

# The Impact of COVID-19 on Music Pedagogy in Kenya: A Questionnaire Study

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## Abstract

In March of 2020, when Kenya was faced with the first cases of the COVID-19 virus, the situation escalated quickly in Kenya and around the world, prompting the World Health Organization (WHO) to declare the international epidemiological circumstance a global pandemic. The neoteric nature of the COVID-19 pandemic overturned the normal modality of education globally. The abrupt closure of schools led governments to reconsider the education systems that had been in place for many decades and evaluate which systems would be needed for future education. In Kenya, the COVID-19 pandemic highlighted the inequality in the education system when education was moved to online platforms. Kenya had conventionally adopted a face-to-face modality to music instruction until the onset of the COVID-19 pandemic, which forced music educators to rethink their pedagogies and philosophical beliefs about education, prompting them to adopt new ways of teaching music by accommodating the use of information and communication technologies (ICT) in education. Music educators faced a lot of new challenges and experiences while teaching during the pandemic. This small-scale research aims to examine the experiences and challenges that music educators faced while teaching during the COVID-19 pandemic in Kenya. This study is relevant because there is a lack of research on how the COVID-19 pandemic has affected music education in general and more specifically in Kenya.

## Introduction

The challenges that came with the COVID-19 pandemic resulted in over 17 million learners being sent home as schools closed their doors and learners did not physically go back to school for many months, thus impacting the children's right to education (Jelimo, 2020; United Nations, 2009). About 1.8 billion learners were affected by the pandemic worldwide due to institutional closures by March 27, 2020. (Areba, 2020). Schools were financially challenged, forcing teachers to find new ways of teaching students through online and hybrid learning. The education sector suffered unprecedented challenges as teachers had no other sources of income, and lacked the needed technological infrastructure such as affordable and reliable internet services, computer hardware and software, to facilitate online instruction.

This questionnaire study inquired from 14 itinerant and full-time music teachers based in Nairobi, how the COVID-19 pandemic affected their music pedagogy. This study aimed to answer the following questions. (1) What was the economic impact on music educators while teaching during the pandemic? (2) How did COVID-19 influence music student class attendance in Kenya? (3) Were teachers prepared to give online instruction? (4) What was the impact of online instruction on the quality of music education? (5) Were resources and equipment available to teach music during the pandemic? and (6) How did COVID-19 affect

the motivation of music teachers'? Were there any positive outcomes that music teachers experienced in their teaching during the COVID-19 pandemic?

## **Literature review**

The United Nations policy brief on education noted that the pandemic brought about the greatest disruption of education systems ever known to mankind (2020). These unprecedented times brought new challenges in the education sector, forcing government leaders, guardians, educators and learners to make extraordinary efforts in their approach to education (Council of Europe, 2020). The negative social, emotional, and economic impact of the COVID-19 pandemic forced government leaders around the world to think critically about the education systems that were in place before, and what the disruption of learning meant for education in the future. In Kenya the COVID-19 pandemic had an insurmountable impact on music pedagogy for learners, guardians, teachers and the government alike. This literature review covers two subsections: the negative and positive impacts of COVID-19 on music pedagogy in Kenya.

### **Negative impacts of COVID-19**

In Kenya whilst the more affluent learners attend private boarding schools, most learners have to commute to public day schools daily (Battle, 2020). The classrooms are overcrowded making the ministry of health guidelines for social distancing almost non-existent (Fröhlich & Wasike, 2021). According to Battle (2020), to reduce the spread of the virus, the Kenyan government indefinitely closed all learning institutions on March 16, 2020. This resulted in education moving to online platforms where teachers were asked to give students work for them to do at home. The move to online teaching highlighted the education inequality in Kenya, as many learners were excluded from online learning because of unreliable electricity and inaccessibility of internet (Jelimo, 2020). In terms of instruction in music, the abrupt closure of schools meant that all co-curricular activities including drama and music in Kenyan schools were interrupted (Areba, 2020).

The COVID-19 pandemic added huge financial constraints on many employees, but teachers were the most affected due to the widespread loss of income (Doorly and Niazi, 2020; Schiavo, 2021). Jain et al. (2020) corroborated this argument, stating that some parents lost their jobs resulting in them not being able to pay teachers. As education was moved to online learning, teachers had to invest money to access technology in their homes, which included boosting internet speeds, having reliable power and investing in video equipment and internet-enabled devices (Jain et al., 2020). This sentiment was corroborated by Colclough (2020) whose global survey report on the *Future of Work in Education and Teaching with Tech* compared internet access in Africa and Europe and concluded that educators in Africa had more challenges accessing the internet than educators in Europe.

