



Student Teachers' Views on Developing Practical Online Art Skills During Teaching Practice

Vol 5, 2024



CONTACT: Thelma de Jager- dejagert@tut.ac.za

This work is licensed under a Creative Commons Attribution 4.0 International License.



Official publication of the Unit for Distance Education
Faculty of Education
University of Pretoria
Web address: <https://upjournals.up.ac.za/index.php/tetfle>
Email address: tetflemanager@up.ac.za

Student Teachers' Views on Developing Practical Online Art Skills During Teaching Practice

Thelma de Jager

Tshwane University of Technology, South Africa

Email: dejagert@tut.ac.za

ORCID Identifier: <https://orcid.org/0000-0002-6962-7974>

DOI: 10.35293/tetfle.v5i1.4582

Abstract

Addressing the learning needs of grades 10–12 art students, specifically those students who are vulnerable to exclusion and marginalisation, requires inclusive and innovative approaches when teaching practical art skills online and face-to-face. The aim of the study was to establish student teachers' challenges when teaching practical art online during COVID-19 and to find innovative ideas for addressing such challenges. Qualitative data was collected from art student teachers (n=147) who reflected on their teaching practice experiences and responded to two online open-ended questions. Challenges that student teachers mostly experienced included a lack of in-person teaching, internet connection and data, student-teacher support from mentors and lecturers, not enough practical teaching experience hours, stress, and anxiety. If not addressed, these challenges could have an impact on not only the practical application of art skills but also the development of scarce skills such as creativity and problem-solving skills that are necessary for all citizens to make informed decisions. In addressing these challenges, various innovative online and offline activities were suggested, such as demonstrations posted on WhatsApp groups, peer tutoring, extension of submission dates for practical art activities, creating offline videos for learners to view and work on activities at their own pace, repeat lessons, keeping activities simple, virtual museums, and using natural resources from learners' surroundings to develop practical art skills.

Keywords: Art education, practical skills, online teaching practice, creativity, problem-solving, natural resources



Introduction

Globally, COVID-19 has affected students, lecturers, and educational institutions in transferring from a face-to-face to an online teaching mode (Mailizar, Almanthari, Maulina, and Bruce 2020; Toquero 2020). The rapid spread of the virus contributed to institutions being unprepared to manage the teaching of practical skills effectively. Crawford *et al.* (2020) state that this transformation imposed many challenges on all stakeholders in education, especially in subjects requiring the development of practical skills such as art education. Although various online techniques have been recommended to supplement practical skill development, McPherson and Bacow (2015) point out that from a macro level perspective, the efficacy of online education and the effect on practical skill development has not been investigated. Liguori and Winkler (2020) add that the capacity of effective online teaching for practical subjects varies from educator to educator. Moreover, the socio-economic circumstances of some art students living in rural informal settlements affect their learning because not all of them can afford technology devices and reliable internet connections to attend online classes and apply practical activities online (Zhong 2020). Asmara (2020) notes that students and lecturers prefer to engage and communicate on a WhatsApp platform to find a solution to the challenge experienced with a lack of internet connectivity.

To adapt to the new online learning environment, globally, art teachers have merely transferred content to online platforms with very little training in diverse interactive online teaching methods and strategies and the impact on practical subjects and the skills that these students need to develop (Ahmad *et al.* 2021). This has resulted in art students developing a lack of creativity and lose interest in attending online classes as shown in some studies. The reasons could be that students' diverse learning styles are not always accommodated (Zhong 2020). For example, art students cannot always interact and socialise with their peers in creating a performance as communication is limited regarding the availability of fellow students online. This is problematic as Aliyu, Arasanmi and Ekundayo (2019), allude us that students need social interactions with other student teachers in solving challenges and finding innovative ideas for how to teach practical art online. Students are not always able to interact socially with fellow students, which could contribute to depression and psychological distress in artists (McCarthy, 2020). Additionally, Zhong (2020) raises the concern that art students mostly discuss the content online with the educator and that practical skills are not developed, which contributes to fear and anxiety among students, as they cannot

apply practical skills in activities.

Since institutions must modify their curricula and programmes to reach the same programme objectives and develop prescribed practical skills, teaching art subjects online during a pandemic could be considered as crisis learning (Pace, Pettit and Barker 2020). Recent research studies have investigated the challenges associated with online learning and teaching during pandemics (Mailizar et al. 2020). Mailizar et al. (2020) emphasise the importance of investigating students' perspectives and the possible challenges they experience when learning and teaching practical subjects, while Basilaia and Kvavadze (2020) emphasise exploring effective online learning. In addition, Aglazor (2017) underlines the importance of teaching practice, where student teachers are provided with opportunities to develop effective pedagogical and practical skills while interacting in real-life classroom lessons. In order to engage student teachers in hands-on experiences during this period, guidance and interaction between student teachers and knowledgeable lecturers and school mentors are essential (Izadinia 2016).

