

TEACHING PRACTICE FOR RESILIENCE DURING COVID -19 AT A HIGHER EDUCATION INSTITUTION

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Abstract

This article focuses on student resilience at a university that trains pre-service teachers. The compulsory practical component is a fundamental that students need to complete for both the Bachelor of Education (B Ed) and Postgraduate Certificate in Education (PGCE) courses. Known as teaching practice or work integrated learning (WIL), pre-service teachers attend schools for a limited period in order to learn skills and competencies from a mentor teacher who is assigned to them. The article foregrounds student resilience and resistance to adversity at a time when it seemed impossible for students to complete their school-based teaching practicum. Schools throughout South Africa were closed and re-opened intermittently, due to the waves of infection in different areas. This made it impossible for pre-service teachers to complete their teaching practice within a continuous period at schools. Within this context, the writer set out to explore how pre-service students' resilience was achieved at one university by using the online teaching practice programme in 2021, during the Covid-19 pandemic. This qualitative article is situated in the interpretivist paradigm and utilises document analysis as its research method. The content and procedures found in the students' online teaching-practice handbooks was analysed to show how its implementation contributed to the resilience of pre-service student teachers. The research question is, therefore: How was pre-service students' resilience achieved at one university through the use of an online teaching practice program, during the period of the pandemic in 2021.

The key findings revealed that the online teaching practice program enabled pre-service teachers to complete their teaching practice component, even though it did not meet the Minimum Requirements for the Teacher Education Qualification (MRTEQ) in South Africa. The study concluded that there was a positive adaptation of teaching practice with the use of the online program, because all the students who registered for teaching experience completed the module. It also enabled final-year students to complete their practicum and qualify at the end of 2021. The success of the program suggests that the Council for Higher Education (CHE) reviews and updates the MRTEQ, making the teaching practice requirements applicable to 4IR, so that technology can be used legitimately when training teachers during future pandemics and other difficult circumstances.

Keywords: Covid -19; Online Teaching Experience; Resilience; Pre-Service Teachers

Introduction and Background

This qualitative article presents the main factors that contributed to pre-service student teachers' resilience during the Covid-19 pandemic. The Corona virus had a massive impact on all aspects of life, internationally, during 2020. One of these aspects was the inability of pre-service teachers to complete their practical, school-based teaching component.

The National Policy for teacher education (MRTEQ) require pre-service students in initial teacher education programmes to complete a total of twenty-four weeks of school-based teaching practice over a four-year period for the Bachelor of Education degree, and between ten and twelve weeks of teaching practice for the one-year PGCE program (MRTEQ, 2015; Rusznyak & Robinson, 2020). During the school-based teaching practice, every student is under the supervision of a mentor teacher. Students observe teaching, prepare and teach lessons and take on the role of a junior member of staff (Rusznyak & Robinson, 2020). Teaching practice prepares the student for their final, school-based teaching practice evaluation, conducted by both their mentor teachers and university supervisors.

When countries around the world went on lockdown due to the Covid-19 pandemic, only people in essential service jobs were allowed to travel to their places of work (Merisi, Emekako, Legg-Jack, Mpundu, Lubombo, 2022). This restriction led to student confinement within their university residences or their homes (Sarmiento, Ponce & Bertolin, 2021). This meant that pre-service students did not have access to schools to complete their compulsory school-based teaching practice, and those in their final year of study were not be able to graduate at the end of 2021. From a policy perspective, non-completion of teaching practice meant that students would not have met the Minimum Requirements for Teacher Education Qualifications (MRTEQ) and would therefore not qualify as teachers (MRTEQ, 2015).

