Remote Teaching of the Arts in a Time of COVID-19

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Abstract
COVID-19 pandemic resulted in educators making a sudden shift to a largely online modality in teaching. For educators used to studio teaching, this change could be radical in terms of teaching approaches. Arts-based pedagogies tend to be studio-based and experiential. A small scale exploratory study was conducted to gather insights on how art and music tutors adapted arts-based pedagogies for online teaching. Eight tutors in the Arts disciplines were interviewed on how they integrated the use of new technological platforms for online teaching and to identify emerging practice which had proven to work for them. This paper discusses the findings of this study, examining the effects of the COVID-19 pandemic on art and music pedagogies and implications of online learning on art and music teaching.

Keywords: COVID-19 Pandemic, Arts-based Pedagogies, Experiential Learning and Online Teaching

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Context of the Study

The recent COVID-19 outbreak has led to the quick implementation of communicative technologies (i.e. Zoom) across the different universities in Singapore. Tutors were asked to being asked to redesign their courses online teaching on an emergency basis. For disciplines such as Art and Music teaching practice based traditionally on studio practice, teaching online could be quite challenging as the Arts teaching environment is quite different from the virtual environment.

First-time users will need to explore and find ways to integrate platforms' features into their lessons typically carried out face-to-face. Currently, there is no consistent model of best practices for teaching music and art online as these are studio-based, requiring tactile and experimental approach to teaching, which is difficult to replicate online. Through online interviews, the study will uncover rich practices arising from experimentation with online learning the last year using Zoom as the main virtual platform.

Aims of the Study

Given the context of the study, the aims of the study are to:
1.   How did instructors integrate the use of the new technology i.e. Zoom into their lessons?
2.   What new ideas emerged, which have proven to work, through experimentation of using Zoom for teaching?

The study hopes to contribute to our understanding of best practice online for teaching in the Arts. Currently, there is no consistent model of best practices for teaching music and art online as these are studio-based, requiring tactile and experimental approach to teaching, which is challenging to mimic online. The study will identify rich practices arising from experimentation with online learning in the last year and build a corpus of knowledge in this area.

Research Design

Given the exploratory nature of the research questions, the study adopts a phenomenological approach to detail observations made and to uncover findings. Because the study is exploratory, it seeks to gather different emerging online teaching practices found to have worked for tutors. The present study explored how eight university tutors prepare online lessons. The study was based on data collected from interviews in which the respondents used their own experiences from online teaching experiences. The respondents were not selected randomly but were selected based on their above-average teaching ratings beyond 3.7 and that they were the main tutors of the course. Purposive sampling method was used (Cohen et al., 2011).

All respondents in the sample taught university undergraduate courses. They were also responsible for the design of their courses, along with planning and implementing teaching-learning activities. These include online lectures and activities over Zoom, as well as preparation of online assignments and exams. The size of online classes taught by the respondents is small, varied from 10 to 30 students and need to be maintained as small class teaching due to the Arts-based pedagogies which had to be deployed. Except for one respondent, the remaining respondent hardly had any online teaching experiences before the COVID-19 pandemic. Other than Zoom, five of the tutors had used alternative experiences

with virtual conferencing platforms for lessons outside of SUSS. The overview profile of the respondents is shown in Table 1.

Table 1: Overview Profile of Respondents

ID	Subject Area	Years of Teaching Experience (Approx)	Years of Online Teaching prior to COVID-19	Done teaching using other virtual conferencing platforms in other institutions
1.	Music Education	12	0	Yes
2.	Music Education	13	0	Yes
3.	Music Education	30	0	No
4.	Music Education	20	0	Yes
5.	Art Education	15	1	Yes
6.	Art Education	10	0	Yes
7.	Art Education	More than 20	0	No
8.	Art Education	More than 20	0	Yes

Semi-structured interviews were conducted with respondents. The scope and relevance of the initial set of questions were reviewed by co-researcher and revised in light of their comments. A pilot interview was conducted with a tutor not taking part on this research project and the interview protocol was further revised. The finalized protocol focused on how strategies and teaching approaches used by respondents to carry out online teaching during the COVID-19 pandemic. The scope and relevance of the initial set of questions were reviewed by co-researcher and revised in light of their comments. In addition, a pilot interview was conducted with a tutor not taking part in this research project, and the interview protocol was further modified. The finalised protocol focused on how strategies and teaching approaches used by respondents to carry out online teaching during COVID-19 pandemic.

