

Chapter 2

Challenges and Opportunities: Dance Education in the Digital Era



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Abstract Because of the COVID-19 pandemic, dance education, which is heavily dependent on a face-to-face model, had to change and continue in a virtual environment. How did the rapid adoption of online technologies affect tertiary dance educators' teaching? More importantly, what were the practical ideas and effective tools/strategies learned to move dance scholarship and practice into a post-pandemic era? This study investigates nine tertiary dance educators from Europe, Oceania, North America, and Asia, who conducted online dance classes during the pandemic. This study has utilized multiple sources of data (images, videos, and writings) from dance educators to explore the challenges, benefits, and innovations in the context of virtual dance teaching. Dance educators have shared their views on teaching dance online: tools they have utilized as well as pros and cons with regards to different pedagogies and learning spaces. Findings indicate that the present online model will have a significant impact on future dance education. This article shares lessons and insights on tools, pedagogies, and strategies, which not only support dance education in a post-pandemic era but can also benefit other practice-based subjects at large.

Keywords COVID-19 · Dance education · Digital era · Online technology · Post-pandemic · Higher education

2.1 Introduction

The Internet, mobile applications including social media, and the fast-paced evolving technologies have created a perfect tsunami of resources and tools, as well as open

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and free information access. Such a phenomenon has not only resulted in a change in what individuals of dance programs study, but how, why, and where they learn, process their learning, and create dances. The COVID-19 pandemic is the start of all kinds of paradigm changes. The COVID-19 pandemic has created a significant impact on all sectors, including education across the globe. As of 19 September 2022, there were 608,328,548 confirmed cases and 6,501,469 deaths in the world, according to the World Health Organisation (WHO September, 19 2022). The pandemic came in waves and shut down schools and universities as face-to-face teaching became unavailable.

Just as any other disciplines at virtually all universities, tertiary dance programs in different countries have adopted a different format of delivery, namely, online. For this study, the researchers interviewed eight tertiary dance educators from Europe, Oceania, North America, and Asia, and analyzed their responses. The goal was to investigate how tertiary dance teachers in different countries responded to and overcame challenges encountered when teaching during the pandemic and how they could enhance dance education in the future. In this study, dance educators have shared their views on teaching dance online: tools they have utilized as well as pros and cons with regards to different pedagogies and learning spaces. They have also revealed insights into their accomplishments, challenges, and discoveries when teaching during the pandemic. Scholarship on dance education during the pandemic is growing, however, studies that focus on dance teaching and learning from different countries *during* the same period is rare. This study contributes to dance education scholarship by including perspectives and recommendations from dance educators from different continents. Their lessons in different settings, utilization and engagement with technology, as well as how they overcame the many challenges in virtual dance teaching can further enhance and strengthen dance education for post-COVID-19 era.

2.2 Literature Review

In a fast-changing world of technology, scholarship on the use of technology in dance education has been growing steadily. Leijen et al. (2009) explore the use of online streaming videos for ballet students' self-evaluation. Stancliffe (2019) discusses the use of annotating pre-recorded video footage for training analytical eyes. Dania looks at how teachers use technology on motor skills with an emphasis on physical and dance education (Dania et al., 2011). Parrish (2007) has suggested ways for dance educators to implement technologies in dance teaching. She also advocates the use of online tools and platforms such as MOOC (Massive Online Open Courses) for students to take charge of their own learning (Parrish, 2016). Li's research finds that dance students are not only ready for new pedagogies, but they are also exhibiting a shift in their learning tools from desktop computers to mobile devices (Li et al., 2018, 2020). In addition to teaching and learning, live-streamed performances (O'Hagan & Borowiecki, 2021) and sporting events (Ordway & Anderson, 2022) such as Beijing Winter Olympic and Paralympic Games are taking place recently. Audiences of all ages and backgrounds watch them on digital devices, a phenomenon that is becoming

ubiquitous. In fact, many students in developed and developing countries have grown up with the latest digital technologies (Robinson, 2011). Students are proud to share their creative works and dance performances on social media channels (O'Hagan & Borowiecki, 2021; Li, 2021a, 2021b). As technology advances and infiltrates all sectors, the larger dance community is gradually embracing it.

Dartnell (2020) asserts that COVID-19 has changed our personal lives and that businesses and employees are adapting to the new workplace. The prevalence of technology and the application of technology in dance teaching is widely recognized (Li et al., 2018, 2021, 2022a, 2022b). In recent years, personal computer sales have dropped significantly, while mobile devices become increasingly popular, especially among the younger generations (Li et al., 2018, 2022a; Lim et al., 2014). Mobile technologies are ubiquitous in many affluent countries and they are widely utilized in education (Kaliisa et al., 2019; Li et al., 2022b; Lim et al., 2014), including dance education (Li et al., 2018; Zhou & Li, 2019; Li, 2020, 2021b). Technology-integrated pedagogy has been generating momentum over the years. Students are able to apply technology to develop creativity and nurture critical thinking skills while educators scaffold and moderate the learning process (Robinson, 2011). The COVID-19 pandemic provides an opportunity for dance educators to move dance teaching and learning to a hybrid mode.

