# A Shift with a Twist: Transforming Experiences of Teaching and Learning Music Online

### K. Samarasinghe<sup>1</sup>, R. Nethsinghe<sup>2</sup>

<sup>1</sup>IT Centre, Faculty of Music, University of Visual and Performing Arts, Sri Lanka. <sup>2</sup>Faculty of Education, University of Canberra, Australia.

#### Abstract

Most of the teaching and learning in the performing and visual arts subjects occur in traditional classroom settings with face-to-face instruction methods, but the University of Visual and Performing Arts (UVPA) swiftly switched the delivery of all undergraduate courses to an online format in response to the COVID-19 pandemic. Similar to other universities in Sri Lanka, the UVPA started using modern technology and tools like Zoom and a Learning Management System to conduct online instruction and learning during the COVID-19 period. The purpose of this study was to understand how academic staff and students felt about teaching and learning Music online. A case study approach was used as the method for this investigation. An online questionnaire was used to collect feedback on their online learning experiences from a sample size of 425 students comprising third and fourth year undergraduates of Bachelor of Performing Arts (Music). Semi-structured interviews were conducted to collect feedback from randomly selected eight academic staff members from the Faculty of Music in the 2018/2019 academic year, at the UVPA. Responses revealed that most teaching staff were new to teaching online but have managed to learn strategies for teaching online and have improved their technical and pedagogical skills in a short period of acting under compulsion. It was found that the student participants have also developed their knowledge and skills in online learning. All participants have indicated their willingness to engage in technology-enhanced online teaching and learning in the future as a result of these transformative experiences.

*Keywords:* COVID-19, educational values, new skills, transformative experiences, teaching and learning music online

# Background

University of Visual and Performing Arts (UVPA) is the only university solely dedicated to visual and performing arts subjects in Sri Lanka. The university's four faculties include Graduate Studies, Dance and Drama, Music, and Visual Arts. Due to the impact of the COVID-19 pandemic-related lockdowns, the UVPA swiftly switched all its undergraduate courses including music education to an online delivery mode (Samarasinghe & Nethsinghe, 2022). Most of the teaching and learning in courses at the UVPA occur in traditional classroom settings, with face-to-face instructions. Although several other educational institutions in Sri Lanka had firsthand experience with online delivery before the pandemic, this was the first encounter of the UVPA with the notion of complete online delivery. To support the faculty members in the transition to online delivery, the UVPA offered a series of intensive online professional development (PD) sessions with the engagement of the second author who has prior experience in online delivery of Performing Arts courses as a consultant. The first author was the director of the Centre for Online and Distance Learning (CODL) of the UVPA at the time and who continues to work as a senior lecturer in Information Technology, teaching technical skills to the students undertaking educational programs in the discipline areas of Visual and Performing Arts. With the engagement of several experts assisting the teaching faculty, the UVPA started delivering all its courses online in November 2020. Hodge at al., (2020) pointed out that "the speed with which this move to online instruction is expected to happen is unprecedented and staggering" in such a narrow preparation window (para. 2). In contrast, the students who joined from their homes participated in online learning swiftly with minimal preparation and support. Their teachers (faculty members) who undertook PD were the only source of assistance for these students. Therefore, it was vital to investigate the experiences of both educators and learners for a variety of reasons including providing the required support and making various enhancements needed.

There is an increasing demand for online education as technology develops globally. Day et al. (2020) explained that the transition to online learning for students who have first registered in on-campus mode is inspiring, and online delivery has affected the nature of teaching practices of academic staff throughout the pandemic. A range of specialized skills, such as "understanding of student thinking and learning, knowledge of subject content, and increasingly, knowledge of technology" (Koehler & Mishra, 2009, p. 61) is required to prepare students for future teaching. According to Koehler & Mishra (2009), three primary areas of knowledge that academic staff should possess are content knowledge, pedagogical knowledge,

and knowledge of technology (p. 62). Technological Pedagogical and Content Knowledge (TPACK) is a framework introduced by Koehler & Mishra (2009) that combines all three recommended areas of teaching knowledge. Figure 1 displays the components of the TPACK framework. Therefore, the TPACK framework was considered as the theoretical foundation for activities developed and for UVPA faculty members to assist with online course design and delivery. Considering the appropriateness, two knowledge components of the TPACK framework were selected and used by the providers of PD as a new model for faculty development (Koehler et al., 2004) for preparing UVPA staff for online delivery. The Technical Content Knowledge (TCK) and Technological Pedagogical Knowledge (TPK) were the selected components as the expert art educators already possess the other knowledge component, Pedagogical Content Knowledge (PCK).