The move from face-to-face learning to online music lessons according to Gibson (2021) led music educators to shift their teaching conceptions and goals to achieve satisfactory results. This pedagogical shift was antithetical to the conclusions of Allen (2011) whose seminal work suggested that face-to-face teaching was the traditional method of music teaching as it involved singing, ensembles, movement and playing of musical instruments which were not vital to other subject classes. In a report for the Incorporated Society of Musicians (ISM) Underhill (2020) agreed with this sentiment, stating that:

*The COVID-19 pandemic had a devastating effect on all aspects of music pedagogy from curriculum entitlement, singing in schools, practical music-making, extra-curricular activities, instrumental learning and examinations (Underhill, ISM, 2020, p.2).*

Studies have found that the shifting from face-to-face instruction to online instruction was challenging. For example, Herzog (2021) opined that teaching violin lessons without physical contact between the teacher and student led to frustration and unwanted results because “a simple touch of the wrist or repositioning of the elbow can be worth a thousand words of explanation.” (p. 53). Varying internet speeds between students and teachers made ensemble music-making quite challenging (Ambriz, 2020). Online music instruction was a challenge to music educators globally. European education systems, for example, found new innovative ways to blend distance learning and face-to-face teaching which required new pedagogical methods (Council of Europe, 2020).

The COVID-19 pandemic caused significant changes to music programs, with the digitalization of learning being prioritized (Ambriz, 2020). Stoneman (2021) argued that digital solutions solely rely on the digital literacy of the teachers, learners and guardians. This move to online learning was difficult because many teachers reported challenges with online pedagogies due to minimal digital experience (Scherer et al., 2021). Many teachers did not have the basic digital skills to facilitate online instruction, which resulted in teachers not only struggling with their professional development, but also facing challenges in providing quality education while teaching remotely (United Nations Sustainable Development Group [UNSDG], 2020). Ertmer and Ottenbreit-Leftwich argued that teachers needed to understand how to use technology in classrooms to facilitate meaningful learning (2010) therefore, even faculty members of highly accredited higher learning institutions had to get certifications for online instruction, for them to be equipped with the skills necessary to provide online lessons (Shahzad et al., 2020). Johnson (2017) opined that the insufficient amount of research available on online music pedagogies suggested a need for more studies to be done.

In a survey on the impact of COVID-19 on children’s education in Africa, Human Rights Watch (2020) found that, during the pandemic school closures, many students shared feelings of anxiety attributable to their lack of connection to their school communities. Lack of music education for students who relied on their learning institutions for musical instruments, tutelage and mentorship resulted in them panicking because of the challenges of accessing music lessons (Strauss, 2020). This abrupt closure of schools resulted in many exams being postponed or cancelled including the Associated Board of the Royal Schools of Music (ABRSM) testing centres for music examinations (www.abrsm.org, 2020; Burgess and Sievertsen, 2020), which according to Areba (2020) had a substantial impact on exam candidates, increasing their anxiety and uncertainty towards national and international examinations.

The COVID-19 pandemic led to teacher demotivation due to several factors; for example, salary cuts, lack of support from employers, challenges with technology, lack of resources, and student behaviour and motivation (Gadella-Kamstra, 2020). Gadella-Kamstra (2020) argued that it was quite challenging for teachers to juggle new ways of online teaching, without forgetting about their own learners’ motivation. This is corroborated by a study by Katz and Shahar (2015) who opined that a teacher’s own motivation could influence the motivation of students. A study done by Øystein et al. (2009) on teacher motivation,

suggested that teachers with more experience with e-learning were more motivated to teach online, and their motivation increased the more they accepted and utilized online teaching platforms. Øystein et al., (2009) also noted that teachers who were not under pressure to teach online found it more pleasurable and therefore, were more motivated. Notwithstanding its burden, there were some positive impacts of the COVID-19 pandemic on the music education sector as reviewed below.

### **Positive impacts of COVID-19**

The increased integration of technology into education systems was a positive impact of the COVID-19 pandemic because “new technologies provided more opportunities for both teachers and students.” (Magomedov et al., 2020, p. 2). It also inspired educators worldwide to adapt new creative ways of teaching with new technology constantly being invented (Flores and Swennen, 2020). In addition to the pandemic reinforcing the imperative role that teachers play in education, it also emphasized the importance of having flexible approaches to education pedagogies (Stoneman, 2021). According to Misra (2020) the normalizing of blended face-to-face learning with online learning, would improve the quality of the learning material, and therefore the quality of education being provided.

In Nairobi, public transportation is grossly underdeveloped to access jobs, education, and healthcare, hence lack of proper transportation infrastructure is one of the biggest challenges faced in education in Nairobi (UK AID, 2015). This means that many students are impacted by lack of reliable transportation. This is exactly why many authors agree that blended learning becomes an affordable and rewarding pedagogy for many students who can easily access educational programs, through synchronous and asynchronous online teaching platforms. Some of these authors include Thomas (2021) who argued that the digitalization of education made learning more affordable due to the reduction of infrastructural costs for institutions and Subramanian (2020) who asserted the idea that the lack of need to buy physical textbooks made e-learning cheaper for students.

### **Methodology and Methods**

The purpose of this study was to find out the impact of the COVID-19 pandemic on music pedagogy in Nairobi, Kenya. This question is worth asking because the COVID-19 pandemic is an ongoing crisis affecting the whole world and its impacts have been felt across all sectors of livelihood. The literature available on the impact of the COVID-19 pandemic on music education is insufficient to meet the demand for information; hence this study will be a good addition to the literature.

