How to Cite:

Bharti, H., Singh, D., & Malik, M. (2022). E-Learning platform for music instruments: Advantages and challenges. *International Journal of Health Sciences*, 6(S1), 5890–5898. https://doi.org/10.53730/ijhs.v6nS1.6211

E-Learning platform for music instruments: Advantages and challenges

Harshita Bharti

B.tech CSE, Galgotias University, Greater Noida

Email: harshitabharti072@gmail.com

Deepak Singh

B.tech CSE, Galgotias University, Greater Noida

Email: deepaksingh21@gmail.com

Dr. Medhavi Malik

Assistant Professor, SCSE, Galgotias University, Greater Noida

Email: medhavimalik28@gmail.com

Abstract---We're living in the work from home or remote work era and all are home bound where everyone wants to learn new things whether it's their lost passion or their curiosity to learn so this study is based on the evolving advantages and challenges of e-learning platform that will be helpful in learning different music instruments at their own comfortable place. This study focuses on the depth knowledge of ease of e-learning in music sector. This study will encourage the user to learn and excel in the music sector by the use of distance learning applications by sitting comfortably at their home or any other place. In addition, it focuses on the adoption of e-Learning outcomes to reduce environmental impact, with minimal use of mobility and paper use to facilitate learning. It is important to note the fact that the attention is more given on the process more than on the content of education. This change in the mode of learning has result in convenient, as well as the rapid development of music education for students. In this regard, e- Learning is important in the field of education.

Keywords---Music Education, Music Performance, Music Training, Online Distance Learning.

Introduction

Music education includes music training and teaching. It consists of teaching and music operation, as well as how these two things come together to develop a musical habit as regulation. Lessons are often designed to guide students with

information or to assist them with more important tasks. Two different types of econtent are identified, which are information-based and presentation-based articles. The first conveys information to the learner, and the last involves the development of a high level of competence in which the learner is given to develop his or her ability. Both of these types of words are related to music education. Music theory is based on knowledge, and includes things like music history, ethnomusicology, psychology and music sociology, among many others. The use of E-Learning in knowledge-based information will greatly enhance teaching in the environment, and provide students with learning to interact more with their teachers and companions. The main goal of music forms an important part of discipline, because music is actually a masterpiece. The use of e-Learning in this field is why important. Promote of internet technology and multimedia technology are two main benefits of e-Learning. Various technologies, which are constantly changing, have been developed to facilitate e-Learning. Electronic learning creates a variety of activities that can include computer-based strategies with the environment like a classroom and delivery methods that can bring teaching resources out of the classroom walls. With regard to music education, resources available in a variety of delivery methods include integrated education, distance learning, visual education and synergic music activities.

Literature Review

E- Learning as a Strategy for Enhancing Access to Music Education [1]

By Dr. Beatrice A. Digolo (Corresponding Author), Miss Elizabeth A. Andango, Mr John Katuli In Kenya, as in many other countries, the opportunity to study music is limited, with a large number of students wanting to further their education without a degree. Many music service workers find it difficult to extend their studies outside of the classroom walls due to the inability to distribute available resources for use outside the campus. However, it is becoming clear that there is a need for more music training for many interested people who do not have the opportunity to study this field at university level. Distance learning has two things to think about as solutions to this problem. The above scenario uses service providers to explore opportunities to teach online music education as a way to access more music learners. This research argues that e-Learning provides an effective problem-solving solution.

Evaluating a music e-learning resource: The participantsp erspective [2]

by Frederick Seddona & Michele Biasuttib

This research study examined the effectiveness of electronic reading music designed to enable each student to sing the 12 blues developed by learning on the keyboard. The study also sought the views of participants in the unit by refining their thinking on learning. Learner's opinion regarding the role of the internet educator in the e-learning environment were also explored. The study used participatory video presentations of participants as they engaged with the source. The lead video footage is analyzed using the analytics process. Reorganized interviews were conducted with individual participants after the fulfilment of the study sessions.

ePiano, a case of music education via internet in rural Zambia [3]

by Kristin Shoemaker & Gertjan van Stam

The objectives of this research are: 1) to evaluate the effectiveness of piano lessons used within two distinct geographical areas, (2) to provide ideas on benefits and challenges of melodic and constant learning of piano, and either it is used in combination or not.

Music and Arts E-Learning Graz [4]

by Manfred Rechberger

Computer-based resources and applications are getting important due to the emergence of new media programs in music. In comparison to the common learning methods, the learning methods at the university of art is reliant on visual media. Many modules contain content that convey creative process and learning environment. The benefit of e-learning include flexibility for students, especially if they have a wide variety of reading courses using multimedia. This research is about the use of forums, blogs, wikis and online activities that promote music readings and available music stories based on real-life news discussions. The final analysis returns to an important learning situation about making a musical instrument and making video recommendations.