Schmid and McGreevy-Nicholas (2021) write about new initiatives that the National Dance Education Organization (NDEO) has taken during the pandemic. They include gathering questions, ideas, concerns, challenges, and problem-solving strategies through various channels, such as online chat sessions, webinars, and meetings. With three key questions on "good practices, learning options, and modifications," NDEO is able to gather enough insights to create a guideline, based on scientific evidence from the dance community (p. 4). Similarly, a group of Brazilian researchers provide safety guidance for people to practice dance activities at home during the pandemic (Rodrigues-Krause et al., 2021). Based on webinars and networks organized by NDEO, Gingrasso (2020) put together some practical resources regarding online dance teaching. In Gingrasso's study, eleven participants at various levels ranging from private dance studios to university programs in U.S.A. share their pandemic dance teaching experiences.

Weber (2021) elaborates how Project Trans(m)it connects dance educators from different places. It originally started as a technology-enabled dance collaboration project. During the pandemic, Project Trans(m)it becomes a virtual hub, where dancers and dance lovers continue to explore choreography, improvisation, and practices. Li (2020) shares his experience of leading a live-streamed dance class in a tiny apartment for students in general education programs. Students utilize various spaces for dance practice, performance, and final projects. During the pandemic, a surge of creativity among dance students is shown through classes, choreographies, and performances. Some dance educators admit that student works during the pandemic are some of the best works they have received. Baker (2020) states that an event such as COVID-19 could be a once-in-a-generation opportunity to reimagine society and build a new future. All these in fact provide a great opportunity for dance educators to rethink, reflect, and modify pedagogies in dance education. The

crisis may most likely lead to innovation and change in terms of how dance is taught in the future (Li et al., 2021, 2022a, 2022b). This research shows how instructors from different continents have engaged with technology and how they have inspired students to use technology for meaningful objectives. We hope this rich data-based study provokes more questions and generates fresh ideas and practical strategies among dance educators to push dance education to the next level.

2.3 Methodology

This research has utilized multiple sources of data from dance teachers to explore the challenges, benefits, and innovations in the context of online dance teaching. This approach has enabled the researchers to gather multiple forms of data from dance educators (Lim et al., 2014) and provide rigor and integrity to the qualitative research process (Cohen et al., 2012). Methodological pluralism rather than methodological monism is the ideal option to which research on artistic practices and approaches subscribe (Cole & Knowles, 2000; Eisner, 2002). Eisner (2002) writes that “looking through one eye never did provide much depth of field” (p. 74). Additional data collections include online class observations and recordings made of choreographic or rehearsal work that took place after regular dance lessons. Some dance educators share screen-captures of online dance classes and works by their student.

In order to fully capture the online experience of dance teaching during the pandemic period, multiple rounds of interviews were conducted at various times. Cole and Knowles (2000) assert that speaking directly with dance educators is to break the “theory–practice gap” so that others would benefit from a research (p. 9). Interviewees were encouraged to reflect, compare, and discover new insights and understandings about dance teaching at various times. Griffin (1996) writes: “we live in the present time, where the past and future are tangled and intertwined lines composing and creating who we are today” (p. 149). This study provides participants an opportunity to share their practical recommendations, methods, and applications regarding dance teaching during the pandemic.

2.4 Participants

Nine dance educators (4 women and 5 men) from Australia (Adrian), New Zealand (Nolan), the United States of America (Phil, Jenny & Amanda), the United Kingdom (Polly), Canada (Candy), Vietnam (Victor), and Hong Kong (Tom) have participated in this study. All names are replaced with pseudonyms. They are highly respected individuals in the field and have actively been involved in dance education at the tertiary level for decades. One of the researchers has met these individuals at various dance conferences and collaborated on dance projects in the past. One of the researchers has sat with several of these dance educators on a major dance education

network committee in North America; they have organized multiple dance events and conferences in Taipei, New York, Hawaii, and Vancouver. Some of these dance educators are keen on using technology in dance teaching and others disapprove and reject it. They teach contextual and practice-based dance courses at both undergraduate and postgraduate levels. Some of them are from conservatories while others teach at universities where dance is offered as general education courses.

The selection of participants was made based on willingness and availability, rather than how much they use or know technology. Although participants' backgrounds seem to be diverse enough to represent different types of tertiary dance educators, the study should not be taken as evidence of general understanding owing to small sample size. There is a sense of trust and openness between the participants and the researchers. With that in mind, participants feel comfortable revealing their "failure" as well as sharing their success stories. Of the nine dance educators, two were recommended by individuals who could not participate in the study because of unavailability. During the pandemic, all nine dance educators have taught technique, improvisation, choreography, somatic, dance education, screen dance, and theory-based dance courses to both undergraduate and postgraduate students in their respective institutions. In terms of course level, these educators have taught both dance major students as well as minor and/or elective dance courses for students with little or no dance background.