#### **The study sample**

Potential participants for this questionnaire study included current music teachers in Nairobi who had experience teaching music during the COVID-19 pandemic in both private and public schools and were either full-time teachers or part-time music teachers. Using opportunity sampling (Bhattacharjee, 2012), a call was sent out to ‘the music teachers’ forum,’ a WhatsApp group that was created for and by music teachers in Kenya and has been in existence for three years. The members in the group all had different music teaching experiences and backgrounds and taught in different schools in Nairobi. The participants were chosen because of the specificity of the requirements, namely: they had taught during

the COVID-19 pandemic and were also practicing in Nairobi, Kenya's capital city. Two additional calls were sent out to the WhatsApp group to encourage more responses from the music teachers' forum group members.

Those who were willing and qualified to participate were sent personal emails containing an adult participation consent form and a detailed project form. Out of the 100 potential participants who received the invitations and were asked to participate in this research, 20 of them were willing to participate in the study. However, only 14 completed the survey. Out of the 14 research participants, by the time of this study, four participants had been teaching music for 4-5 years, three participants had been teaching music for 6-10 years, and seven participants had been teaching music for over 10 years.

### **The questionnaire design**

This study used the survey method with a questionnaire as a tool. An anonymous online questionnaire was designed to address the specific question of how the COVID-19 pandemic impacted music pedagogy in Nairobi. It also aimed to find out how remote music teaching and face-to-face learning had been affected. This questionnaire inquired about the digital competencies of the participants before the pandemic, and how their digital competencies or lack thereof affected their music pedagogy during the pandemic. Moreover, the questionnaire also inquired about the positive impacts of teaching music during the COVID-19 pandemic and the negative impacts it had, such as financial constraints.

The questionnaire had 10 open-ended questions aimed at answering the main research question, and was disseminated online, via email. I decided to use an online questionnaire as my research tool because questionnaires, according to Bhattacharjee (2012), had minimal disruption to research participants, allowing them to share personal traits and preferences on ways they approached music pedagogy during the pandemic. The online survey gave the participants the convenience of answering the questions at their own time, and also provided a wide range of answers from participants (Gillham, 2008). It was also disseminated online due to strict COVID-19 protocols which limited physical contact. In addition, I found online questionnaires to be cost-effective as I was able to distribute them to many people without incurring printing and transportation costs.

### **Approach to data analysis**

Data was analysed using themes that emerged from the data in relation to the research question (Braun and Clarke, 2006). According to Creswell (2014) when there has been little research done on a topic, or if the topic needs more understanding, then it is best to analyze data qualitatively. Therefore, this methodology fitted very well with my research question as little research has been done on the impact of COVID-19 on music pedagogy in Nairobi. Due to the neoteric nature of the COVID-19 virus, I thought analysing individual opinions of teachers qualitatively would elucidate the data collected (Creswell, 2014). The data was collected over a three-week period, where the participants sent back their data and signed consent forms via email. The data collected was coded and organized into themes in order to report my findings (Braun and Clarke, 2006; St. Pierre and Jackson, 2014).

### **Ethical approval**

This research observes the British Psychological Society's Code of Human Research Ethics (2014) and their Code of Ethics and Conduct (2018). It has gained approval from the University of Sheffield ethics board for the School of Education. In order to be transparent about this research and gain consent from participants, a detailed research project information document was sent to potential participants. This document detailed how the information they provided would be used in the study. Consent forms were issued out to research participants who were required to read, understand and finally sign before going on to fill the questionnaire.

There were some ethical considerations when conducting this study. To answer the research question, participants would have to admit to the negative impacts of the pandemic on their livelihoods such as loss of income, and their pedagogical shortcomings such as digital illiteracy, which would have made some participants feel uncomfortable. Because of this, all participants in this study were assured anonymity and confidentiality. Participants were also assured that any identifiable raw data would be destroyed at the end of this study.

## **Analysis and Findings**

This study provided an opportunity to find out the impact COVID-19 had on music pedagogy in Nairobi. The process went as expected without any complications. The participants were individually identified from T01 – T14. 'T' referred to 'teacher' while '01' referred to participant one.

In this section, I analyse and discuss the findings from the data. The themes that emerged include: a decrease in music students' attendance, a decrease in teacher motivation, digital illiteracy, quality of online education, the flexibility of lessons, increased expenditure, reduced income, and health and online safety.

### **Decrease in music student attendance**

The findings suggested that music teachers in Nairobi experienced a decreased number of students taking music lessons during the Coronavirus outbreak. This was expected because when schools closed, research showed that many students were unable to get reliable internet to continue with lessons virtually (Battle, 2020). This was supported by responses to question 4: 'How was your student attendance during the pandemic?' In response, 11 teachers stated that they had fewer students during the pandemic. Participant T01 mentioned that "*student attendance was not very regular. It was affected negatively*". Three participants disclosed that their student attendance had not been highly affected by the pandemic. Participant T05 mentioned in more detail that "*my student attendance was surprisingly high. Not 100% but around 80%*".