Reflections On Music Therapy Training Within E-learning Education Contexts [5]

by Imogen Nicola Clark & Grace Anne Thompson

The rapid growth of e-learning technology is transforming the availability and delivery of university education. In Australia, e-learning gives students the opportunity to study music lessons while living in remote areas of the mainland. Students enrolled in the Masters Of Musics Therapy at the University of Melbourne can choose courses about integrated learning, which includes physical as well as virtual learning. This article focuses on integrated learning by music medicine students and teachers at the University of Melbourne. The explanation of a music therapy program is provided with a detailed description of a single topic to show how electronic learning is controlled. There Integrated Student Teaching course is discussed, and identifies key challenges that include teacherstudent relationships, general information, student-to-student teaching, curriculum and teaching. They then look at students' responses from some assessment, and explain what impresses students with enjoyable reading with teaching staff, and reading instruction. Finally, They discuss the future of music medical education in an online forum, looking at the challenges and benefits of students, therapy education and upcoming educational institutions.

The concept of e-learning in the context of music education

Music education includes training and teaching in music. It incorporates both the theory and practical music, as well as how these two regulates together to improve the function of music as a distinction. Although the theory creates minor discipline, effective interaction between theory and practical is essential for understanding, finding, discovering, and better achieving results. Both theoretical

and practical aspects are important and useful in music education. The section of music at all levels of education worldwide is usually very small for a number of reasons. First, most vocal and instrumental teaching is based on skills, aimed at improving proficiency in practice. As students acquire performing or singing skills in various fields, there is a need for special attention in teaching. Second, the idea of a gifted or talent that is important in the decision to study music that often provides a certain "difference" in the division, thus gaining more students. In additional reasons related to the actions involved in decorating music halls, and, in some cases, the requirement for students to purchase their own instruments, are also reduced.

Like many other countries, the availability of music education is limited, with a large number of students interested in furthering their education from the program. Many music service providers often find it difficult to extend their work outside the walls of their defensive operations due to the lack of profitability of the production work. However, it is very clear that there is a need for an increase in professional music for many interested people who do not have the opportunity to study this field at university level. The above scenario allows service providers to evaluate opportunities for online service delivery. This research observes that e-Learning provides an effective solution to this field problems.[6]

Content

E lessons are designed to guide students with information or to help them do specific tasks. Two different types of content have been identified, namely information-based and practical-based. The former transmits the information to the learner, and the second involves the development of a learning ability when the student is given the opportunity to develop a career. Both of these types of content apply to music education. Music theory is based on knowledge, and includes aspects such as music history, ethnomusicology, psychology and music religion. The e-lerning program about knowledge-based information will greatly enhance teaching in the area, and provide a platform for students to learn from international educators.

The practical view point of music forms the disciplinary feature, since music is actually the art of doing something. An electronic learning tool in this field of music is very important, yet it is also a challenge for the two genres. This research delves into accessible information to test the e-Learning app for disseminating practical-based information in music education.

Methods Participants and Procedure

A different design was made. The sample consisted of 220 students (155 women and 65 men), aged 26.57 (SD = 8.46), from eight universities from 12 universities covering music programs in Romania. Using simple samples, the questionnaire was used in the Google Forms app and posted online (Facebook pages and Facebook groups for music students; university teachers from various universities were asked to distribute the participants' request to their students. collaborative research. This data was collected from Kaggle that we used in our study for

getting further outcomes.

The questionnaire was handled online, during the second semester of the 2020 academic year and was maintained for 1 month. The questionnaire was managed without obtaining any personal information, identifying it and without signing in to their Google accounts to ensure anonymity. Participation in the survey was completely voluntary and written consent was obtained from each participant. The objectives of the study, the confidentiality of individual information, and other considerations of the ethical principles discussed in the study guidelines were explained to participants prior to data collection. Participants who gave their consent to read all the information and understand and agree with all the information were able to access the questionnaire. Those who did not give their consent, were not given a completion link.

Measures

Student satisfaction with online learning and teaching is measured by three types of didactic organization: individual issues, group and theory. Three things have been used in each of the three situations: How do you feel about the individual / collective / theoretical categories? responses are rated on a Likert rating of five points, ranging from completely useless to very useful. Two additional factors measure the satisfaction of online learning in general and the e-learning platforms used in didactic activities (How satisfied are you with online learning / e-learning platform?), Measured by Likert with a five-point scale, from dissatisfaction totally to the point of complete satisfaction. One thing weighed in on students' perceptions of the impact of online learning in developing their skills (How much do you believe online courses have contributed to your preparation as a music student?), A five-point Likert scale is also used for feedback, from very small to very large.