2.5 Procedure

In summer 2021, an invitation email about the study was sent out to fifteen dance educators in different countries. It was assumed that by then, most of the dance programs at the tertiary institutes would have concluded. Ten dance teachers responded that they were either about to finish their teaching or had already completed their teaching. All of them indicated that they had taught dance classes online at one point. Follow-up interviews were conducted in the fall of 2021. Participants were informed that due to uncertainties during the pandemic, they could withdraw from the study at any time and that their identities would be protected. Out of the ten dance educators, five confirmed their participation right away, one could not make it but recommended another dance educator working in the same country. The rest of the participants responded soon after, but some sent in incomplete responses or later informed the researchers that they were not available for interviews. As a result, two individuals have been excluded from the study. In total, nine dance educators from different continents participated in this study.

Because of the very reason that face-to-face interactions were unavailable, semi-structured online interviews with nine dance educators were conducted. Virtual interviews were conducted on Zoom¹ and time was arranged based on the interviewees' availability. The virtual interviews varied in duration: they were anywhere between thirty minutes to an hour and half. Flexibility in time arrangement for interviews proved to be effective and, thus, the participants were less likely to reject the interview request. For instance, the researchers had to conduct an interview at 1:30 AM (Hong Kong time) with a participant from U.S.A. during her lunchtime (1:30 PM). All interviews (virtual, textual, and mobile messages) were transcribed, archived, coded, and analyzed. In the end, four themes emerged: reactions, actions, transition, and perspectives.

2.6 Findings and Discussion

Findings are organized in three parts: (1) Actions taken; (2) Views on technology; (3) Looking ahead.

The majority of the nine dance educators carry leadership responsibilities in addition to their respective teaching responsibilities. Nearly all participants indicated that resources and support from their home institutions were extremely limited, since the negative impact on businesses and other fields has also severely affected tertiary dance education (Dartnell, 2020; Heyang & Martin, 2021). Being leaders, they had to be “innovators” while going through steep learning curves to maintain the operation of their dance programs. Many of these dance educators learned and used some practical resources about online dance teaching (Gingrasso, 2020). They were able to connect with other dance educators who were in a similar dilemma (Weber, 2021). The growing scholarship (Schmid and McGreevy-Nicholas, 2021; Li, 2020, 2021a, 2021b) and professional network provided more support than their universities could offer. Nonetheless, the pandemic forced all nine dance educators to modify their pedagogical approach, particularly that in practice-based dance courses such as technique and choreography.

2.6.1 *Actions taken*

Dance teachers' initial reactions varied when they switched the mode of dance teaching from face-to-face to online. Four of them experienced stress in the transition while the other five had easier transitions. Some of them quickly adapted to the new model and discovered new insights and strategies in teaching dance.

¹ Two dance teachers used social media (FaceTime and Facebook Messenger) as means to complete the virtual interviews. Since these two technologies function similarly to Zoom interviews, the researchers decided not to treat this data differently.

Nolan (New Zealand), Adrian (Australia), Victor (Vietnam), Phil and Jenny (U.S.A.) shared similar difficulties when online dance teaching took place.

Nolan is originally from Australia and has twenty years of teaching and research experience in dance. He is the Head of Dance Programme at a liberal arts university in New Zealand. He asserted:

I found it very stressful. We had to work very quickly to get all staff and all students on to the same technology so we could all connect online. Teaching became one dimensional, and in order to animate a lesson I had to exaggerate ideas and actions so that my intent got across the digital screens.

Jenny is the Director of a dance education program at a university in a large city on the east coast of U.S.A. She has been teaching dance for more than 30 years. She described her initial feeling as a “crazy transition filled with anxiety.” Victor and Adrian experienced similar chaos as they were in the middle of their holiday when the change of teaching model took place. In Adrian’s case, he could not come back to campus until much later because he had to spend two additional weeks in quarantine. Adrian stated:

[T]here was almost no time to prepare as the impact of the pandemic was fully realised and things were changing quickly worldwide. I was actually in Melbourne, Australia when it was decided that the institution would close. I was unable to go back until face-to-face teaching resumed.

Adrian and Victor shared similar comments in terms of their teaching environment. Adrian is an administrator who teaches in a performance-based tertiary dance program in Australia and Victor is a professional dancer and choreographer from Vietnam. Victor teaches mostly dance technique and somatic courses at a conservatoire in Vietnam. They both have over twenty years of teaching theory and practice-based dance courses at various institutions around the world. In follow-up interviews, Adrian and Victor talked more about the current state of dance education. They shared similar comments that in this new hypercompetitive world, educators could not afford to be complacent. Innovation and adaptation are new survival strategies, particularly during the pandemic, as said by Victor:

For years, we are avoiding something that is hard but necessary. We are shrinking from rather than rising to the challenges and opportunities of the digital age. My students, on the other hand, are coping well. They have submitted some of the most creative works I have ever seen in my entire career.