All interviews were conducted over the Zoom platform for approximately one hour. The information gathered is then analysed. The resulting data were analysed in iterations based on Braun and Clarke's guide (2006) for thematic analysis by the principal investigator. Possible relationships between themes and sub-themes were explored to clarify patterns.

Results and Analysis

Through 'respondents' data, main themes and sub-themes were derived, and these are presented as shown in Table 2. Table 3 shows a sample of respondents' quotes.

Table 2: Main themes and Sub-themes in response to 'Respondents' Interview Data

	Research Questions	Themes	Sub-themes
1.	How did instructors integrate the use of the new technology i.e. Zoom into their lessons?	Adapting existing lesson plans and instructional strategies	• Chunking and pacing of lessons • Use of visual cues • Assuming "DJ" persona. • Utilise home resources
		Integration of apps to complement "live" teaching	• App tools for collaboration, reflection and discussion.
2.	What new ideas emerged, which have proven to work, through experimentation of using Zoom for teaching?	Correcting distorted images and colours online	• Experimentation with camera angles • Experimentation with lighting for best effects • Use of software to correct colours • Utilising second web camera to capture additional views • Use of 'Spotlight' to pin images
		Correcting and improving audio sounds online	• Pre-setting Zoom to reduce noise reduction • Set audio mode to 'high fidelity' • Performing on own system to avoid latency
		Preparing Set-up for Zoom	• Instructional set-up for students • Virtual space exploration and experimentation
		Recreating workstation and space	• Making space at home for workstation • Arranging items or resources within reach for online teaching

Below will discuss the following research questions:
1.   How did art and music instructors conduct teaching online using web-conferencing platform, Zoom?
2.   What new ideas emerged which have proven to work to create the setting for music and art teaching?

How Did Instructors Integrate the Use of the Virtual Conferencing Technology, I.E. Zoom

According to respondents, adaptations had to be made in terms of online strategies and pacing lessons for students prior to the online lesson. For example, Fatigue could quickly set in during online lessons due to intense screen viewing and an absence of physical interactions with peers. This section examines some of the adaptation strategies tutors adopted.

Adapting Existing Lesson Plans and Existing Instructional Strategies

Chunking and Pacing of Lessons

Unlike teaching and learning face to face, nonverbal cues are less easily picked up. Much effort is required to bring messages across (e.g. exaggerated nod or put thumbs up) and interpret verbal and nonverbal cues online. For example, a side glance during face-to-face teaching is very different from looking at a person from a video chatbox. Furthermore, "cramming 18 hours of instruction meant for face-to-face into six online sessions is already a challenge for students to watch" (ID2). As a result, efforts have to be made to make lesson less taxing for students. Scaffolding takes place with bite-sized teaching:

So you got to find a way to try to help them in that kind of situation. So what that leads me onto really, is the operating part of it…. So when I designed the lesson is…I'm usually thinking in chunks of 20 minutes or 30 minutes before either change your topic or change the focus on that particular topic. So I think you have to think literally the kinds of instructions needed to get your message across. (ID3)

I'll try to take a break every out to give them a chance to get up or to do things … That five-minute break really helps … It gives students the breathing space just to switch search off the video for a while for five minutes and stretch their legs. (ID3)

The activities are bite-sized and they shift every now and then from singing to playing of recorders and to do music and movements to get students engaged at all times, and to build them up such that it all comes together at the end, and that's when scaffolding has to be very clear. (ID4)

Besides keeping lecture short, videos were also kept short to hold students' attention (ID5). Longer videos not only cause slow downloading it also wears down students' patience. Instructions to students also need to be more specific and focused in telling students what is required of them. One of the respondents noted the need to slow down the pace as there is a tendency to "Zoom off" slides when teaching online, especially when teaching online.

Use of Visual Cues

Visual cues and cue cards were also used to help engage and facilitate instructions online. Body movements also have to be exaggerated to get students to follow:

I use a lot of visual card cues which I never used much the last time [Bringing out the different colour coded cards with different shapes]. If I ask students… "Move your legs [flashing a card] versus "move your legs (hands folded with body leaned forward to screen)…Hence, there are a lot of visual cues. (ID4)

The lack of nonverbal cues might impact interpersonal relations (Short, Williams, & Christie, 1976) and can contribute to a sense of disconnectedness. More effort is required to bring messages across (e.g., exaggerated nod or put thumbs up). Less is more to the tutors. To avoid overloading of verbal instructions, one of the instructors used picture card cues. There were also attempts to draw attention to where students had to move through using fingers to point across the virtual screen box.