The amount of time spent studying activities before the COVID 19 and during the epidemic was also measured in three learning areas, individually, group, and theory. Students' perceptions of storytelling and online learning and learning methods are measured in 17 subject-divided study topics (e.g., music history, music theory, musical forms and analysis, etc.) and group issues (e.g., orchestra, choral ensemble, directing, etc.). 17 items were rated on Likert's five-point scale, ranging from total disagreement to total consensus.

The perceived use of online learning methods in music education is measured by a questionnaire of 16 items, 8 items that measure the positive aspects of online learning methods (examples of things: Teachers are more involved in teaching, I have more time to study, etc.), Alpha Cronbach's size of 0.90 and 8 negative rating factors (examples: I am not encouraged, I have too many things to do at home), Cronbach Alpha is 0.79. Sixteen items were weighed on the Likert scale for five points.

Attitudes about e-learning programs used during the COVID 19 epidemic are rated on 15 items organized into two categories, happiness (positive attitude) (7 items, Cronbach's Alpha 0.88, examples of things: it seems interesting using IT, I am passionate about learning online) and vice versa, dislike (negative attitude) (8

items, Cronbach's Alpha of 0.87, examples of things: I do not like when the teacher is not near me, I do not get an answer, etc.).

Tolerance of uncertainty is measured by the Short version of Tolerance of Tolerance of Uncertainty (Carleton et al., 2007). The scale measures responses to uncertainty, uncertain conditions, and the future. Twelve items rated on a Likert scale with 5 points from 1 (not at all my feature) to 5 (complete feature for me) can be categorized into two dimensions, expected anxiety (7 items, Cronbach's Alpha -0.89) and Inhibitory anxiety (7 items, Cronbach's Alpha of 0.87).[7]

Advantages and Challenges of Content Delivery in Music Education through E-learning Advantages

Electronic learning creates a variety of resources that can enhance the integration of electronic-based techniques with high quality standards and delivery methods that can take traditional way of learning out of the walls. With regard to music education, the existing activities of various service delivery methods include mixed learning, stretch learning, virtual learning and enjoyable music activities. There also an increasing realisation of necessity to create Virtual Learning Environment to serve for distance and open-learning services both within Department of Music . This will provide an opportunity for those who can find domains that can help them find some or all of their music lessons from remote internet sites.

Extensive online helps students with learning from home, thus enabling them to learn school while chatting with online tutors. Similarly, teachers can interact with their students being out from institution or while attending conferences or other press activities.

Through e-learning, interactions with other music sectors around the world are being strengthened, and new ones are being made available. By engaging in discussion forums, blogs, wiki and online engaging activities, endless opportunities to share information are created. Such cooperative applications encourage the formation of talk involving students from various institutions working with others. Corporation between educators also provide circumstances for cross culture research programs, in which scholars from different countries and continents conduct research in various fields.[8]

Challenges

Although many opportunities for expansion are available, the acceptation and use of e-learning courses creates other challenges that may have a significant impact on their work. With regard to the use of e-learning courses in music education, the following are some of the challenges identified:

1. Reluctance to deviate from traditional practices used over the years. Refusal to change may cause mankind to hesitate from E-Learning because it differs greatly from such practices.

- 2. Expertise in device use, device ownership and time management also determines the amount of acceptance and use of the e-Learning perspective.
- 3. Hesitation on technology. The need for technical skills required among educators is mandatory in order to achieve effective results following the distribution of e-material for study. Employees working with online students should be able to understand the content and at least sensibly or be highly trained in computer and internet use.
- 4. The installation of e-Learning programs requires the availability of individual device and the software for students. This is because e-Learning often requires doing things by hand, whether one is doing parallel or related tasks. Music as a functional topic requires certain software to be used in writing and recording. Therefore there is a need for a comprehensive domain of good devices or online-based services.
- 5. Time is also an important factor in the development of e-content. Contrary to the traditional study of practice, the amount of time required to develop and use electronics can sometimes be a barrier to its use. Because content is used to be handled at the same time as the person in the course of instruction, there is a need for time management.
- 6. Absence of fast internet connection and internet access, inadequate resources and slow dial-ups too are the obstacle in content delivery. This may interfere with the transfer of distance learning courses.
- 7. Despite all the merits of E-Learning, there is a risk that students may not regularly attend face-to-face, online classes, benefit from online learning. This situation is highlighted in Hebert's Sloan Report on Music Education (2007), which states that students are often least satisfied with their online studies as compared to classroom studies. [9]

Benefits

With pre-recorded video, video and audio quality can be greatly controlled, not depending upon the speed of internet connection, but by the quality of video recording device available. Therefore, timed videos have provided a preferred alternative to improved audio and video quality transmission. In between any video of any notation, student can stop, reverse or look at the content again and again if needed, thus having a self-paced learning.