Victor’s comment about an increased level of creativity among student works was echoed by other participants in follow-up interviews and relevant scholarship (Li, 2020; Weber, 2021). Here are a few student dance works that show how they have worked with alternative spaces and technologies (Fig. 2.1).

To some extent, restrictions brought about by the pandemic have forced students to think outside of the box. Students have started to observe carefully what they have, where they are, and how they can better engage with the spaces around them creatively. On this topic, Jenny shared:

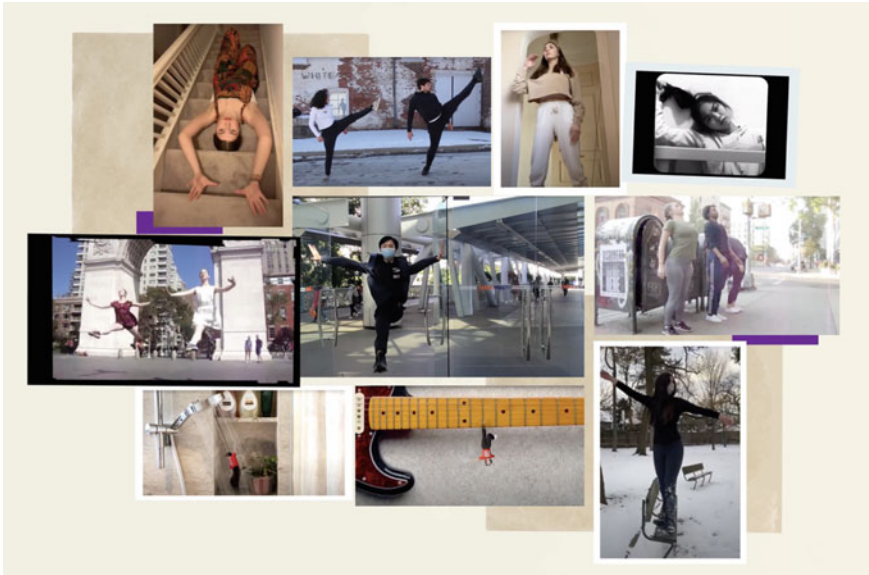


Fig. 2.1 Sample student works

One of my students has set up a YouTube channel (Fig. 2.2). She teaches online ballet classes to students of all ages who cannot afford to take classes or cannot attend classes in studios due to COVID-19. She has hundreds of online subscribers and with that, she secures her own unique YouTube channel title. Her ballet classes are designed for people with limited space and she hosts regular online discussions with students and friends.

Victor, Jenny, and Tom indicated that their students welcomed and exploited the influx of digital technology and social media to promote their dance works, a theory supported by studies (Li, 2020, 2021a, 2021b; Li et al., 2018; Lim et al., 2014; Zhou & Li, 2019). With that, the researchers would encourage dance educators to reflect on what have prompted students to become so engaged in completing their dance works. Dance educators can also ask questions such as what tools their students have used and how such tools have promoted learning in the virtual environment. This kind of reflection would help teachers better prepare students for future changes. Despite all negativities associated with the pandemic as identified by educators at the present moment, the outburst of creativity, innovation, resilience, and the use of technology have been evident among teachers and students. According to the participants in this study, students have adapted to online teaching much better than teachers have done. Dance students have figured out screen-sharing, chats, and breakout rooms without anyone teaching them. Furthermore, some students have actually acted as “teaching assistants” during online classes; they have helped their teachers work with various functions found in, for example, video-conferencing tools.

Five dance educators have experienced relatively easier transitions to online teaching with their prior knowledge and institutional support. Before the pandemic,