This added to the depression and sense of adversity that the pre-service students experienced; the uncertainty around the different types of Covid-19 and the physical isolation associated with them had an adverse effect on the students' socio-emotional, physical and mental state (Sarmiento *et al.*, 2021; Bruinsma, Tigelaar, Rijswijk & Jansen, 2022). Isolation, quarantine and social distancing were vital to prevent the spread of the disease, but the solitude and separation enhanced students' levels of anxiety and stress (Lanranjeira, Dixe, Valentim, Charepe & Querido, 2022). Pre-service teachers had to learn to cope with not having access to teacher education programs or to schools (Bruinsma *et al.*, 2022). Their increased stress levels impacted negatively on their inability to complete their teaching program (Rots *et al.*, 2014 cited in Bruinsma *et al.*, 2022).

When students are faced with such difficulties, resilience is of paramount importance.

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To encourage students' resilience during that time, as well as to provide a means of assessment, the teaching experience office developed a special online teaching practice program.

The purpose of this article is to report on how pre-service teachers were resilient in participating in an online teaching practice program during the Covid-19 pandemic and completed their teaching practice in 2021. The writer analysed the online teaching practice program, noting how it was aligned to the face-to-face teaching practice program and how it contributed to students' resilience during their teaching practice in 2021. The article is based on the lived experience of the writer, and recounts how the inquiry-based online program of Bybee (2009) was used as part of a pre-service teaching practice program. The inquiry-based program followed the pattern of engagement, explanation and evaluation when students had to develop their lesson plans. The online program was analysed to show its successful implementation, which supported student resilience.

Research Question

Given the problem statement above, the main research question is:

“How did the online teaching practice program implemented at a higher education institution during the Covid–19 pandemic, ensure student resilience?”

Research Aim and Objectives

The aim of this study was to examine how student resilience was promoted during teaching practice which occurred during Covid-19 at a higher education institution.

The following objectives are pursuant to this aim:

- a) To demonstrate how an online program contributed to student resilience during Covid -19
- b) To examine the similarities of the teaching practice program when compared to a school-based teaching practice.

Significance of the Study

This article presents an alternative teaching practice program to the standard school-based teaching practice that promotes student resilience. Since the main focus of the article is to demonstrate how the online program embraced teaching practice during Covid-19, for students' resilience. It will assist policy-makers to include alternative methods of teaching practice in the MRTEQ (2015).

Literature Review

A Definition of Resilience and its Application to the Study

Resilience is the ability to recover quickly from difficulties (Oxford Dictionary). In line with this, Bruinsma *et al.* (2022) assert that resilience involves recovering after challenging and difficult situations. During teaching practice, students were able to recover from the emotional stress of not knowing how they were going to qualify without completing the teaching practice component of their courses. The online teaching practice program reinforced student success, despite the adverse conditions that students were experiencing. It provided an opportunity for students to recover lost ground through the completion of the tasks provided. For the teaching experience office, student resilience was achieved when most students “bounced back” from the adverse circumstances they were in by completing the online teaching practice program.

Consequently, in the social sciences, Diaz, Prados, Canos & Martinez (2020) view resilience as a reconstruct of academic achievement in difficult contexts. In line with this definition, student resilience was achieved through the reconstruction of the teaching practice program from school-based to an online mode during the difficult context of Covid-19. The use of students’ technical skills reinforced the “in practice” that MRTEQ (2015) makes reference to when they had to use the various online applications to deliver their lessons. However, the views of Diaz *et al.* (2020) can be refuted in instances where students were in difficult settings such as remote areas, and were at a disadvantage due to lack of connectivity. This meant that it brought about additional distress for some pre-service teachers.

In contrast to Diaz *et al.* (2020), Morrison and Allen (2009) expand on the idea of student resilience to include social and academic competence, problem-solving skills, autonomy and sense of purpose (Waxman, Gray & Padron, 2003). In line with Morrison and Allen’s (2009) definition of resilience, the completion of the online program assisted students in their teaching competence. Students were able to teach online using the theoretical skills for promoting teacher competency, included in the *Becoming a teacher* and *Being a teacher* courses that were taught when face-to-face teaching was still possible at the university. It also gave them a sense of purpose to know that they were afforded an opportunity to complete their teaching practice and be awarded their qualifications on schedule.