Similar challenges in the teaching of practical subjects such as art are experienced in the South African context as they are in other developed and developing countries. Due to limited research studies in how practical subjects such as art can be taught online, the author investigated the development of student teachers' ability to teach practical art skills during the COVID-19 pandemic in their teaching practice schools. Detecting challenges in effective teaching and innovative ideas in how practical art skills could be developed in a multimodal approach is essential. Therefore, the study investigated the challenges student teachers experienced in applying and developing practical online art skills during the COVID-19 pandemic by answering the following open-ended research questions:

- *What are the challenges experienced in teaching practical online art skills during teaching practice?*
- *What innovative online practices can be applied to address the challenges and develop practical art skills?*

Background

The COVID-19 pandemic disrupted art education and training at all levels, given the distinctive art skills that students need to develop. The significance of art education



cannot be ignored. The art curriculum is an activity-based programme where students learn different art skills, the foundational knowledge of art, and appreciation of artworks of diverse cultures (Ahmad et al. 2021). Furthermore, regular evaluation of students' development of practical skills could enhance their independent thinking (Yu and Li 2022) and encourage creative and imaginative thinking (Perignat and Katz-Buonincontro 2019). In both Curtis, Reid, and Ballard (2012) as well as Daigle and Vasseur (2019) it is emphasised that engaging and using natural material from learners' environments in arts activities does not only make it accessible for all learners to develop art skills but also assist them to understand the complexity of nature. In exploring their natural environment and creating innovative art forms, learners could become critical thinkers and problem solvers who are needed to respect and maintain the natural environment.

The South African Creative Arts curriculum in the senior phase (grades 7 to 9) aims to develop creative, expressive, and innovative individuals and to expose students to experiences in drama, music, dance, and visual arts (including crafts and design) (Department of Basic Education 2011). The aim of exposing students to all four art forms is to develop basic art skills in different art forms from which students can select one in Grade 10 in the Further Education and Training Phase (FET) and develop one art form extensively. For example, in studying the dance art form in the senior phase, students are provided with opportunities to learn how to dance and enjoy it, warm up and use their bodies safely, develop fitness for dancing, and develop basic dance skills. All four art forms are integrated in the creative arts curricula and include different skill development and aims that students need to achieve before selecting one of the following art forms as a subject in FET: dance studies, design studies, dramatic arts, music, or visual arts.

Jansen van Vuuren (2018) points out that student teachers and teachers often have limited art skills because of their education by insufficiently trained art educators. To exacerbate the inadequate in-service and pre-service training of art educators, pandemics such as COVID-19 have posed additional challenges that hamper effective art education (Carrillo and Flores 2020). Such challenges include a lack of infrastructure and internet connectivity, the development of practical skills online, digital skills, technology devices, infrastructure, student support, and online training (De Jager and Dondolo 2023). These challenges contribute to pressure, anxiety, and stress so that art students are not actively engaged in their course and are not able to develop and apply

their practical art skills in class or online. Moreover, De Jager and Maserumule (2021) point out that addressing the learning needs of art students, specifically those student teachers who are vulnerable to exclusion and marginalisation, requires inclusive and innovative approaches when teaching practical skills online to provide them with opportunities to develop effective pedagogical skills. If not addressed, these challenges will affect not only the practical application of art skills but could also affect the development of scarce skills such as creativity and problem-solving needed by all citizens for informed decision-making (Yu and Li 2022).

Teaching practice is essential in the teacher training programmes of all institutions where theory is implemented in practice but varies in different countries according to their national education policy. For example, in Nigeria teaching practice is a compulsory course for all final-year student teachers. It runs for one semester from the beginning to the end of the first semester. During this semester, the programme focuses on lesson planning, technology application, and micro-teaching with the assistance of a mentor. Similar to Nigeria, China insists on compulsory teaching practice for final-year student teachers only, consisting of a three-month period. According to Zhao and Zhang (2017), the internship at schools in China is too late in a student-teachers' development of teaching pedagogies and leaves qualified teachers with little experience in what all the different components of teaching practice entail. In the participating South African institution of this study, student teachers are exposed to classroom experiences from the first to the final year of their teacher training programme, which includes six weeks of teaching practice at a functional school annually for four years.