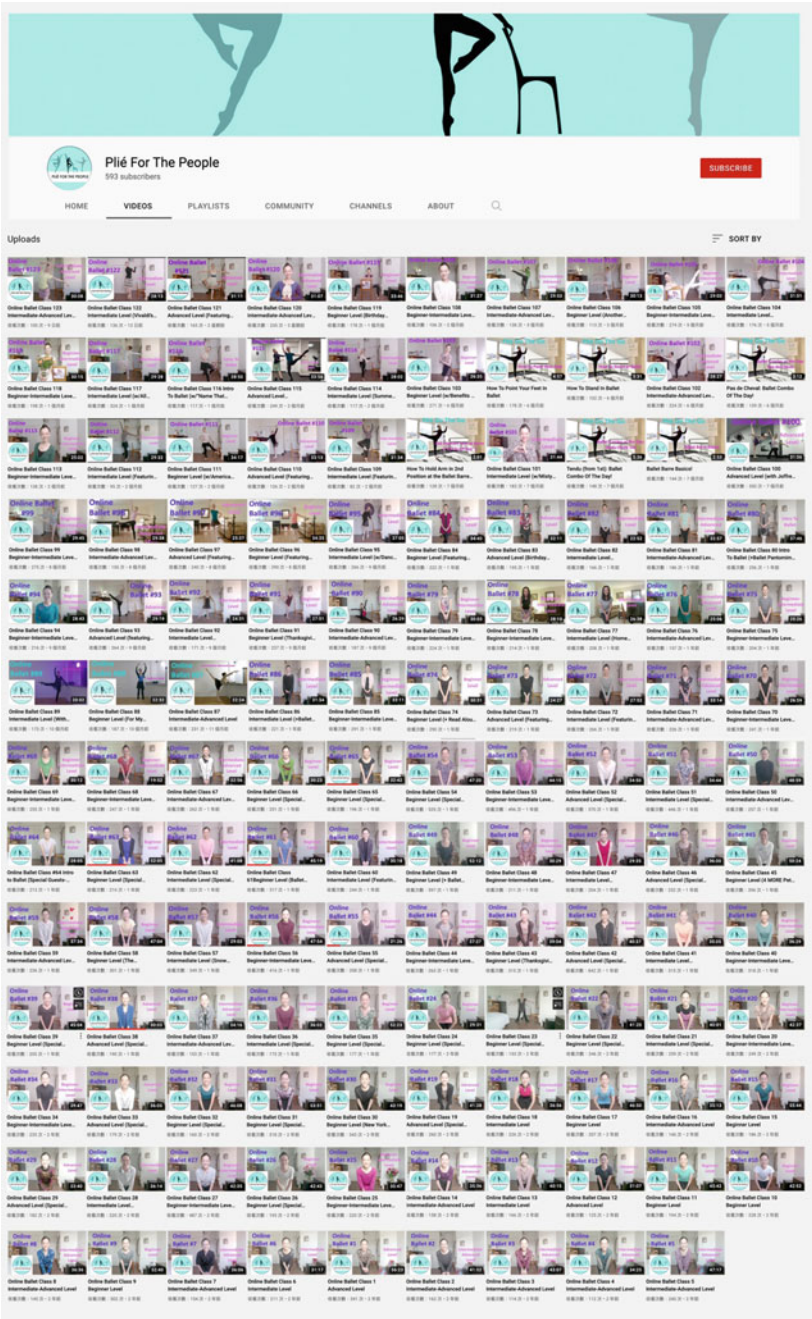


Fig. 2.2 Plié for the people on YouTube

Candy (Canada) was used to eLearning. She frequently uploaded her courses onto an online platform which she also used for communication with students and assignment grading. For over 25 years, Candy has been teaching ballet and dance education at a comprehensive university in Toronto, Canada. After receiving a Ph.D. in Education, she continues to explore various ways to integrate technology with her dance classes. She is familiar with the online learning management system at her home institution and considers it an effective online tool to assign readings as well as distribute and collect assignments. For her, the transition was “a piece of cake.” Sharing similar thoughts in the transition to online teaching is Amanda (U.S.A.), who has years of experience of teaching modern dance technique, improvisation, and choreography at a liberal arts university in the northwestern part of U.S.A. Amanda is also a professional videographer, editor, and teacher of screen dance. With her expertise in digital media, she has experienced a smooth transition: “I have constantly dealt with people online in teaching and research. It’s not a big deal and it should not be.”

Phil (U.S.A.), a former principal dancer with Bill T. Jones/Arnie Zane Dance Company, has taught dance at several universities in U.S.A. He is passionate about the use of multimedia, film, video projection, lights, and shadow in dance performances. In recent years, he has become interested in utilizing mobile devices to create dance films. One of his award-winning works was featured in the New York Times (Fig. 2.3). Transitioning to online teaching was natural for Phil as he often encouraged his students to use technology: “Dance opportunity is not as vast as it used to be. Try something new, even if you don’t like it.”

