the results of Sibelius and Cubase combined.
- By going through the four processes above, the researchers made a video to provide knowledge about numbered musical notation and symbols musical notation using a mobile phone.
- After that, make an exercise consisting of 5-10 questions in the form of a stave in MS. Word. Example of exercises show in figure 2.



Fig. 2. Example of exercises.

- Make 10 questions for the quiz, which consist of numbered musical notation and symbols musical notation course material with a duration of 60 minutes. This quiz aims to make students able to review the course material that has been studied in the previous session. Example of quizzes show in figure 3.

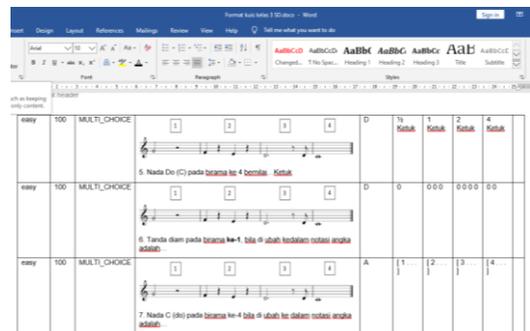


Fig. 3. Example of quizzes.

- The final process is uploading the basic music theory course materials in the form of videos, exercises, and quizzes into the LMS (Learning Management System) platform. Students can access the platform with their

respective accounts. Teachers can monitor student progress online.

#### V. CONCLUSION

The learning model of e-learning of the basic music theory is made based on problems that occur in elementary school education, including most teachers have no expertise in their fields, which has an impact on the process of student learning outcomes that are less optimal. The advancement of technology and the facilities that every school has, such as laptops and cellphones make the learning model of e-learning very appropriate to use. The design of the model was carried out in two stages, namely a preliminary study and the process of making the media. The platform used for this learning is the LMS (Learning Management System).

The course material designed in the learning activity is music notation, which includes numbered musical notation and symbols musical notation so that students can understand the pitch, duration, and accentuation. The course material is made using 4 applications (software), namely Sibelius as a means to provide symbols musical notation material such as staves, keys (clef), music note forms, music note values, duration and accentuation. Second, Cubases are used to fill in the sound before editing video. Third, Microsoft Word for writing the course material and making numbered musical notation using the parrumation font (writing music using numbered musical notation) as well as making exercises and quizzes. Fourth, Adobe Premiere software which serves as a video merger, and

audio from the results of the previous process. It is expected that by using this e-learning model, it can help teachers teaching materials and can provide solutions to the learning needs of elementary students.

#### REFERENCES

- [1] Gagne and Briggs, Pengertian Pembelajaran [Online], Retrieved from: <https://www.scribd.com/doc/78981263/Menurut-Gagne-Dan-Briggs> accessed on June 24 2020, 1979.
- [2] Undang-Undang No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional
- [3] I. Musbikin, Manfaat dan Pengaruh Belajar Musik. Jakarta: Erlangga Pramayuda, Yudha. 2010. Buku Pintar Olah Vokal. Yogyakarta: Bukubiru, 2009.
- [4] Rusman, dkk. Pembelajaran Berbasis Web (E-Learning) <http://indahyulianda14.blogspot.com/2016/05/pembelajaran-berbasis-web-e-learning.html> (diakses tanggal 24 Juni 2020)
- [5] H. Pamadhi, E. Sukardi, Yusrafiddin, and A. Tatang, Pendidikan Seni di SD, Tangerang Selatan: Universitas Terbuka, 2014.
- [6] D. Ardiningsih, Rancang Bangun E-Learning Teori Dasar Musik Bagi Calon Mahasiswa Sekolah Tinggi Musik Bandung. (Disertasi: Bandung: Universitas Pendidikan Indonesia), 2014.
- [7] B. Sugiharto, Untuk Apa Seni. Seri buku Humanjora. UNPAR
- [8] A. Firmansyah dan Sugeng, Teori Dasar Musik 1. Bandung: CV. Bintang WarliArtika, 2014.
- [9] Jamalus, Busroh Hamzah, Pendidikan Kesenian 1 Musik. Departemen Pendidikan dan Kebudayaan Direktorat Jenderal Pendidikan Tinggi Proyek Pembinaan Tenaga Kependidikan, 1992/1993.
- [10] Ratma, Maman Wijaya dan Sugianto, Seni Musik. Yayasan Harisma, 1989.