The COVID-19 pandemic showed that adaptations to a remote/multimodal teaching strategy exhibited unexpected challenges and concerns among art student teachers of various countries, as student teachers were not able to visit schools in person and they were not all trained in how to teach and illustrate practical skills effectively online (Abbasi, Ghamoushi, and Zenouzagh 2023; Alenezi et al. 2022). Additionally, Teng and Wu (2021) have stressed the importance of an increased demand for training in developing students' digital literacy and adapting their teaching practice methods to a digital environment. Online video recordings and induction programmes on how to teach effectively could guide arts student teachers in how to confidently apply various strategies in their online lessons and assist them in developing their own innovative ideas when creating arts activities online (Zenouzagh, 2022). Furthermore, Chen, Lai



and Yu (2021) highlight the value of virtual museums that can be utilised as sources for online class activities in art. In addition, Lee (2017) suggests that the repetition of the same online classes could also provide learners with the opportunity to find answers to their questions as not all students can attend the online classes at given times of the day due to a lack of internet connectivity. Apart from teaching online practical art skills and the rapid technological changes that arts teachers have to adapt to, art education is essential for developing a more improved society.

Theoretical framework

Eisner's Curriculum Theory (2004) emphasises that art education teachers should focus on developing skills that will enable students to make judgements, think critically, and make informed decisions in collaboration with other citizens. Thus, teaching practice enables art student teachers to adapt, practice, and apply various strategies that could enable their learners to engage in inquiring processes where they can arrange, categorise, find patterns, compare, critically review, interpret information, and formulate a solution to a problem. In agreement with Eisner's vision, John Dewey emphasises the ability to make informed decisions, effective education, acquiring significant knowledge and developing skills as 'a way to live one's life' that contribute to a better society (Boydston 1971). Dewey's moral life focus characterises democracy in art education where the artist makes art available to everyone and models transformative processes from personal and community experiences that will add value and dignity to citizens' moral conscience. It is crucial for student teachers to be able to create diverse online activities where learners can develop an appreciation and respect for various cultures and use natural resources from their social environment that could contribute to more democratic reflections and expressions in art. Dewey explicitly emphasises the responsibility of people to adapt to change and engage and take responsibility for all actions (Boydston 1971). Thus, art education should inspire students to adapt to changes and demonstrate in a creative way how society can be improved democratically and responsibly. In line with Dewey's theory, student teachers should use art education responsibly to apply innovative strategies according to the challenges that their arts learners might encounter in the social context they are living in. This is essential to remove the fear of online teaching from their learners, and to reflect on their own practices and empower their learners to make decisions

and create innovative practical activities. Related to Dewey's theory, the COVID-19 pandemic demands adaptations in art education and digital literacy, and the provision of equal opportunities for all. Additionally, Eisner (2004) emphasises the importance of art education and the development of practical art skills.

Marshall, Shannon and Love (2020) caution that, during a pandemic, online learning challenges could contribute to the development of social and emotional difficulties and impede effective art education due to a lack of digital skills and technology devices and resources. Therefore, when creating online practical activities, art student teachers should keep in mind Dewey's vision of the importance of developing and illustrating art skills in accordance with the social context of different cultures to support art learners who are encountering social and emotional difficulties.

Method

The study employed a descriptive research design where data was collected employing a literature review and an online questionnaire consisting of open-ended questions to establish student teachers' perceptions of the teaching and learning of practical art skills during pandemics. The literature study was conducted to gather previous research findings on challenges experienced with practical art education online. The online, open-ended questions were used to collect qualitative data about student teachers' perceptions and in-depth experiences within diverse social contexts where they conducted their practical teaching.

Qualitative data was collected, using the perspectives of art student teachers in Further Education and Training (FET), grades 10–12, regarding the development and application of online art practical skills during a pandemic. Art student teachers (n=147) from a university in Pretoria completing their postgraduate certificate in FET education were sampled to complete the online questionnaire. The university is situated in a township of South Africa and most participants were from poor and disadvantaged socioeconomic contexts.

The participating student teachers specialised in different art forms, including dance, music, and visual arts, and conducted six weeks of practical teaching during their first and second years of the two-year course. Both first- and second-year art student teachers were sampled to find an empirical view of what they valued as important in FET art education for adapting to online art practices as future art



teachers. This was because student teachers are a new generation and will be teaching their future students practical art skills during pandemics and in a democratic manner.

Inspired by the theories of Eisner (2004) and Talebi (2015), two open-ended questions were constructed to establish the challenges student teachers experience in teaching practical art skills online during teaching practice, and how they could adapt and create alternative strategies to address these challenges. With these theories as the foundation, the researcher found the questionnaire to be valid and reliable for analysing the qualitative data of this study. The aim of the open-ended questions was to establish student teachers' challenges in online teaching in the development of practical skills in art education by reflecting on their teaching practice experiences and finding innovative ideas to engage their learners in practical online art activities.

Before the research commenced, ethical clearance and permission to conduct the study in the relevant university were acquired from the research committees. The researcher subscribed to ethical principles—namely autonomy, justice, fidelity, openness, and respect for participants' rights and dignity—and adopted important ethical guidelines as set by the institution. The objectives of the study were communicated to all participants and consent forms were e-mailed. The research purpose and potential effects on the participants were explained to them. The participants were informed about what the research was all about and how it would affect them, and it was stipulated that participation was voluntary. In the process of data collection and analysis, I ensured that participants' data remained confidential and anonymous in all respects.