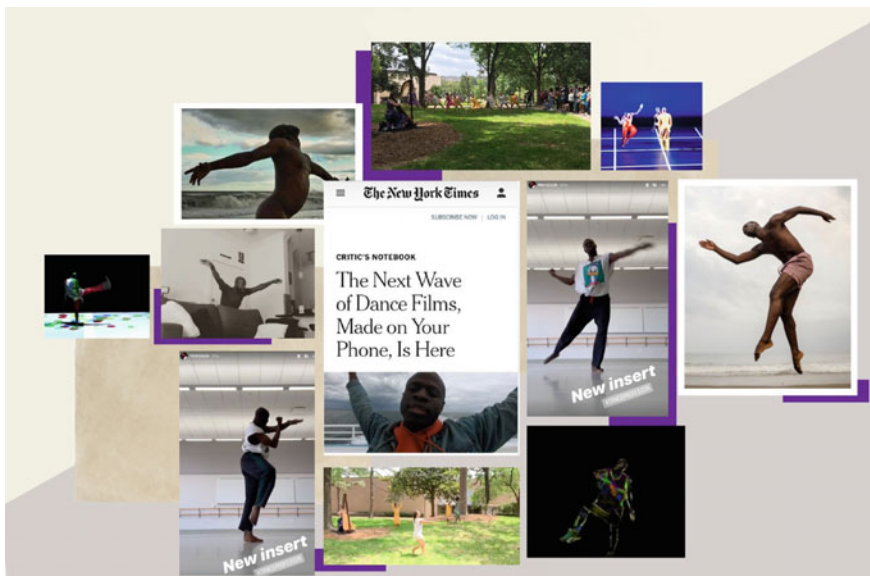


Fig. 2.3 Phil’s dance works

While serving as a full-time faculty member, Jenny also works on her doctoral degree at a research-oriented university in New York City. She commended her Ph.D. supervisor on actively using Canvas (a learning management system), online videos, and Google workspace in teaching. Jenny also teaches courses on utilizing technology to enhance dance teaching for various age groups and levels. She asserted: “These explorations have prepared me with the confidence and hands-on experience to believe [that] effective teaching and learning could be combined with meaningful engagement for both students and instructors.” Likewise, Polly (U.K.), a London-based dancer, choreographer, and producer who has performed and taught dance at reputable conservatoires worldwide, described the transition as straightforward because she had received good technical support from her institution (Figs. 2.4 and 2.5).

Unlike Polly, Tom (Hong Kong) has used a blended model to teach dance since 2015. Typically, in the same class, half the class would attend online while the other half joined in person. The experimental approach initially shocked many students and colleagues. It received good feedback from learners nonetheless. Tom was not teaching this academic year (at the time of writing), but reported that one of his colleagues shared similar approaches during the pandemic. Figures 2.6, 2.7 and 2.8 highlight a blended teaching model in modern dance and ballet classes.

Tom recalled that many students valued the blended model and commented positively on its convenience and accessibility. His blended approach was also used by instructors who taught physical education (PE) and teacher training programs; the majority of students would become PE teachers upon graduation. Tom quoted one of his students who said: “It’s a fun approach, but I don’t see it ever happen in real life.” In 2020 and a good portion of 2021, almost all classes were delivered online.



Fig. 2.4 Polly teaches virtual ballet technique class



Fig. 2.5 Polly demonstrates in a virtual dance class



Fig. 2.6 Tom teaches a blended dance class in 2015



Fig. 2.7 A blended ballet class in 2021—stretching exercise

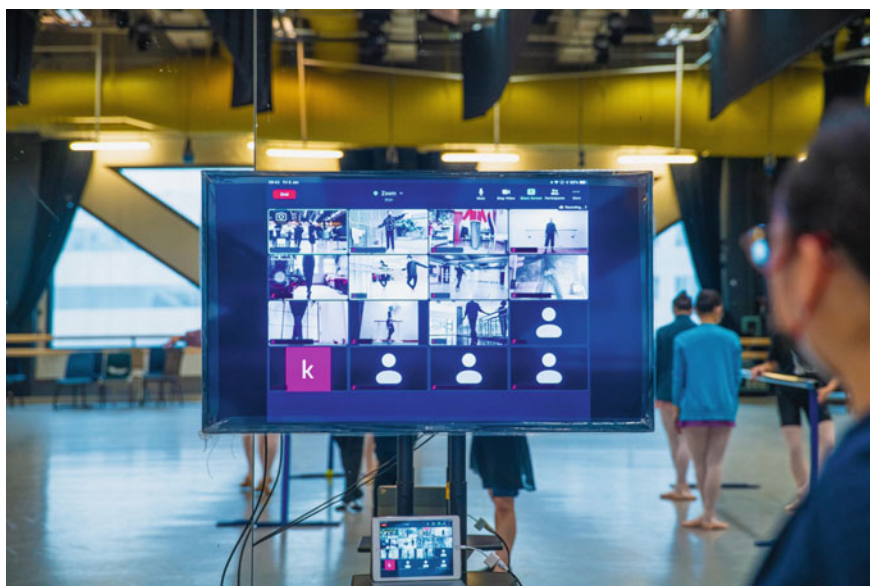


Fig. 2.8 A teacher monitors a barre exercise (online & F2F) during a blended ballet class in 2021

Polly and Tom admitted that the digital skills students learned from virtual teaching might not seem to be relevant to dance students or PE teacher candidates. However, the reality is that the majority of dance students who graduated from their programs would not get into professional dance companies. There is a need for dance students to upskill digital literacy and look beyond dancing professionally. For example, Hong Kong Dance Company recently recruited staff for dance education outreach. In addition to dance training, which is listed as optional, digital media, branding, project creation, and social media skills are some of the must-have prerequisites in the job advertisement. Students who aspire to become independent dancers and studio teachers would also need technical skills in graphic design and digital promotion of their dance projects. Tom added: “Many dance students teach dance in a variety of settings after graduation, the skills such as media creation, promotion, digital marketing, and website design [that] they have learned from taking classes during the pandemic would certainly support their future career development.”