Assuming "Disc-Jockey" Persona

To maintain a "lively" session, tutors need to engage students through various means to create lively lessons complete with online activities. One of the respondents (ID6) observed the need to entertain students online. She likened the need to assume a DJ persona in the way DJ bantered with an online audience.

I feel like I have to be like a DJ now [laugh out loud]. And of course, you got to, you know, you need to be quite handy with Zoom and kick start the "live streaming" process by greeting them, "Hi everyone! How are you?" to create a lively online presence. It is a different kind of online presence, as I said. It really helps to engage and capture their attention. And yes, you have to be a bit more "alive" on the screen. I am aware that it's not only about teaching right. You have to entertain them, draw their attention. (ID6)

For her, it was having to get used to seeing her face online via a technical medium. Sensory cues such as voice inflexion, facial expressions, and other body language were used to banter online audiences and create a vibrant, positive learning space. This was done intentionally to enhance social interactions and create positive vibes. Successful learning occurs primarily due to the social, interactive, and affective dimensions of the learning experience (Rodriguez, 1995 and Wulf, Hanor, & Bulik, 2000). Not only could maintaining a lively persona enhance communications, it also increases student interest in content matters.

Utilise Home Resources

Unlike classroom teaching, where resources (e.g. musical instruments) are prepared ahead and placed in the classroom for student use, this could not be done in the online format. As a result, tutors had to adapt and had improvised the resources on their own. In one example, the tutor had students improvise the use of household items (pots, pans and chopsticks) as percussion instruments for teaching rhythmic ostinato.

Group activities need to be creative and interactive... And if they are at home, they could use chopsticks or other household items, and it need not be musical instruments [Demonstrating on screen how he would use them for percussion]. And I could even get them to use pens on their tables. In other words, you don't necessarily need Orff musical instruments. (ID4)

Integration of Apps and Virtual Platforms for Teaching

To enhance learner's experiences, most tutors would leverage tools for collaboration, reflection and discussion. All respondents had experimented with one to five additional tools depending on the learning outcomes of the courses. See Table 3. As Zoom is not geared towards sharing artwork, Padlets and Instagrams were used to share images for discussion and critique. There are also more specific apps for music such as Sibelius, MuseScore, Garage Band and Audacity

for music notation and playing. Zoom whiteboard caters to the written text and not writing out musical notations.

Table 3: Technological Tools and Apps used

ID	Subject Area	Nature of Subject	Examples of Apps, Platforms and Types
1.	Music Education	Music and Movement	Skype, U Tube
2.	Music Education	Composition	Skype, Microsoft Team, Xiao Er Tong, U Tube
3.	Music Education	Music and Movement	Instrumental App, U Tube, Skype
4.	Music Education	Music Technology	Sibelius, MuseScore, Garage Band and Audacity, U Tube
5.	Art Education	Art Critique and Teaching	U Tube, Kahoot
6.	Art Education	Media Art and Technology	U Tube, Padlets, Kahoot, Slido, Instagram
7.	Art Education	Drawing and Painting	Open Broadcaster Software App, EpocCam, U Tube
8.	Art Education	Media Art and Design	Digital journal, Microsoft Teams

What New Ideas Emerged to Create the Setting for Art and Music Teaching Online?

Art and music lessons are challenging to conduct online due to the experiential learning practice they required. For example, within the Art studio discipline, there is an emphasis on the experimentations with colours and textures and how one should hold the brush. Tutors need to be able to demonstrate and correct students on the spot. For music, the challenge would include the correcting of pitch and rhythm whilst performing via Zoom.

Correcting Distorted Images and Colours Online

Because the teaching of drawing/painting requires the demonstration and the viewing of brush strokes at proximity, the placement of items at correct light source is important. According to one respondent, "the colours you see on screen is also dependent on the overall lighting and angle. Sometimes, a blue or red paint shown could appear as different shares on their screen … you have to tilt the camera at 30 or 45 degrees angle for the colours or texture to be shown clearly (ID7)." Distorted colours and pixelated drawings are not uncommon. Common strategies used included using lighting and tilting video cameras to correct the colour and eliminate hotspots.