The questionnaire, consisting of open-ended questions, was created on the "Survey Monkey" online application and the link was posted on an online teaching and learning platform where participants could complete the questionnaire anonymously in their own time.

Results

Responses to the research questions were analysed and grouped according to frequently recurring themes. The main issues emanating from the identified themes were compared with previous research studies to identify challenges when teaching online and find innovative practices for how art practical skills could be developed in a multimodal way during a pandemic in South African secondary schools.

Analysis of participants' responses to open-ended questions

Most participants contributed similar responses that were grouped together, using common themes. Edited transcriptions are provided below for the sake of clarity. Themes were extracted from responses to both questions.

All participants (n=147) responded to question one and shared their challenges with online teaching of practical arts skills. Disappointingly, only sixty participants answered the second question and shared innovative ideas for addressing the challenges. The possible reason that not all of them completed question two could be that they did not have innovative ideas that they could share.

Question 1: What are the challenges experienced in teaching practical online art skills during teaching practice?

Lack of in-person teaching

Participants shared how they missed in-person teaching, as indicated in the following direct quotes of some participants:

“Teaching practice is about practical work, it [is] all about gaining experience on what need to be done in class with Art learners during and after class; interaction between teacher and learner should take place, communication is important, hence effective teaching practice cannot be done in an absence of learners because we need learners during TPs and they also need us in order to interact and be able to be determined to achieve our best.”

“I was requested to video record myself while teaching an Art lesson, this was impossible as lecturers could not evaluate my real teaching skills and class management.”

“It is impossible to conduct effective teaching practice while there are no Art learners and it's impossible to evaluate me as a student teacher as we did not conduct lessons in presence of the learners during the COVID-19 pandemic.”

Most of the participants (n=95) felt that they could not develop their own strategies to develop learners' practical art skills in the absence of an interactive class and without the evaluation of their lecturers. Supporting the above, Ahmad et al. (2021) emphasise



that the art curriculum is an interactive programme where learners engage in practical activities to develop diverse art skills and simultaneously develop an appreciation for different artworks and cultures. Student teachers also experienced this when using video recordings of their teaching skills, a lack of in-person teaching, and evaluation by lecturers did not contribute to effective teaching. In this regard, Yu and Li (2022) as well as Perignat and Katz-Buonincontro (2019) emphasise the importance of the evaluation of students in establishing the development of their practical skills that could improve their independent, creative and imaginative thinking skills.

Lack of internet connection and data

The challenge of a lack of data and internet connection was indicated by most of the students (n=129), for instance:

“Online learning and lessons can be used as one method to continue with the learning and teaching of Art, but most learners will be left out from teaching and learning activities as they may not have access to the internet.”

“Many of the learners are from disadvantaged communities and cannot afford data.”

Alarmingly, only eighteen (18) students did not indicate sufficient data and online access as a challenge, which indicates that not all student teachers were always able to teach online.

Participants agreed that most of their learners were from disadvantaged communities and were unable to participate in online teaching and learning due to a lack of internet connections. Zhong (2020) points out that those learners living in informal settlements and rural areas are not able to purchase expensive technology devices and internet data and cannot attend online classes and engage in practical online activities.

Lack of student-teacher support from mentors and lecturers

Most participants (n=78) emphasised their need for extra online support from mentors or lecturers during and after online classes, for example:

“I experienced when completing the lesson plan assignment, the lecturer who was supposed to guide and mentor us, referred us back to a teaching lesson video which costs a lot of data to download. For effective Art teaching and learning to take place, we need a team of lecturers/mentors available to answer our questions during working hours. I really believe that if we have more active mentors/lecturers available online to assist us, even on a chat basis, then we will be able to teach practical art activities effectively.”

Izadinia (2016) emphasises the importance of school mentors that are able to guide student teachers effectively during their teaching practice. In accordance with Dewey’s theory, sufficient support during online teaching is essential to include all students from diverse social contexts and support those who are possibly experiencing emotional challenges (Boydston, 1971).

Less practical teaching experience hours

Student teachers mostly responded that they needed more practical teaching experience to develop not only art skills, but also how to apply these skills in real classroom situations, for example:

“Practical teaching was reduced, which hampered my skill development and experience of real-life classes.”

This is evident in a study by Jansen van Vuuren (2018), who indicates that arts teachers are not always effectively trained and develop limited art skills. In addition, De Jager and Maserumule (2021) highlight the importance of opportunities to develop effective pedagogical skills to teach effectively. Thus, the reduction of teaching practice time could contribute to art student teachers graduating without developing effective teaching skills.

Stress and anxiety

As expected, most participants’ answers reflected concerns such as a lack of data or no access to the internet which contributed to stress and anxiety.