Figure 2. TPACK Frameworks and Its Knowledge Components.

*Note:* TPACK framework. Copied from "What is technological pedagogical content knowledge?" by M. Koehler and P. Mishra, 2009, p.63.

The relationships that exist between and among these bodies of knowledge, represented by PCK (pedagogical content knowledge), TCK (technical content knowledge), TPK (technological pedagogical knowledge), and TPACK (technological pedagogical and content knowledge), are equally important to the approach (Koehler & Mishra, 2009, p. 62–63). Academic staff and students have learned that engaging in online activities for performing arts disciplines, particularly music and dance which also entails collaborative tasks, is an incredibly challenging endeavor due to different reasons such as internet-related delays (Samarasinghe & Nethsinghe, 2021, 2022). These difficulties have direct and indirect impact on both academic

staff and students. Because of the sudden demand for 'Emergency Remote Education (ERE)' (Shin & Hicky, 2020), many music educators adapted to "a situation of social isolation where some type of online learning became the only way to continue any sort of music education practice" (Camlin & Lisboa, 2021, p. 134).

## **Objectives and the Research Question**

The main research question of this study is how staff and students experienced online teaching and learning of music, used as the emergency remote teaching method during the COVID – 19 pandemic? The purpose of this study is to understand how academic staff and students felt about learning music online in order to improve the strategies for blended delivery transformation. The objectives of the study are as follows.

- 1. To identify the effective strategies used for teaching and learning music online.
- 2. To investigate ineffective aspects, any barriers, and areas that require further improvement.

### **Research Design and Method**

A case study approach has been used as the method of this investigation (Crowe et al., 2011). Case studies explore a real-life, contemporary bounded system (a case) or numerous bounded systems (cases) through time by collecting detailed, in-depth data from multiple sources of information and reporting a case description and case themes (Creswell, 2006). Purposive sampling was used as a sample method when selecting academic staff members and random sampling was used for the selection of students to take part in this research. Semi-structured interviews were conducted to obtain feedback from carefully selected eight academic staff members at the Faculty of Music in the 2018/2019 academic year, at the UVPA, based on the goal of the research. In this study, data was also collected from 425 participants (3<sup>rd</sup> and 4<sup>th</sup> year students) utilizing a questionnaire survey created with Google forms to explore their learning experiences. Data collected from faculty members employing semi-structured interviews were transcribed, coded, and analyzed for identifying recurring themes, patterns, or concepts. The survey questionnaire data (used for student participants) were analyzed by calculating the percentages and providing qualitative descriptions for unpacking the background information offered for open-ended questions (Zinal, 2003). Multiple methods (a questionnaire survey that included open-ended questions and semi-structured interviews) and data sources (faculty staff and students) were used for validation of data (Patton, 1999) through cross verification.

The first author who currently works at the UVPA as a Senior Lecturer in Information Technology conceived the research and collected the data. Both authors contributed to the data analysis and wrote this paper, the second author undertaking a mentoring role in the process.

# **Results and Findings**

The analysis of responses in Figure 2 revealed that most teaching staff were new to teaching online but have managed to learn strategies of teaching online and have improved their technical and pedagogical skills (related to the TPACK framework) rapidly acting under compulsion.