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Back and front lighting needs to be used to eliminate shadows and "hotspots" on the artwork. (ID7)

For students to see art textures, the camera needs to zoom in to enable a close-up view of the artwork. To solve the problem, tutors adopted the following approaches:

• Use of virtual conferencing software (e.g., Open Broadcaster Software) to adjust the colours

• Installation of IP/Wifi Camera-related software (e.g., EpocCam or DroidCam) for greater accuracy of images presented

• Use of lighting to adjust colour accuracy and consistency

Students need to know to spray fixatives onto their artwork. The frontal camera captures an online view that gives a distorted spatial perception of spraying demonstration in action. Therefore, a second camera (e.g. webcam, IP camera or mobile phone cameras) had to be set up to show other side views. Besides art lessons, music lessons also require the use of various camera angles and set up for movement demonstrations.

I was working from home, I was using the wide angle lens, and was just able to toggle over with the set up set up the laptop. I also had a speaker microphone. The distance between a whole body to the screen is to be a distance faraway so, which is about just about one meter away. The side camera would capture the whole body movement while doing the music and movement eurhythmic activity. Hence, if you don't want to look at the front view, you could look at the side view for the movement. This is how music lesson could be taught using Zoom. (ID2)

For those who did not want to use a separate camera, iPad cameras were used instead. The tutors also used Zoom's "Spotlight" function to pin student's art images for further discussion and demonstration.

Correcting and Improving Audio Sounds Online

For music lessons, tutors also had to pre-set Zoom to reduce noise reduction, set the audio mode to "high fidelity," and calibrate the microphone to optimise the connection. Tutors had to trigger noise reduction in the Zoom set-up. A constant issue is the audio latency (due to time delay in reading and processing sound signal) encountered in technology use, making it almost impossible for musical jamming, group singing, or ensemble. To reduce audio latency, respondents involved had to relook score selection for singing or have individual performers perform using their PC system.

If you are playing the keyboard or an instrument, you have to switch off the original sound as it is picking up sounds coming everywhere around If you are turning off the "Original Sound", you are actually suppressing the background noise. I need to pre-set Zoom to reduce noise reduction, set the audio mode to "high fidelity," and calibrate microphone to optimise the connection.

It will not be possible to include an ensemble online as the instrumentalists would not be in sync with each other when playing due to time lag. The only way to get the ensemble in sync is to get them all play separately on a microphone using their own system and to combine the tracks.

Preparing Set-up for Zoom

In experimenting with virtual spaces, one tutor noted the need to prep students to prepare in advance for lessons. For example, for the drawing and painting lessons, the tutor needs to see the students' artwork and their progression.

To prepare students for the art lesson, I told them how to set up the camera, and what to do ... I showed them how to use books to prop up the cameras and how to attach a second camera (using mobile phones) focusing on the artwork. Back and front lighting need to be used to eliminate shadows and "hotspots" on the artwork. I taught how to use their mobile phone as a camera. Mobile phone camera is easy to shift around to get the angle needed. (ID7)

The tools and equipment's set-up is essential over the students' end where they were taught how to position the web camera such that their artwork could be seen in Zoom. Another respondent also mentioned the need to introduce online etiquette prior the lesson to minimise lesson disruption.

Recreating Workstation and Space

Creating workstation and space could pose a challenge for students, or even tutors, in getting ready for the lessons. Tutors and students sought to create spaces within their living rooms to set up a workstation for Zoom teaching. For some tutors, this would entail re-arrangement for home furniture and converting the dining table as a workstation.

As for myself, I need to create spaces within living room to set up a workstation for Zoom teaching. I need to re-arrange home furniture and converting the dining table as a workstation. To capture music movement, you need different camera angles. Hence, for the eurhythmic session right… there is always a frontal camera for the face and a side camera whereby the whole body can be seen. (ID2)

And I have a big workstation now for online lesson and it is located where my grandpiano used to be. To be honest, this used to be a grandpiano. I had to get rid of it because I think I need the space. I just have MacBook pro so that I can play the piano and they can see it just like this [tutor moved the MacBook to show the piano where it is strategically placed]…You have to prepare your visual aids, I have to prepare my slides and my setup, prepare the extra instructions you need students to have. (ID4)

Desk space is intentionally created to allow essentials to be within an arm's reach. This eliminates the likelihood that they would have to get up to look for items during lessons. For music tutors, the piano and the keyboard also need to be within reach in the event they need to play on the keyboard. There is also a need to find a private space there is least foot traffic, so that family members would not get in the way of lessons held.