“During the COVID-19 pandemic I found teaching practice extremely stressful, and this caused that I developed anxiety attacks as I did not have sufficient data, access to the internet and did not always know if I was on the right track in compiling my lessons. It was also very difficult to talk with my friends about the fear I am experiencing.”

Moreover, Zhong (2020) is concerned that because they are merely discussing the skills online and not always putting art skills into practice in activities, art students can develop fear and anxiety as they are unable to apply online practical art skills in their lessons. McCarthy (2020) adds that students are social beings and if they are unable to interact with their peers online, this could contribute to other psychological effects such as depression, which could hamper student teachers’ progress in their Arts courses.

The results showed that the most common challenges experienced by student teachers were that they required more teaching practice time in class, and extra support from competent mentors and lecturers during the COVID-19 pandemic, and that many of them had insufficient data and internet access which contributed to the development of anxiety and stress.

Some felt that teaching practice was too short, and lecturers’ assessments were not sufficient to guide them in conducting effective classroom practices. These reflections align with Aglazor (2017) who emphasises the importance of teaching practice where student teachers can develop pedagogical and practical skills in a classroom. During this period, guidance and interaction between student teachers and knowledgeable lecturers and school mentors are essential in engaging student teachers in hands-on experiences. However, Jansen van Vuuren (2018) cautions that mentors are often not effectively trained in how to teach the different art forms and will therefore not be able to support and guide student teachers effectively during teaching practice.

To find innovative solutions to conduct online practical art lessons during teaching practice, the following question was posed to all participants:

Question 2: What innovative online practices can be applied to address the challenges and develop practical art skills?

Online and offline learning

From the responses it seems as if innovative practices assisted to overcome challenges. Participants also suggested some others:

“... Assign activities and communicate with learners during teaching practice in using WhatsApp groups.”

“We can also make short, structured videos, demonstrating practical Art skills such as dance moves, drawing, painting and designing and then post on WhatsApp groups, because some of the learners do have data and it is a cheaper option.”

“Create offline demonstration videos which learners can view in their spare time.”

“Teach learners about new technologies that they could use to complete their art activities. Use, for example, Google Classroom to encourage student participation.”

“Decide on one online platform for lessons, either Zoom or Teams (avoid confusion) to teach learners practical skills and repeat these lessons as often as possible to ensure all are able to attend, even if they attend in groups on one device.”

Most of the participants requested communication using WhatsApp groups. Asmara (2020) points out that WhatsApp communication is valuable in the sense that students can contact their lecturers or peers at any time of the day to clarify unclear concepts. It also makes it easier for lecturers to communicate with their students.

Participants felt that only one platform for lesson activities should be selected to avoid confusing the learners and repeat the lessons as often as required by learners. In agreement with Lee (2017), online learning provides learners with the opportunity to find answers to their questions by engaging in lectures that are consistently repeated to ensure all students stay on track. Not all students are able to attend the online classes at given times due to a lack of data.

Peer group learning

Students as social human beings are influenced by their interactions with other student teachers who can assist them in finding the best ideas for how to teach practical art online (Aliyu et al., 2019). Some suggestions were made by participants:



“... create groups for student teachers where they can share ideas on how to conduct practical art lessons”.

“... provide channels on television where learners could view and observe extra practical classes in Art activities”.

Practical lessons demonstrated by various arts teachers on television programmes, could assist students in adapting their teaching strategies to the social context in which they are teaching.

Extend submission dates of practical art activities, repeat lessons and keep activities simple

Participants required short and simple activities on which they could work at their own pace with the resources at hand.

“Learners should be able to complete assignments at their own pace and according to availability of resources. They need extra time to submit their Art practical work.”

“Lesson activities should be short and simple for all to understand as they do not have a teacher in class to support them always during a pandemic. Learners should be given enough time to complete the task.”

“I’ll keep on repeating the same topic before starting another one as many do not attend classes during the pandemic.”

They also indicated that they needed extra time to submit their class activities and needed lessons to be repeated online consistently as they were not always able to log into the digital platform when lessons were presented.

Practical art activities

Some suggestions were made with regard to practical art activities:

“... Virtual Art museums could be used to teach the history and practical lessons to learners. Send the website URL to all learners.”

“Allow learners to select their own activities from diverse but simple activities

created on a choice board.”

Students could visit online virtual museums to gain a better understanding of diverse cultures’ art histories and lesson strategies that they employ in artworks, dances, and drama classes. Virtual museums can also be utilised as art sources in assignments (Chen et al. 2021).

Choice boards are valuable for assisting students to select their own online teaching and learning strategies for diverse lesson activities.

Connect nature to practical art activities

The importance of connecting nature to practical art activities was mentioned by some participants

“... learners can select items from their natural surroundings to create a colour wheel. They can search their homes to find the different colours and paste it on the wheel.”