Because the converted videos can be downloaded from the Internet, it has been helpful to download the already recorded videos at unavailable times, when the VSAT internet is slightly connected. This has accelerated download accuracy, without bothering other internet users in the rural community.

Additionally, this means that the reader has the freedom to watch the video without access to the internet. As the downloaded video was downloaded online, the student continued to work with the video, as long as the student had the access of power.

With time-varying instruction, students have had a much larger audience than real-time experience. When a student writes and posts a video on a social-networking website, it can be shared with more viewers than the teacher alone. Teaching methods allow the reader to choose how the video can be shared. On the other hand, the re-recorded format allows the teacher to share his videos with

larger viewers. In this way, the teacher can create video data that will be shared with a group of students, eliminating the transfer of communication from one to another for general information about time.

The task of making a video has been a worthwhile endeavor for both the student and the teacher. In addition to mastering the skills of working on a recording and video presentation, the student has developed a number of practical skills and performing many required tasks.[10]

Result

The results of this study have been positive, indicating that this new field of music research education is in operation. Flexible learning is appropriate, but separately, each method of communication has important consequences. Successful learning leads to a combination of real-time (recommended) and time-transfer (self-guided) forms. Foremost results of online e-learning music research have been encouraging. Students continue to develop their musical skills, and in the class, they have the opportunity to connect with other new artists from different countries.

Certain obstacles must pass, including those resources and time. For this type of learning, some resources and apparatus are required. The reason for getting these things may be the obstacle. In addition, this arrangement has required adults to work hard at their initial setup and with ongoing technical assistance. Ideally, an adult having fundamental knowledge of device should be available to provide assistance if needed.

Conclusion

Online education can be considered an inclusive education as it provides a wide range of educational opportunities. It can be a great option for adults who do not want to return to campus university life. It can be suitable for people who work full-time and have busy day plans, or people who have a busy family life. It provides flexibility, which is important for someone who cannot fully participate in the study.

Previously, flexibility, as a key component of online learning, offers a variety of professional development opportunities. It helps people develop their knowledge and skills or discover new ones. It opens up new ideas that can be linked to more job opportunities or personal satisfaction. Flexibility as the same easy-to-use word is also a major factor in teachers choosing to teach online instead of a traditional classroom-based lesson. It can save you time, money and energy without reducing the level of knowledge and skills transferred.

The participants who participated in the platonic study as educators can express themselves enthusiastically by studying online grades and definitely recommend it to students with the same perspective. Real-time educators, e.g. equipment studies, they are very skeptical as they often deal with practical problems based on technology and technical equipment. What is important though is that despite the difficulties they support online courses as they are equal to the people in

terms of education level.

Online grades are constantly evolving and expanding in many different fields of study. Since the launch of the first online study to date, great strides have been made and many of its features have been developed in terms of educational, social, and psychological features. So, what is the challenge of online music learning in the coming years? Learning online depends on technology. The technological advancement of online teaching means higher internet speed and consequently higher accuracy in subjects that require music performance. It also means better-built system that will reduce the social and psychological gaps that can be created by distance learning.

Additional educational efforts are needed to improve online learning in music. In Greece, there are currently no online music courses offered by any higher education college or university, which excludes the country from the competition for excellence in music education and advances Greek-minded students in choosing to study online abroad. Research should continue with online music education so that online programs can expand, reach higher levels of teaching and inform many disciplines in the performing arts.

References

- [1] http://ir-library.ku.ac.ke/bitstream/handle/123456789/8036/E%20Learning%20as% 20a%20Strategy%20for%20Enhancing%20Access%20to%20Music%20Educat ion.pdf?sequence=4
- [2] https://www.sciencedirect.com/science/article/pii/S0360131508002030
- [3] https://www.academia.edu/download/53917775/websci10_submission_28.pdf
- [4]http://learningideasconf.s3.amazonaws.com/Docs/Past/2009/Papers/Rechberger.pdf
- [5] https://voices.no/index.php/voices/article/view/2321
- [6] https://en.wikipedia.org/wiki/E-learning_(theory)
- [7] https://www.frontiersin.org/articles/10.3389/fpsyg.2021.753785/full
- [8] https://www.sciencedirect.com/science/article/pii/S1877042816000641 [9,10]

https://www.researchgate.net/publication/304574795_Online_Distance_ Learning_and_Music_Training_Benefits_drawbacks_and_challenges