### **Decreased teacher motivation**

According to literature, teachers lacked motivation to teach students due to salary cuts, challenges with technology, and student behaviour and motivation (Katz and Shahar, 2015). Participants were asked if the pandemic affected their motivation to teach. Out of 14 teachers, 12 mentioned that COVID-19 impacted their motivation for teaching negatively. To show that student interest and behaviour during online lessons influenced the motivation of teachers, participant T03 stated in more detail that:

*I found myself looking forward to teaching only the students who put in effort in attendance and practise. I did not look forward to teaching lazy students and I ended up dropping them off my timetable. In other words, online teaching made me less patient.*

Screen fatigue was also a demotivation for teaching during the pandemic. Four participants mentioned that being glued to the screen for prolonged periods made them feel drained. Øystein et al., (2009) opined that teachers who had more experience teaching on online platforms were more motivated. This was proven by two participants' responses to question 9 asking 'Has the pandemic made a difference to your motivation for teaching?'. Participant T13 said "I would say yes because of online/screen fatigue, which I never thought would be an issue but it was". Participant T05 disclosed that "well, the feeling of being glued to the screen made me dislike teaching for some time before getting temporarily used to it".

### **Digital illiteracy**

Digital illiteracy was an emerging theme from the data. Out of the 14 participants, 10 had never taught digitally before the pandemic. Results from several studies conducted suggested that a lot of teachers lacked the basic ICT skills to facilitate online lessons and had to get digital training to facilitate online learning (Gadella-Kamstra, 2020; Jain et al., 2020; Shahzad et al., 2020). From the findings, it was clear that some participants had to learn how to use digital platforms to teach online, while other participants disclosed that they learned how to make and edit videos, to integrate into their online lessons. Participant T03 mentioned that:

*I was forced to get more technologically savvy to manoeuvre the digital platforms. I had to learn to create video recordings to support teaching, especially for demonstration. I researched how other online music tutors taught before the pandemic.*

Similarly, participant T10 stated that "I had to think outside the box and in cooperate videos that I created myself. I got to learn how to shoot and edit videos".

### **Quality of online education**

Out of 14 participants, 13 mentioned that they found some elements of music pedagogy difficult to translate to an online context. According to the literature review, teachers had challenges providing quality education while teaching practical music-making and instrumental learning, remotely (Underhill, 2020; UNSDG, 2020). These challenges were not existent pre-COVID-19, when lessons were face-to-face (Allen, 2011). From the findings, the most highlighted musical elements that were difficult to teach via digital platforms included; teaching beginner students, playing ensembles in groups, teaching how to tune instruments, accompanying learners while they perform, demonstrating specific instrumental techniques and helping learners keep the tempo/beat of the music.

Figure 1 shows the highlighted elements of music that participants have found difficult to teach digitally, based on frequency. The category of frequency is on a scale of 1-10 (1 being the least mentioned and 10 being the most mentioned aspect).

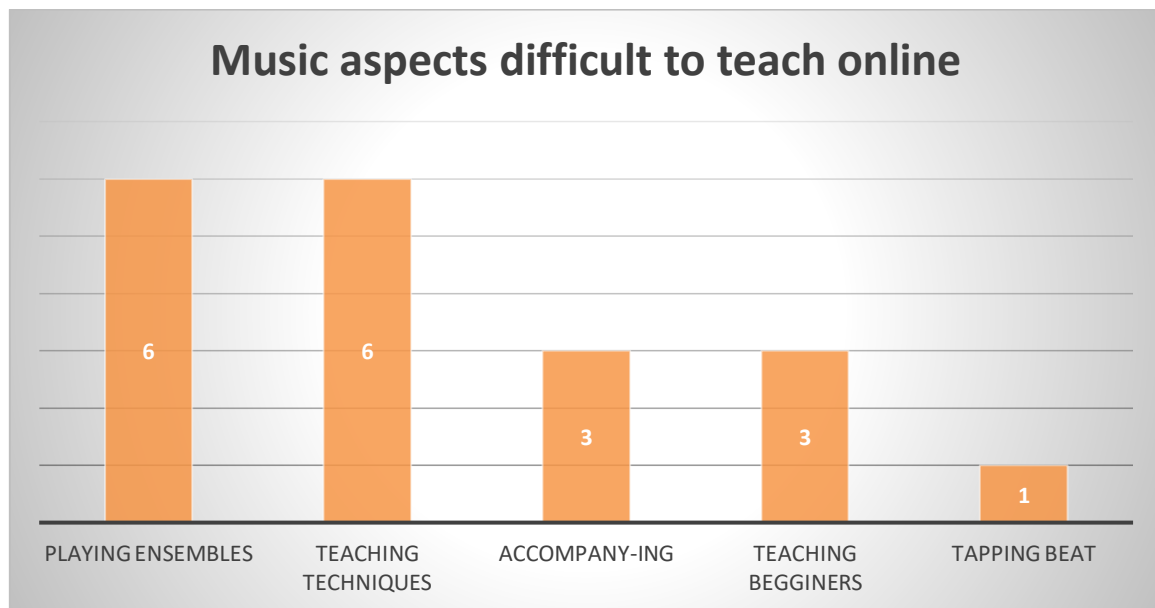


Figure 1. Participants' response to question 5: What aspects of your typical lessons have been difficult to translate to an online context?