Figure 3. Academic Staff Teaching Experience

In response to the question "Did you face difficulties in conducting online classes at the beginning?". Academic staff participants stated that at the beginning of online classes they faced difficulty in adapting but now feel very confident in teaching music subjects online. Also, participants illustrated that they tested and used different teaching approaches and strategies to teach music online during the process. Academic staff said that they encountered buffering, video and audio delays, and other disturbances while running Zoom online classes. Additionally, (Author2., 2019, 2021) indicated that it is exceedingly challenging to conduct online practice sessions for music vocal, and instrumental performing activities using Zoom technology because of different internet-related delays. Furthermore, participants stated that due to the numerous delays, it is quite challenging to follow the teacher to handle a musical instrument correctly, produce sound, and use the finger movement methods necessary for a better grasp of playing the musical instrument (Tabla, Sitar, Violin, etc.). The flipped classroom (Bergmann & Sams, 2012) is an educational strategy for inverting the sequence of learning meaning "events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa" (Lage et al., 2000, p.32). Providing recordings of instructions

and content for students is one of the important strategies used in a flipped classroom using a Learning Management System (LMS) for "presenting all activities in an organized way" (Basal, 2015, p.33). At the UVPA, Moodle is used as the LMS presenting learning resources, assignments, and assessment information and activities including submission. This was a brand-new experience for both staff and students as the use of an LMS to assist the delivery of all programs was not previously feasible. Participants of this research used recorded lessons as a substitute for traditional in-class/face-to-face teaching and learning. All teaching/academic staff participants claimed that they obtained unique online teaching experiences through this suddenly forced exercise and gained transformative knowledge and skills in using modern technology. They also found that the strategies used for teaching and learning music online as effective for students. Supporting this claim of their teachers, student participants explained that flexible access to learning material at anytime from anywhere (Hodges et al., 2020) has been a real benefit of online learning. Enfield (2013) pointed out that flipped learning facilitates "a more customized learning environment" (p. 27) for students. Teachers can select and include a variety of appropriate activities to address the needs of diverse learners when using the flipped classroom approach.

Therefore, the academic participants indicated that they are ready to incooperate online teaching into their teaching and technology-enhanced teaching will be a good transformation of their pedagogical practice in the future. While 35.8% of the 425 participants were third-year students and 64.2% were fourth-year students, 32% of participants had responded to the survey. Student participants were asked whether they prefer to continually use pre-prepared learning materials posted in LMS in the future when face-to-face teaching resumes. Figure 3 demonstrates students' responses to this question.



*Figure 4.* Prefer to continually use prepared learning materials posted in LMS in the future when face-to-face teaching resumes.

Student participants were asked about their satisfaction with the new online learning experience and following Figure 4 visualized responses. It is interesting to see the willingness of students at the UVPA to continually use the LMS for supporting their learning which is a common practice in contemporary educational settings in most countries of the world.



Figure 5. Satisfaction with the New Online Learning Experience

According to figure 4, 73% of the student participants were satisfied with the new online learning experience but 27% were not satisfied due to access issues to devices and the internet including the lack of technological knowledge and skills. Additionally, student participants indicated that using technology enhances their development of 21<sup>st</sup>-century skills and abilities and facilitates the transformation of learning processes. The majority of the student participants (90.5%) used their smartphones for the learning process. In this exercise, the SAMR framework, developed by Ruben R. Puentedura (2013) was also used in addition to the TPACK

framework to ensure that technology is effectively incorporated and used to make this transformation happen. Figure 5 explains the SAMR framework details. The four categories of technology utilization for learning activities make up the SAMR Model (Puentedura, 2013).



## Figure 6. SAMR Framework

*Note:* SAMR framework. Copied from "SAMR: Moving from Enhancement to Transformation," by R. Puentedura, 2013, p.3.

According to the SAMR framework:

*Substitution*: Technology offers a substitute for other learning activities without practical change.

*Augmentation*: Technology offers a substitute for other learning activities but with useful improvements.

Modification: Technology permits the learning activity to be reshaped.

*Redefinition*: Technology permits for the making of tasks that could not have been done without the use of the technology.