Discussion of Study

As much as many improvements have made way for collaborations and constructivist teaching to take place within the field, these are mainly content-driven and not skills-based.. Much of the challenge remains for carrying out skills-related developmental activities online. The lack of nonverbal cues might impact interpersonal relations (Short, Williams, & Christie, 1976) and can contribute to a sense of disconnectedness. More effort is required to bring messages across

(e.g., exaggerated nod or put thumbs up). Hence, students needed to work harder to process non-verbal features online, such body language and facial expressions.

A critical aspect of studio art involves demonstration, modelling and experimentation. This needs to be replicated online. When done online, the lesson's pace had to slow down considerably as students were not able to follow the lessons due to latency experienced from time to time and limited visual view on artefacts or demonstrations online. Different visual cues and cards were deployed to capture students' notice and get them engaged.

Students were encouraged to explore the virtual space within the viewer box and to move according to the beats and rhythms. Instructions were kept as precise and short as possible to avoid overloading of verbal instructions. Art and music education courses draw on situated theory (Lave & Wenger, 1991) and reflective pedagogies (Schön, 1983), where students are expected to reflect and critique. There is also a need to maintain constant virtual presence throughout to engage students. Bite-sized learning (or micro-learning) feature prominently in respondents' narratives. As an instructional pedagogy, micro-learning focuses on guiding students through micro-learning activities in a digital media environment. Research studies have shown the value of bite-sized learning or micro-learning (Ledger et al., 2019). This becomes even more crucial in an online context where attention span is even shorter due to the passive nature of Zoom learning. Respondents emphasised the need to shorten and simplify instructions and provide bite-sized contents to keep students engaged. They also emphasised the need to have a range of activities carried out online, sometimes changing from one to the next. There was the need to assume a constant active online presence in engaging with students. The home environment also plays a part in facilitating lessons. There is a need to prepare students to set up studio workstation for art and music activities, and get them to explore the virtual working environment. Through analysis of data, we learnt that adaptations had to be made in terms of pedagogical approaches, learning about technological affordances and limitations, integrating online tools to replicate learning environment for the Arts, and preparing students for online lessons. More importantly, Art and Music courses require experiential learning and much of this is based on sensory experiences and are directed towards awakening aesthetic senses in colours, textures or space. The confines of one within the two-dimensional online space could easily lead to cognitive and social dissonance and warped sensory experiences

Implications of Study

While small scale, the research study provides some preliminary ideas on the types of teaching practice that could be harnessed and deployed for experiential courses such as Art and Music.. It suggests a need to further examine the psychological dimension and impact of online learning. Artists and musicians do not thrive in an unnatural or contrived setting. Professional practice is an essential aspect within the fields of music, art, craft and design. Higher education institutions are responsible for designing complementary learning situations to the future professional careers and need to be cognizant of the limitations of online learning for future artists and musicians (or teachers in the field).

Limitations of Study and Future Research

This pilot study aims to shed light on how Art and Music tutors adapt their classroom teaching online during COVID-19. The authors acknowledge the limitations of the small sample size and the use of only an interview approach. Further investigation is needed to validate the

findings with larger sample size. The study could be broadened to include interviews with students to understand how they perceive the efficacies or impact of online teaching.

Conclusion

The study will contribute to our understanding of best practice online for teaching in the Arts. Through interviews with eight tutors, the authors were able to establish some preliminary insights on teaching approaches for art and music. Complementary technological tools and apps are necessary to overcome the limitations of web conferencing platforms. In teaching lessons online, tutors also saw the need to replicate physical teaching space further online and work around the affordances of the virtual learning platform to support learning. Steps were required to set up the home environment to facilitate lessons smoothly. There is a need to consider learning processes and set of contexts and interactions that provide students with opportunities and resources for learning. Ongoing support to tutors in these areas is essential for the smooth running of art and music lessons online.

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