“... learners can search for natural materials and compose a picture using different shapes.”

“They can make their own paint with coffee, tea, spices, fruits, mud and others and paint a theme.”

“... they can use different cardboards, magazines and papers they find in their homes to create a collage.”

“... let them make wire sculptures, from old wire hangers.”

“... let them create their own traditional dances and songs and video record their moves step by step for the educator to assess.”

“... I will take pictures of the Art form I am teaching, by sending pictures step by step so that they can easily download it from the WhatsApp group.”

Integrating art activities in nature not only contributes to an awareness of the complexity of nature but also contributes to the development of creative and problem-solving skills that a sustainable society requires (Curtis et al. 2012; Daigle and Vasseur 2019). Thus, learners not only develop art skills but also problem-solving and critical thinking skills.



Disappointingly, not all participants completed question two. Nevertheless, interesting ideas were accumulated from the 60 responses. The innovative ideas suggested by participants to enable learners to complete practical art activities included the creation of WhatsApp groups to post videos and demonstrations and to communicate, creating diverse art activities, short offline video recordings, television programmes where practical art demonstrations or lessons could be viewed, visiting virtual museums and completing art activities using natural resources from students' surroundings. According to Zenouzagh (2022), online video recordings during teaching practice and online induction video programmes that demonstrate effective teaching strategies could provide students with more clarity and confidence when applying their own innovative strategies in art classes.

Most of the innovative ideas adhered to Dewey's philosophy that learners should be empowered from their own experiences in the social context they grow up in to adapt and create from their natural environment (Boydston 1971). Thus, using natural elements from their surroundings and environment could assist them in developing the required art skills in a disadvantaged community.

Discussion

COVID-19 was experienced as a stressful learning and adjustment curve for arts student teachers, lecturers, and educational institutions in teaching practical arts skills (Marshall *et al.*, 2020). What contributed to the ill-prepared teaching and learning of practical art skills during teaching practice was the poor socioeconomic status of most of the arts student teachers and their learners who lived in rural areas with little or no access to internet or data (Zhong 2020) and lack of sufficient training in the application of digital skills (Teng & Wu 2021). Moreover, student teachers who were able to create online classes felt their learners could not always attend their lessons where practical art skills were taught. This runs counter to the theory of Eisner (2004), who emphasises the importance of the development of practical arts skills.

Student teachers need to develop effective pedagogical skills when teaching art and require more teaching experience in face-to-face classes to gain experience in the management of art classes. Zhao and Zhang (2017) concur that sufficient teaching practice experience is important for student teachers to gain sufficient practical experiences where theory can be implemented in practice.

Moreover, participants felt that they were not properly assessed, guided, and supported by knowledgeable lecturers and mentors. Their experiences are in alignment with Aglazor (2017), who accentuates the creation of opportunities for active participation of student teachers in face-to-face classes where they are assisted by mentors and lecturers to develop effective pedagogical practices. However, Jansen van Vuuren (2018) warns that it is often found that art educators themselves have limited art skills and are not always able to teach their student teachers the art skills they require.

Participants indicated that most of their learners were from disadvantaged communities and were unable to attend their online classes during teaching practice due to a lack of sufficient data and internet connection. Zhong (2020) warns that the socioeconomic status of art students affects their ability to attend online classes due to a lack of access to technology and data. This contributed to student teachers' experiences of stress and anxiety as they could not always connect to the internet and did not always know whether they were on the right track when conducting their practical lessons. McCarthy (2020) mentions that a lack of social interaction with their peers could cause psychological agony in students.

The value of the development of practical art skills cannot be ignored as art skills not only enable students to think independently (Yu and Li 2022), but encourage creative thinking and problem-solving (Perignat and Katz-Buonincontro 2019). In finding solutions to address the challenges and to create innovative online practical lessons where the art learners can engage actively with student teachers and develop practical art skills the following ideas were suggested by participants: (1) create WhatsApp groups where student teachers could communicate with their learners and post short video clips or demonstrate specific art skills; (2) create offline videos so that learners can view the art lessons on their own time and at their own pace without having to use data; (3) teach learners how to use technology to complete art activities (Google Classroom); (4) to avoid confusion, decide on using either Zoom or Teams as a teaching and learning platform when teaching arts; (5) encourage peer-group learning where student teachers can assist each other; (6) refer to a channel on television where practical art skills are demonstrated; (7) keep practical activities short and simple and extend the submission dates of these activities; (8) repeat the same topic as often as required by learners as not all learners attend all the online classes; (9) send a website URL for learners to use virtual art museums that could



support art culture and history; (10) use choice boards where learners can select from diverse activities; (11) connect practical art activities to nature and the surroundings of learners—learners could select coloured leaves, flowers, magazines, cloths to build a colour wheel and natural materials to compose different shapes; when developing painting skills they can use teabags, coffee, spices, fruits, and mud as colours to paint a picture; a variety of cardboard holders, magazines, and items can be used to create a collage; create a wire sculpture from old wire hangers found in their homes; (12) compose traditional songs and dances and video record these activities for lecturers to assess. The innovative ideas concur with Dewey's theory (Boydston, 1971) that student teachers should be able to adapt and create diverse online activities using their own cultural activities and resources from their natural environment, so that art learners can respect and engage in the art skills of diverse cultures.