2.6.2 Views on Technology

Dance educators used different tools, applications, and devices to conduct online dance classes, particularly during the initial phase of the pandemic. Such tools and applications shared similarities and each had its own pros and cons. Because of that, several dance educators kept using their preferred video-conferencing tool even after face-to-face classes resumed. Some tools come with geographical restrictions, such as Google Hangouts (Google) and WhatsApp (Facebook), which are prohibited in certain regions. This study has found that dance educators chose their tools based on three factors: compatibility, user-friendliness, pedagogical features. The number of participants (dance students) allowed in a single session was also an important factor of consideration. The researchers have compiled a list of popular video-conferencing tools and applications currently available in the market. These tools and applications (Fig. 2.9) are free with conditions (restrictions regarding length of time or number of participants), which constantly change over time.

The study has also found that the dance educators did not just rely on one device. Instead, they used several of them when teaching dance and consolidated their tools and applications into one toolkit—the innovative use of devices and Apps for different purposes. Such a toolkit usually comprises three features: video-conferencing tool, LMS (learning management system such as Canvas or Moodle), social media App. Each of these devices or apps has its own limitations, but the combination of all three makes online dance teaching effective and engaging: the video-conferencing tool enables online teaching and the LMS is used for assessment and assignment distribution, whereas a social media App (such as WeChat, WhatsApp, or Facebook Messenger) is used for effective communication. A few of the dance educators later confessed that they continued to use these approaches even after their classes returned to face-to-face mode. “It works and my students respond much faster via social media than email,” one said.



Fig. 2.9 Tools and applications

The use of a toolkit is proven to be effective. At the beginning of the pandemic, eight out of the nine dance educators used a variety of different video-conferencing tools and applications. Later, all nine of them switched to Zoom because of its user-friendliness and compatibility with different devices. Among all Zoom features, Breakout Rooms and Polls were rated high. According to Nolan:

[Zoom] was very good as it was relatively direct and easy for the students and myself to enter and manipulate. It was good, in that you could have Breakout Rooms, and rearrange teacher moments via video.

Phil divided his dance students into breakout rooms and encouraged them to share pre-recorded footage, concept, and music with each other. In small groups, these dance students discussed entering and exiting (the screen), transitioning between clips, and the quality of their movements on camera. They also talked about using different devices for capturing images and videos and discussed various factors such as time of shutter/exposure, when to turn on/off camera, camera to move with the bodies and/or dancers to follow the camera. Phil challenged his dancers to fit their bodies into available technologies, in other words, exploring the body and working around and with the technology. “How can you dance with the camera, interact with online viewers, and promote your work virtually?” This was a question that Phil asked his students.

Jenny (U.S.A.) used Breakout Rooms for students to share COVID-19 stories at the beginning of each dance class. Her classes were two hours and thirty minutes long and breakout-room sharing sessions usually took the first five to fifteen minutes. Candy (Canada) and Adrian (Australia) also used Breakout Rooms often for student engagement. Adrian stated:

When using Breakout Rooms, it appears that smaller groups were more constructive. The most satisfying course was working with my MFA student who was working on a Professional Practice Choreographic Performance.

In Repertoire (dance production), a third-year major course for dance students majoring in Fine Arts, Adrian was able to conduct dance rehearsals via Zoom.

Because he had been traveling, Adrian was quarantined while his students were able to return to studios at the university where he worked. He described:

A camera was set up in the dance studio where all the dancers (maintaining social distancing) could be seen by me and they watched me giving them instructions from my apartment. Students worked hard and they asked me direct questions, as if I were in the room.

Adrian's comments were later echoed by similar stories shared by Amanda, Tom, Phil, and Jenny in follow-up interviews. Students would be focused and they would practice diligently as long as the instructions were clear. In some cases, multiple devices were utilized for small-group rehearsals and dance instructors would visit virtual groups (breakout rooms) to monitor their progress. Virtual performances took place and students combined both pre-recorded materials along with live-streamed parts. Students were able to use materials that they had at home or outdoors to enrich their dance performances. In Phil's virtual performance, some dance students moved in front of a piece of green fabric in their own room. With Open Broadcaster Software (OBS) multimedia software, the performance seemed as if it took place on Mars as the green background was replaced with an image of Mars. Phil was able to "clone" some dancers with OBS and achieved the effect of dozens of dancers performing together. The entire process, from discussion of choreography to practice and rehearsal, took place in breakout rooms and was staged virtually on OBS. Phil added that most of the student dance works were filmed on smartphones and were submitted with mobile devices. Phil then created dance series based on submitted dance works from students, which he later shared on Instagram and Facebook. These videos generated tens of thousands of likes.

2.6.3 Looking Ahead

The impact of COVID-19 pandemic still lingers and it continues to cause different waves of concern on various continents. In Spring 2022, the researchers received news from dance teachers in Hong Kong that their institutes had finally reopened after months of shut-down because of the fifth wave of outbreak in the city. Meanwhile, situations were improving as most of the European and North American countries reopened. The pandemic has posed both challenges and opportunities for dance educators to tackle and respond to in the future. Valuable lessons learned from the pandemic could be adapted to post-pandemic dance teaching and learning.