### Flexibility of lessons

The findings revealed that online teaching made it convenient for teachers to teach comfortably from home, giving them time flexibility and the ability to teach students from any geographical area. Before the pandemic, face-to-face learning required that students and teachers resided in close proximity to each other. This corroborated a report by Magomedov et al., (2020) which suggested that using new technologies in education created more opportunities for teachers. Teachers in Nairobi got more teaching opportunities because their physical location was not a hindrance. When asked about the advantages of digital teaching, participant T12 mentioned *"accessibility and convenience of learning – being able to teach from the comfort of my home"* and participant T01 noted *"being able to teach people worldwide"* as benefits. Similarly, participant T08 mentioned *"the advantage of teaching students beyond my usual geographic location and the advantage of teaching at any time, as long as both the student and teacher were available"*.

### Increased expenditure

Schiavo (2021) argued that teachers had the biggest financial constraints during the pandemic. This was true from the findings as 12 out of the 14 participants admitted to having incurred extra financial costs to teach during the pandemic. Most participants disclosed that they had to upgrade WI-FI speeds and hire musical instruments to teach music lessons. Responding to question 10: 'Did you incur any additional costs in order to teach during the pandemic?' Participant T04 disclosed in detail *"yes, I had to hire an instrument (previously provided at my teaching station), incur costs of internet bundles when the Wi-Fi was down,*



and costs of collecting online resources.” Likewise, participant T09 mentioned “yes, I had to upgrade my WIFI speed, to fit my needs.”

Figure 2. Below shows extra expenses incurred by participants during the pandemic. The category of expenses is on a scale of 1-10 (1 being the least highlighted and 10 being the most highlighted expenses by participants).

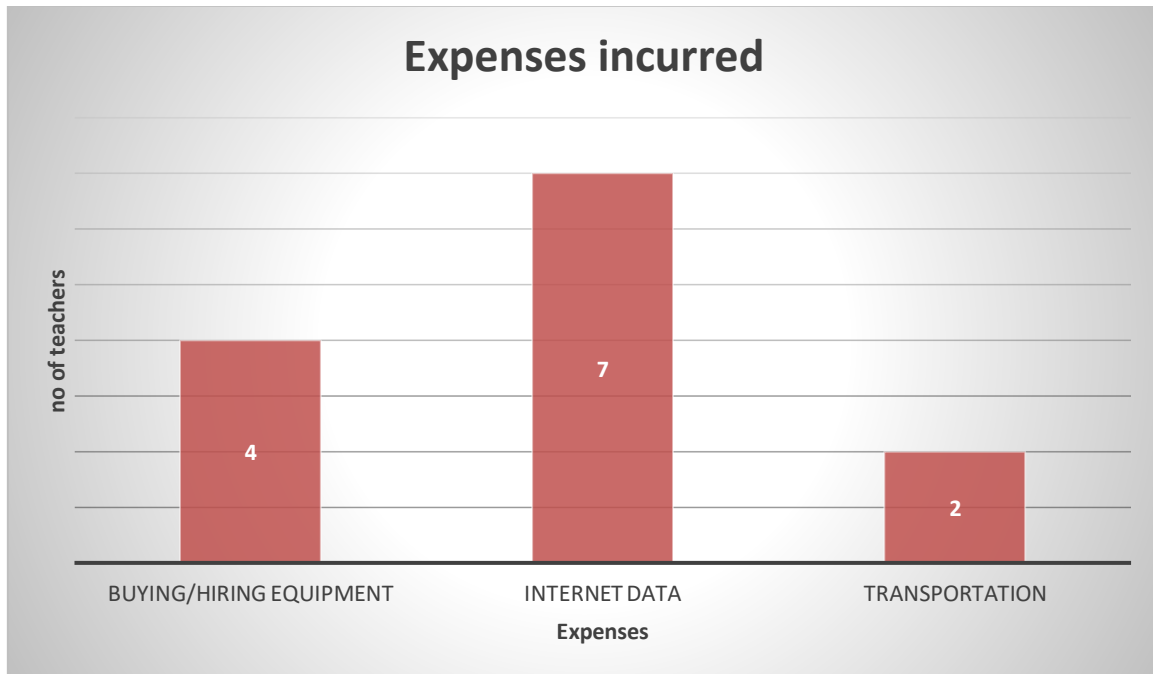


Figure 2. Extra expenses incurred by participants while teaching during the pandemic.