Recommendations

Deriving from the research findings in supporting the development of art student teachers' pedagogical skills during teaching practice, the following is suggested:

- Mentors and lecturers should be well-trained, knowledgeable, and available to assist student teachers in the development of their art pedagogical skills and to guide them during teaching practice.
- Student-teachers require learning more about how to create diverse online practical art activities to accommodate the diverse learning styles and social contexts of their learners.
- Student teachers should be able to design activities where learners can use their natural surroundings as resources to complete a practical art activity.

The limitation of the study was that the focus is on a single previously disadvantaged institution and does not include the entire country's post-graduate student teachers' experiences in conducting online classes in practical art during the pandemic. In addition, the fact that not all participants were able to complete the second question where they had to share innovative ideas on how to develop practical art skills online, showed a possible lack of future art teachers' creative thinking skills.

Conclusion

The importance of art education in a democratic society and the challenges teachers experience in teaching practical art skills online require more teaching practice time in class, extra support from mentors and lecturers during a pandemic, sufficient training in digital skills, and the provision of technology resources. Most student teachers had insufficient data and internet access, which contributed to the development of anxiety and stress. Practical teaching experience is limited to twelve weeks over a two-year period and could be insufficient to effectively develop postgraduate FET student teachers specialising in a specific art skill. Often lecturers themselves are not effectively trained in the various forms of art to guide and assist students in developing specific art skills effectively. During a pandemic, online practical classes can be effectively conducted if short, diverse activities are created where learners can use their surroundings to collect shapes, colours, and objects to complete a visual art activity and their culture to compose traditional songs and dances which they can video record in short clips and submit for assessment. The time limit to submit practical activities should be extended to allow sufficient time to complete practical art activities.

Acknowledgement

The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the NRF

References

- Abbasi, M., Ghamoushi, M., and Zenouzagh, M.Z. (2023). EFL learners' engagement in online learning context: development and validation of potential measurement inventory. *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-023-00993-0>
- Aglazor, G. (2017). The role of teaching practice in teacher education programmes: designing framework for best practice. *Global Journal of Educational Research*, 16: 101-110. doi:<http://dx.doi.org/10.4314/gjedr.v16i2.4>



- Ahmad, D.N., Astriani, M.M., Alfahnum, M., and Setyowati, L. (2021). Increasing creative thinking of students by learning organization with STEAM education. *Jurnal Pendidikan IPA Indonesia*, 10: 103-110. doi:10.15294/jpii.v10i1.27146
- Alenezi, E., Alfadley, A.A., Alenezi, D.F., and Alenezi, Y.H. (2022). The sudden shift to distance learning: Challenges facing teachers. *Journal of Education and Learning*, 11: 14-26. <https://files.eric.ed.gov/fulltext/EJ1345999.pdf>
- Aliyu, O.A., Arasanmi, C., and Ekundayo, S. (2019). Do demographic characteristics moderate the acceptance and use of the Moodle learning system among business students? *International Journal of Education and Development using Information and Communication Technology*, 15: 165-178. <https://www.learntechlib.org/p/209741/>
- Asmara, R. (2020). Teaching English in a virtual classroom using WhatsApp during COVID-19 pandemic. *Language and Education Journal*, 5(1): 16-27. <https://doi.org/10.52237/lej.v5i1.152>
- Basilaia, G. and Kavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5: 1-9. <https://files.eric.ed.gov/fulltext/EJ1263561.pdf>
- Boydston, J.A. (1971). Reviewed work: Guide to the works of John Dewey. *Philosophy and Phenomenological Research*: 32(2), 285-286. <https://doi.org/10.2307/2105968>
- Carrillo, C. and Flores, M.A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4): 466-487. <https://doi.org/10.1080/02619768.2020.1821184>
- Chen T-L, Lai W-C, and Yu T-K. (2021). Participating in online museum communities: An empirical study of Taiwan's undergraduate students. *Frontiers in Psychology*, 11: 1-17. doi:10.3389/fpsyg.2020.565075
- Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P.A., and Lam, S.M.S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 9-28. <https://doi.org/10.37074/jalt.2020.3.1.7>
- Curtis, D.J., Reid, N., and Ballard, G. (2012). Communicating ecology through art: What scientists think. *Ecology and Society*, 17(2): 3. <https://doi.org/10.5751/ES-04670-170203>
- Daigle, C. and Vasseur, L. (2019). Is it time to shift our environmental thinking? A perspective on barriers and opportunities to change. *Sustainability*, 11(18): 5010-5017. <https://doi.org/10.3390/su11185010>