Before the pandemic, dance educators were accustomed to teaching in face-to-face environments. Not all dance educators were comfortable with using various technologies for hybrid or online teaching, especially for practice-based lessons. Some of them admitted that they had experienced a steep learning curve when they had to teach dance online. The challenge was more on the teachers' side and teachers could even develop a feeling of "losing control." Regular face-to-face dance classes, which were usually teacher-centered, subsequently became different virtual learning communities: breakout rooms, exploratory initiatives, and cyberspace collaborations.

There was a breakthrough in terms of where the dance took place, who made dance, with whom students created dance, and how dance was watched, assessed, and shared via social media. All these changes were taking place rapidly within a short period of time. Many dance teachers used words such as “shocked,” “chaotic,” and “lost” when referring to teaching dance online, especially at the beginning when they could not see what their students were doing, where they were going, and what the outcome would be. Nevertheless, students, regardless of their disciplines, were not as pessimistic and many actually benefited from such change in the mode of teaching and learning.

While some dance educators were caught off guard, their students took advantage of technology and pushed dance learning beyond studios and regular stages. The roles of teaching and learning at certain points were swapped as students got used to the new environment quickly and a few of them helped their teachers in transitioning to online teaching. Students took bold steps in creative works and explored new territories and genres. For instance, it was impossible for students to dance on rooftop or in a tunnel, therefore, they chose to use various technologies to capture and animate their dances and eventually share them with friends and families anywhere in the world. They were no longer confined by a studio or a stage. This would not have happened, at least not to this extent, if dance classes were held in a typical physical studio. The pandemic forced everyone to re-examine technology and explore its role in dance teaching and learning. Technology was no longer an additional or optional accessory in dance teaching. It became an enabler and booster in transforming how dance lessons were delivered.

One of the participants, Tom, concluded: “Utilizing technology is like using fire. Fire can cook food and it can burn down a house. We leverage technologies to connect, teach, and inspire others.” This is especially evident in the student- or learner-centered approach, one that several dance educators had to adopt during the pandemic. They had to “let go of control” and had students “sit in the driver’s seat.” Phil worked with others in an interactive technology lab, which processed, coded, and sketched a dancer’s movement. Multiple sensors were attached to the dancer’s body and the camera was equipped with a face tracking feature, that drew with precision a space map on the screen. Phil then applied glitch, loop, and repetition effects on the collected data, the product of which was projected on the stage and then interacted with the moving dancer. It was a complicated project and challenged dancers to respond, reflect, and make decisions on movement, energy, direction, and timing. Such an approach sparked his students’ interest and imagination, forcing them to think beyond just movement and studio space. Phil stated:

Technology is now forever ingrained in our societies. Technologies in some ways have transformed everyone from kindergarten all the way up through college, and so for me, it’s just another something to sort of like pique my creative interest. When we use it well in performance, it’s great. If not, at least it’s another form of expression, or, as we say, integration.

The majority of dance educators in this study confessed that many of their students took the lead in coaching others (teachers and peers alike) on how to use the latest technologies or “older models,” collaborating with each other on various projects,

utilizing various devices to enhance their works, acquiring new skills such as movie editing, and sharing creative projects to a much wider audience base via social media channels. It was evident that when technology was well-used in virtual classes, teaching was enhanced, students were empowered, and learning outcomes, such as reflective thinking, creative works, and performances were improved. Such valuable lessons should not be forgotten or discarded once the face-to-face model is resumed. In fact, insights and strategies developed from teaching during the pandemic should be adapted in the post-pandemic era because they help dance educators move forward with a more dynamic and engaging curriculum.

2.7 Limitations and Conclusion

This study does not claim to have covered all the issues and problems during the pandemic, nor does it claim to have exhaustively examined and discussed effective tools, applications, and pedagogies. The study sample is small and methods used are limited. However, the intention of this study is to share timely lessons and innovative ideas with dance educators across the globe. Researchers find that when technology is well utilized, virtual dance classes can also be interactive, engaging, and productive. Students seem to get ahead in this respect when they leverage technology to connect, innovate, and push boundaries. This student-centered approach with open-minded utilization of technology could be further explored and developed. Dance education continues to evolve, so do the advancement of technology and the way people learn and communicate. Recently, the Beijing Winter Olympic and Paralympic Games live-streamed for the whole world their opening and closing performances as well as their competitions (Ordway & Anderson, 2022), while Paris Opera staged its latest production in Paris for Hong Kong audiences (HK Arts Festival 2022). We are now more receptive to hybrid conferences and streaming events than ever. This study invites educators and institutions to reflect and explore what a desirable future could look like for dancers. By envisioning the roles dancers could play in future dance classrooms, we could imagine their involvement in our society in the year 2030. The landscape of teaching and learning is adapting to the new world. It is time for us to rethink teaching, learning, and research for a changing world of education.

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