### Reduced income

From the literature review, it was clear that most teachers lost their livelihoods when schools closed during the pandemic (Doorly and Niazi, 2020, 2020). This was also true for music educators in Nairobi who mentioned that one of the disadvantages of teaching during the COVID-19 pandemic was less income. This was a result of a decrease in the number of music students, salary cuts, and school closures (Jain et al., 2020). Responding to question 8 on the disadvantages the pandemic has had on music teaching, participant T11 revealed that “a reduced number of students meant less income” and participant T02 mentioned “I had to decrease the number of classes taught per week for each student and as a result my income reduced.”

### Conclusion

This research has shown that due to the COVID-19 pandemic, the education sector faced a series of challenges in Nairobi County. The traditional face-to-face learning methods were not an option and governments had to find alternative methods of providing educational services using digitized learning. This research aimed to address the issues that music educators in Nairobi faced while teaching during the COVID-19 pandemic. Based on the findings, the research shows that there were more negative impacts of COVID-19 on music education than positive impacts. These include: the loss of employment and income for many families which

made it difficult for learners to access affordable and reliable internet connectivity, digital illiteracy through continuing education programs, and lack of technological resources such as computers and software products requisite for teaching and learning. These compounding effects of COVID-19 contributed to high learner drop-out rates and interrupted music pedagogy for teachers in Nairobi.

Implications for this research to music education necessitate the government, private sector, and businesses to invest in educational technology by making internet connectivity more accessible and affordable. The stakeholders should also provide more infrastructures in schools such as additional spacious music rehearsal halls to reduce overcrowding of students. The government should subsidize the cost of musical instruments thus making them more affordable for students and teachers. This would alleviate the need for schools to supply students with musical instruments to avoid students from sharing them due to lack of proper sanitization after every use. Institutions should provide professional training in technological competence such as online teaching for all teachers to get them prepared for online pedagogy, and the application of digital platforms for them to be more efficient with online teaching. The blending of online learning with face-to-face learning should become a norm so that all children can have access to music education. The Ministry of Education has to reimagine curricular content and education policies that ensure the quality of online learning is standard. This may include, making digital resources and technology tools affordable for all teachers and students, by subsidizing costs in subscription fees.

This study had two potential limitations that should be noted. First, there is a lack of sufficient literature available on the impact of COVID-19 on music education due to the neoteric nature of the pandemic. This meant that I had limited literature on the impacts of COVID-19 on music pedagogy to source from. Second, this study is based on the sampling of different instrumental teachers with different profiles, making the results generalized. Recommendations for future research should include research questions that address the pedagogical differences in voice and instrumental music education. For instance, could the impacts of COVID-19 on singing pedagogy differ from those on piano pedagogy? Further research exploration into the impacts of COVID-19 on music education is also needed because it could be useful to develop new methods to improve teaching and learning of music in the future, in addition to the traditional face-to-face and post-COVID-19 blending of online modes of teaching.

## References

Allen, T.R. (2011) *Challenges of the music classroom: perceptions of teachers and administrators*. PhD thesis. Florida State University. Available at: <https://pqdtopen.proquest.com/doc/993145933.html?FMT=ABS> (Accessed: 10 April 2021).

Al-Samarrai, S. (2020) *The impact of the covid-19 pandemic on education financing (English)*. World Bank Group Brief No. 148403. Washington, D.C. : World Bank Group. Available at: <http://documents.worldbank.org/curated/en/479041589318526060/The-Impact-of-the-COVID-19-Pandemic-on-Education-Financing> (Accessed: 1 March 2021)

Ambriz, E. (2020) 'Music education during COVID-19', *Music for All*, 11 November. Available at: <https://musicforall.org/music-education-during-covid-19/> (Accessed: 2 March 2021).

Areba, G.N. (2020) 'COVID-19 pandemic impact on Kenyan education sector: learner challenges and mitigations', *Journal of Research Innovation and Implications in Education*, 4(2), pp. 128-139.

Battle, D.E. (2020) 'The impact of COVID-19 on health care, education, and persons with disabilities in Kenya', *Perspectives of the ASHA Special Interest Groups*, 5(6), pp. 1793–1796.

Bhattacharjee, A. (2012) *Social science research: principles, methods, and practices*. 2<sup>nd</sup> edn. Textbooks Collection. Global Text Project. Available at: [https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa\\_textbooks](https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks) (Accessed: 13 April 2021).

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77–101. doi: <https://doi.org/10.1191/1478088706qp063oa>

British Psychological Society [BSP] (2014) *Code of Human Research Ethics*. Leicester: BPS. Available at: <https://www.bps.org.uk/news-and-policy/bps-code-human-research-ethics>

BPS (2018) *Code of Ethics and Conduct*. Leicester: BPS. Available at: <https://www.bps.org.uk/news-and-policy/bps-code-ethics-and-conduct>

Burgess, S. and Sievertsen, H.H. (2020) 'Skills, and learning: the impact of COVID-19 on education', *Vox EU CEPR Policy Portal*, 1 April. Available at: <https://voxeu.org/article/impact-covid-19-education> (Accessed: 4 March 2021).