- De Jager, T., and Dondolo, B. (2023). Student-teachers' evaluations of differentiated online teaching and learning strategies. *International Journal of Assessment & Evaluation*, 30(1): 33-49. doi.org/10.18848/2327-7920/CGP/v30i01/33-49
- De Jager, T. and Maserumule, M.H. (2021). Online learning is an opportunity to meet the needs of struggling students. *The Conversation*. <https://theconversation.com/online-learning-is-an-opportunity-to-meet-the-needs-of-struggling-students-156004>
- Department of Basic Education. (2011). *Curriculum and assessment policy statement: Senior phase grades 7-9*. <https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20SP%20%20CREATIVE%20ARTS%20GR%207-9%20%20web.pdf?ver=2015-01-27-160105-653>
- Eisner, E. (2004). Preparing for today and tomorrow. *Educational Leadership*, 61(4): 6-10. <https://www.ascd.org/el/articles/preparing-for-today-and-tomorrow>.
- Izadinia, M. (2016). Student teachers' and mentor teachers' perceptions and expectations of a mentoring relationship: Do they match or clash? *Professional Development in Education*, 42(3): 387-402. doi:10.1080/19415257.2014.994136
- Jansen van Vuuren, E.N. (2018). Art across the curriculum as a pedagogic ally for primary school teachers. *South African Journal of Childhood Education*, 8(1): 1-10. doi.org/10.4102/sajce.V8i1.477
- Lee, K. (2017). Rethinking the accessibility of online higher education: A historical review. *The Internet and Higher Education*, 33(1): 15-23. <http://dx.doi.org/10.1016/j.iheduc.2017.01.001>
- Liguori, E. and Winkler, C. (2020). From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic. *Entrepreneurship Education and Pedagogy*, 3(4): 346-351. doi.org/10.1177/2515127420916738
- Mailizar, A., Almanthari, A., Maulina, S., and Bruce, S. (2020). Secondary school mathematics teachers' views on e-learning Implementation barriers during the COVID-19 pandemic: the case of Indonesia. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7): 1-9. doi.org/10.29333/ejmste/8240
- Marshall, D.T., Shannon, D.M., and Love, S.M. (2020). How teachers experienced the COVID-19 transition to remote instruction. *Phi Delta Kappan*, 102(3): 46-50. doi.org/10.1177/0031721720970702
- McCarthy, K. (2020, March 7). The global impact of coronavirus on education.



- ABC News. <https://abcnews.go.com/International/global-impact-coronaviruseducation/story>
- McPherson, M.S. and Bacow, L. S. (2015). Online higher education: Beyond the hype cycle. *The Journal of Economic Perspectives*, 29(4): 135–153. doi:10.1257/jep.29.4.135
- Pace, C., Pettit, S.K., and Barker, K. S. (2020). Best practices in middle level quartan teaching: Strategies, tips and resources amidst COVID-19. *Becoming: Journal of the Georgia Association for Middle Level Education*, 31(1): 2-11. doi:10.20429/becoming.2020.310102
- Perignat, E. and Katz-Buonincontro, J. (2019). STEAM in practice and research: an integrative literature review. *Think. Skills Create*, 31: 31-43. doi.org/10.1016/j.tsc.2018.10.002
- Talebi, K. (2015). John Dewey – philosopher and educational reformer. *European Journal of Education Studies*, 1(1): 1-13. <https://files.eric.ed.gov/fulltext/ED564712.pdf>
- Teng, M.F. and Wu, J.G. (2021). Tea or tears: Online teaching during the COVID-19 pandemic. *Journal of Education for Teaching*, 47(2): 290-292. doi:10.1080/02607476.2021.1886834
- Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research*, 5(4): 33-48. doi.org/10.29333/pr/7947
- Yu, L. and Li, Y. (2022). A study of practical drawing skills and knowledge transferable skills of children based on STEAM education. *Frontiers in Psychology*, 13: 1-14. doi:10.3389/fpsyg.2022.1001521
- Zenouzagh, M. Z. (2022). The effect of professional teaching videos induction and online focused group discussion on the development of teacher competences. *Educational Research for Policy and Practice*, 21(3): 465-488. doi:10.1007/s10671-022-09318-z
- Zhao, H. and Zhang, X. (2017). The influence of field teaching practice on pre-service teachers' professional identity: A mixed methods study. *Frontiers in Psychology*, 8: 1264-1272. doi.org/10.3389/fpsyg.2017.01264
- Zhong, R. (2020, March 17). The coronavirus exposes education's digital divide. *The New York Times*. <https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html>