It is important to remind that the framework only applies to the uses of technologies but not to the actual technologies. The first two tiers are regarded as an improvement to learning experiences in which technology substitutes potential functional gains for specific tasks or functions. The latter two are considered transformative, meaning that they enable the redesign of existing tasks and functions as well as the development of brand-new ones that were not previously feasible. From the analysis of the practices of the selected teaching academic staff for this study, it was possible to identify recorded instructional videos, PDF formatted lesson notes/content, and guidelines including Zoom lectures as components of the Substitution and Augmentation tier of the SAMR framework. The LMS discussion forum was used for messaging students and group discussions. In live Zoom classes, the text chat feature was used to communicate questions and answers. This use of features (of the LMS) can be recognized as the *Modification* tier of the SAMR framework. In this online environment, students were asked to record their presentations, performance rehearsals, and techniques (used for making music/singing) for reflections and monitoring progress. The use of technology (for audio/video recordings) permits such practice and the Redefinition tier of the SAMR framework was achieved by integration of technology.

Real-time involvement is required to develop advanced solo and ensemble performance skills, as well as participation in live music and stage performances. However, real-time interaction via the internet between students and instructors in an online context remains a constraint even though there are advantages of using pre-recorded material (e.g. aspects of the flipped classroom). This issue impacts stakeholders worldwide (Joseph et al., 2021) therefore improving online communication platforms and developing new technology is essential.

## Conclusion

There is a lack of previous research that explores the teaching of Performing Arts online including Music in Sri Lanka. A team of researchers from the UVPA has investigated and published perspectives of students on learning and assessing performing arts online (Ferdinando et al., 2021) that indicated a high satisfaction rate for learning Performing Arts online with a substantial positive attitude towards being assessed online. However, this student satisfaction also indicated students' desperate desire to complete the degree program to find employment (Ferdinando et al., 2021). It is important to emphasize the fact that this current research study also has some limitations such as research samples and participant selection. Exploring this topic by engaging the whole student and academic, teaching, and administrative staff population of the UVPA could have provided a more accurate picture of online educational experiences.

As a result of the forced change (shift to online mode), academic staff and students have obtained and developed a set of important 21<sup>st</sup>-century skills (that can be identified as the tilt towards using modern technology). Therefore, the words shift with a twist have been used as a part of the topic of this article. This transformative experience will be beneficial for all

stakeholders as a post-COVID shift toward online education is evident (Bashir et al., 2021). Wells et al., (2008) asserted that the advancements in technology have changed the ways of educators and learners. However, providing access to devices and reliable internet for online teaching and learning is a highly important consideration for authorities. The COVID-19 crisis has focused attention back on education technology, and the academic staff members have become acquainted with it to operate as effectively as possible in the future. This compelled shift to online delivery has contributed to the improvement of TPACK of the academic staff and teachers at the UVPA and beyond. Knowledge of using modern technology for planning, designing, and implementing lessons including for assessing can be considered an essential 21<sup>st</sup>-century requirement for educators operating in any setting globally. In conclusion, it is important to recommend conducting research related to teaching, learning, and assessing practical subjects through online modes, especially in the Sri Lankan context as the country starts utilizing modern, technology-enhanced education methods.

#### References

- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. 28 *Turkish Online Journal of Distance Education-TOJDE*, 16, 28–38. <u>https://dergipark.org.tr/en/download/article-file/156695</u>
- Bashir, A., Bashir, S., Rana, K., Lambert, P., & Vernallis, A. (2021) Post-COVID-19 adaptations; the shifts towards online learning, hybrid course delivery and the implications for Biosciences courses in the higher education setting. *Front. Educ.* 6:711619. doi: 10.3389/feduc.2021.711619 https://www.frontiersin.org/articles/10.3389/feduc.2021.711619/full
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reaching every student in every class every day* (1st ed.). Washington DC: International Society for Technology in Education.
- Camlin, D. A., & Lisboa, T. (2021) The digital 'turn' in music education (editorial). *Music Education Research*, 23(2), 129–138. <u>https://doi.org/10.1080/14613808.2021.1908792</u>
- Creswell, J. W. (2006). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). SAGE Publications, Inc.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(1). <u>https://doi.org/10.1186/1471-2288-11-100</u>