Colclough C. J. (2020) 'Teaching with Tech: the role of education unions in shaping the future', *Education International Future of Work in Education Global Survey Report*. Education International Research. Available at: <https://www.ei-ie.org/en/detail/17040/survey-report-teaching-with-tech-the-role-of-education-unions-in-shaping-the-future>

Council of Europe. (2020) 'Making the right to education a reality in times of COVID-19'. *Conference of Ministers of Education's Political Declaration and Roadmap for Action on the Council of Europe education response to COVID-19*. Strasbourg, France. 20 October. Council of Europe Publications. Available at: <https://rm.coe.int/making-the-right-to-education-a-reality-in-times-of-covid-19-a-roadmap/16809fee7b> (Accessed: 1 March 2021).

Creswell, J. W. (2014) *Research design: qualitative, quantitative and mixed methods approaches*, 4th edn. SAGE Publications. Reference & Research Book News. Portland: Ringgold, Inc.

Dahir, A. L. (2020) 'Kenya's unusual solution to the school problem: cancel the year and start over', *The New York Times*. 5 August. Available at: <https://www.nytimes.com/2020/08/05/world/africa/Kenya-cancels-school-year-coronavirus.html> (Accessed: 2 March 2021).

Doorly, A. and Niazi, M. (2020) 'Estimating the impact of COVID-19 on the non-state education sector in low-and-middle-income countries: a rapid review', Global Schools Forum (GSF). Available at: <https://www.globalschoolsforum.org/page/EstimatingtheImpactofCOVID-19> (Accessed: 2 March 2021)

Ertmer, P. A. and Ottenbreit-Leftwich. A. T. (2010) 'Teacher technology change', *Journal of Research on Technology in Education*, 42(3), pp. 255-284. doi: <https://doi.org/10.1080/15391523.2010.10782551>

Flores, M. A. and Swennen, A. (2020) 'The COVID-19 pandemic and its effects on teacher education', *European Journal of Teacher Education*, 43(4), pp. 453-456. doi: <https://doi.org/10.1080/02619768.2020.1824253>

Fröhlich, S. and Wasike, A. (2021) 'Kenya: back to school after COVID disruption', Deutsche Welle (DW) Africa Top Stories. 6 January. Available at: <https://www.dw.com/en/kenya-back-to-school-after-covid-disruption/a-56146044> (Accessed: 1 March 2021)

Gadella-Kamstra L.S. (2020) 'Teacher motivation is vital – and COVID-19 may be hurting it', *The Conversation*. 13 November. Available at: <https://theconversation.com/teacher-motivation-is-vital-and-covid-19-may-be-hurting-it-149345> (Accessed: 7 February 2021)

Gibson, S-J. (2021). 'Shifting from offline to online collaborative music-making, teaching and learning: perceptions of Ethno artistic mentors', *Music Education Research*, 23(2), pp. 151-166. doi: <https://doi.org/10.1080/14613808.2021.1904865>

Gillham, B. (2008). *Developing a questionnaire*. 2<sup>nd</sup> edn. Real World research. New York: Continuum. Bloomsbury Publishing Plc, London. *ProQuest Ebook Central*. Available at: <https://ebookcentral.proquest.com/lib/sheffield/detail.action?docID=1644312>

Herzog, W. (2021) 'Teaching high-quality violin and viola vibrato, virtually', *American String Teacher*, 71(1), pp. 53-55. doi: <https://doi.org/10.1177/0003131320975870>

Human Rights Watch. (2020). 'Impact of Covid-19 on children's education in Africa', *35th Ordinary Session of the African Committee of Experts on the Rights and Welfare of the Child*. 31 August – 4 September. Human Rights Watch Observer Status No. 025/2017 Available at: <https://www.hrw.org/news/2020/08/26/impact-covid-19-childrens-education-africa> (Accessed: 4 February 2021)

Jain, S., Lall, M., and Singh, A. (2021) 'Teachers' voices on the impact of COVID-19 on school education: are Ed-Tech companies really the panacea?', *Contemporary Education Dialogue*, 18(1), pp. 58–89. doi: <https://doi.org/10.1177/0973184920976433>

Jelimo, C. (2020) 'Impact of COVID-19 on the right to education in Kenya', *The Right to Education Initiative (RTE)* and *Hakijamii Kenya Human Rights Organisation (HRO)*. 1 September. Available at: <https://www.right-to-education.org/blog/impact-covid-19-right->

[education-kenya](#) Reposted with permission from: <https://www.hakijamii.com/?p=6282> (Accessed: 29 January 2021)

Johnson, C. (2017) 'Teaching music online: changing pedagogical approach when moving to the online environment', *London Review of Education*, 15(3), pp. 439-456. doi: <https://doi.org/10.18546/LRE.15.3.0>

Katz, I. and Shahar, B.-H. (2015) 'What makes a motivating teacher? Teachers' motivation and beliefs as predictors of their autonomy-supportive style', *School Psychology International*, 36(6), pp. 575–588. doi: <https://doi.org/10.1177/0143034315609969>

Magomedov, I. A., Khaliev, M. S. U., and Khubolov, S. M. (2020) 'The negative and positive impact of the pandemic on education', *Journal of Physics: Conference Series*. ASEU 2020. IOP Publishing Ltd, pp. 1-4. doi: <https://doi.org/10.1088/1742-6596/1691/1/012134>

Misra, K. (2020) 'Covid-19: 4 negative impacts and 4 opportunities created for education', *India Today (Education News)*. 12 May. Available at: <https://www.indiatoday.in/education-today/featurephilia/story/covid-19-4-negative-impacts-and-4-opportunities-created-for-education-1677206-2020-05-12> (Accessed: 4 March 2021)

Mochere, J. M. (2016) 'Pedagogical issues facing teachers of music in the implementation of music curriculum content: a case of selected secondary schools in Nairobi County, Kenya', *International Journal of Education, Learning and Development*, 4(9), pp. 53-66.