- Day, T., Chang, I. C. C., Chung, C. K. L., Doolittle, W. E., Housel, J., & McDaniel, P. N. (2020). The Immediate Impact of COVID-19 on Postsecondary Teaching and Learning. *The Professional Geographer*, 73(1), 1–13. https://doi.org/10.1080/00330124.2020.1823864
- Enfield, J. (2013). Looking at the impact of the flipped classroom model of instruction on undergraduate multimedia students at CSUN. *Techtrends*, 57(6), 14-27.
- Ferdinando, I., Pathirage, N. S., Abeshika, H. W. C. P., & Nethsinghe, N. R. (2021). Student Perspectives on Learning and Assessing Performing Arts Online: A Study Conducted at the Faculty of Dance and Drama, UVPA, Sri Lanka. *Journal of Visual and Performing Arts Sri Lanka*, 3(1), 53-75. [4].
- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. Retrieved September 15, 2022, <u>https://er.educause.edu/articles/2020/3/the-difference-between-emergencyremote-teaching-and-online-learning</u>.
- Joseph, D., Nethsinghe, R., & Cabedo- Mas, A. (2021). Online Teaching and Learning in Higher Education during COVID-19: International Perspectives and Experiences. Chan, R. Y., Bista, K. & Allen, R. M. (eds.). 1 ed. United Kingdom: Taylor & Francis, Vol. 1. p. 50-68 19 p.
- Joseph, D., Nethsinghe, R., & Cabedo-Mas, A. (2019). "We learnt lots in a short time": Cultural exchange across three universities through songs from different lands. *International Journal of Music Education*, 38(2), 177–193. https://doi.org/10.1177/0255761419880027
- Koehler, M. J., Mishra, P., Hershey, K., & Peruski, L. (2004). With a Little Help From Your Students: A New Model for Faculty Development and Online Course Design. Journal of Technology and Teacher Education, 12(1), 25-55. From http://www.mattkoehler.com/publications/Koehler\_et\_al\_2004.pdf
- Koehler, M., & Mishra, P. (2009). What is Technological Pedagogical Content Knowledge (TPACK)? Learning & Technology Library (LearnTechLib). Retrieved September 15, 2022, from <u>https://www.learntechlib.org/primary/p/29544/</u>
- Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education*, 31(1), 30–43. Retrieved from <u>http://www.jstor.org/stable/1183338</u>
- Maxwell, J. A. (2013). *Qualitative Research Design: An Interactive Approach (Applied Social Research Methods)* (3rd ed.). SAGE Publications, Inc.

- Patton, M. (1999). Enhancing the quality and credibility of qualitative analysis. *HSR: Health Services Research.* 34(5) Part II. pp. 1189-1208.
- Puentedura, R. R. (2013). SAMR: Moving from enhancement to transformation [web log post]. http://www.hippasus.com. Retrieved September 16, 2022, from http://www.hippasus.com/rrpweblog/archives/000095.html
- Samarasinghe, K., & Nethsinghe, R. (2021). Promoting learner-centeredness in creative arts education: the use of flipped classroom approach and technology-integrated blended. In Proceedings of the 34th Annual Conference of the Asian Association of Open Universities: Opening minds for a sustainable future: Re-Orienting ODL Surmount Challenges (Vol. 2, pp. 383-390) <u>https://aaou2020.ou.ac.lk/assets/AAOU2021%20</u> Volume2\_Final\_Online\_Published.pdf#page=384
- Samarasinghe, K., & Nethsinghe, R. (2022). Adopting distance learning approaches to deliver online creative arts education during the COVID-19 pandemic. *Lecture Notes in Electrical Engineering*, 627–634. <u>https://doi.org/10.1007/978-981-16-9012-9-50</u>
- Shin, M., & Hickey, K. (2020). Needs a little TLC: Examining college students' emergency remote teaching and learning experiences during COVID-19. J. Further Higher Edu., 1–14. do i:10.1080/0309877X.2020.1847261
- Wells, P., de Lange, P., & Fieger, P. (2008). Integrating a virtual learning environment into a second-year accounting course: determinants of overall student perception. *Accounting* & Amp; Finance, 48(3), 503–518. <u>https://doi.org/10.1111/j.1467-629x.2007.00249.x</u>
- Zainal, Z. (2003). An investigation into the effects of discipline-specific knowledge, proficiency and genre on reading comprehension and strategies of Malaysia ESP students. Unpublished Ph.D. Thesis. University of Reading.