Øystein, S., Hallgeir, H., Flaata, G.V., and Roar, K. (2009) 'The role of self-determination theory in explaining teachers' motivation to continue to use e-learning technology', *Computers and Education*, 53(4), pp. 1177-1187. doi: <https://doi.org/10.1016/j.compedu.2009.06.001>

Scherer, R., Howard, S. K., Tondeur, J., and Siddiq, F. (2021) 'Profiling teachers' readiness for online teaching and learning in higher education: Who's ready?', *Computers in Human Behavior*, 118, pp. 1-16. doi: <https://doi.org/10.1016/j.chb.2020.106675>

Schiavo, A. (2021) 'Teachers are in danger of losing their savings as COVID-19 persists', *Financial Wellness at Employee Benefit News*. 5 January. Available at: <https://www.benefitnews.com/news/teachers-are-in-danger-of-losing-their-savings-as-covid-19-persists> (Accessed: 1 March 2021)

Shahzad, A., Hassan, R., Aremu, A. Y., Hussain, A., and Lodhi, R. N. (2020) 'Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female', *Quality & Quantity*, 55(3), pp. 805-826. doi: <https://doi.org/10.1007/s11135-020-01028-z>

State Department of Early Learning and Education. (2020) *Kenya basic education COVID-19 emergency response plan*. Kenya: Ministry of Education. Available at: [https://planipolis.iiep.unesco.org/sites/default/files/ressources/kenya\\_emergency\\_response\\_plan\\_4\\_may\\_2020.pdf](https://planipolis.iiep.unesco.org/sites/default/files/ressources/kenya_emergency_response_plan_4_may_2020.pdf) (Accessed: 2 March 2021)

Stoneman, R. (2021) 'The Impact of COVID-19 on secondary education in Africa', *Secondary Education in Africa-Preparing Youth for the Future of Work*. Mastercard Foundation Report. Available at: <https://mastercardfdn.org/the-impact-of-covid-19-on-secondary-education-in-africa/> Reposted with permission from AllAfrica. (Accessed: 4 March 2020)

St. Pierre, E. A., and Jackson, A. Y. (2014) 'Qualitative data analysis after coding', *Qualitative Inquiry*, 20(6), pp. 715–719. doi: <https://doi.org/10.1177/1077800414532435>

Strauss, V. (2020) 'Covid-19 school closures 'devastating' for students who rely on music classes to get them through the school day', *The Washington Post*. 26 April. Available at: <https://www.washingtonpost.com/education/2020/04/26/covid-19-school-closures-devastating-students-who-rely-music-classes-to-get-them-through-school-day/> (Accessed: 2 March 2021)

Subramanian, S. (2020) 'Leveraging the flexibility of online learning', *Business World (BW) Education*. 8 October. Available at: <http://bweduction.businessworld.in/article/Leveraging-The-Flexibility-Of-Online-Learning-/30-09-2020-326479/> (Accessed: 12 April 2021)

Thomas, V. (2020) '8 Positive impacts to look forward to post the COVID-19 pandemic', *SurveySparrow*. 1 April. Available at: <https://surveysparrow.com/blog/positive-impacts-to-look-forward-to-post-covid-19-pandemic/> (Accessed: 5 March 2021)

UK AID (2015) *Urban infrastructure in Sub-Saharan Africa – harnessing land values, housing and transport*, UK Aid African Centre for Cities Case Study on Nairobi Report No. 1.8. Available at: <https://www.africancentreforcities.net/wp-content/uploads/2015/09/DfID-Harnessing-Land-Values-Report-1.8-Nairobi-Case-Study-20150731.pdf>

Underhill, J. (2020) *The heart of the school is missing. Music education in the COVID-19 crisis*, Incorporated Society of Musicians (ISM) Report. London: (ISM). Available at: <https://www.ism.org/news/heart-school-missing-report>

United Nations Convention on the Rights of the Child. (2009) *The right of the child to be heard*, Committee on the Rights of the Child General Fifty-first Session General Comment No. 2. Available at: <http://www.coe.int/t/dg3/children/participation/CRC-C-GC-12.pdf> (Accessed: 9 February 2021)

United Nations Sustainable Development Group [UNSDG]. (2020) *Policy Brief: Education during COVID-19 and beyond*. Available at: <https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond> (Accessed: 29 January 2021)