The online program assisted pre-service teachers in overcoming the ingrained anxiety that they experienced during the pandemic. The completion of the online teaching practice program gave students a sense of purpose and increased their ability to cope, develop and use new teaching strategies.

A further refinement and exploration of the definition of resilience is proposed by Vanistendael (2002) and Cyrulnick (2002) as “a person’s ability to resist possible psychological trauma caused by a problematic and harmful environment”. This definition further encapsulates the previous definitions of how student’s psychological distress was overturned when their internal drive to complete their teaching practice took over. From a teaching practice perspective, it is the ability of the teaching experience office to adapt the teaching practice program so that it avoids difficult situations and non-completion of a course so that students are able to qualify.

In defining the concept of resilience, one is led to question how the national policy on teaching practice, MRTEQ (2015) makes a space for resilience. The guidelines provided to universities in the policy on teaching practice is based on knowledge and practice in schools, but there is no in-depth reference as to *how* teaching practice should actually occur.

Teaching Practice according to MRTEQ

In South Africa, the policy on Minimum Requirements for Teacher Education Qualifications (MRTEQ, 2015) outlines the core curricula for initial teacher education, which leads to teaching qualifications. The complexities of teaching derive from the integration of different types of knowledge practices and learning. Teaching is the infusion of the different bodies of knowledge (Rusznayak, 2020) applied to the moment of practice. MRTEQ refers to this as integrated and applied knowledge.

Competent teachers need to have content knowledge, must be able to reflect on teaching and find a synthesis that emphasises “what is to be learnt and how it is learnt” (MRTEQ, 2015: 9). A renewed emphasis on what and how occurs when pre-service teachers are in actual classrooms (Gravett & Jiyane, 2019). Students’ practical teaching is further enhanced when they observe their mentor teachers modelling lessons to them. The definitions of teaching practice and teaching in MRTEQ (2015) refer to school-based teaching only.

MRTEQ (2015) stipulates five types of learning that are associated with the attainment, amalgamation and application of knowledge for the purpose of teaching. The five types are: disciplinary learning, pedagogical learning, fundamental learning, situational learning and practical learning. None of them include student teacher resilience as an important component.

The focus of this article is on practical learning, which refers to the learning of teaching skills, both from practice and in practice. MRTEQ, (2015), divides practical learning into two distinct parts:

- 1. Learning from practice**, which occurs when students analyse different practices in diverse contexts. These include analysis of case studies, video recordings and lesson observations that help trainee teachers to theorise learning in practice.

When students learn from practice, they need to observe their mentor teachers teach a few lessons. This can be done, not only as school-based teaching practice, but also when students are involved in watching videos of others teaching.

- 2. Learning in practice** occurs when students are placed in classrooms or teach in simulated classroom environments: what is generally known as teaching practice or work integrated learning (WIL). It includes aspects of learning from practice, such as observing and reflecting on how others teach, as well as learning to teach in practice, by preparing lessons, delivering them and reflecting on ones performance (MRTEQ, 2015).

Both learning from practice and learning in practice are fundamental to all initial teacher education programs and must be incorporated into the other three components of learning (MRTEQ, 2015). Learning from and in practice does not prescribe the specific activities that students need to engage in; it therefore leaves out teaching practice activities that can be completed online.

Online Teaching versus School-Based Teaching Practice

Online (or remote) teaching and learning uses digital tools for these activities. During online teaching and learning, students are physically distant from the lecturers (Hermida, 2020). The teacher-student engagement is mediated through the use of technology (Hermida, 2020) and web-based learning management systems (LMS) such as Canvas (Arroyo, Quin, Paretti & Grove, 2022). Some universities, in South Africa and worldwide, have used the web-based LMS method prior to the pandemic. For example, the University of Washington in the United States, the University of Birmingham in the UK, Temple University in Japan, the American University in Nigeria and the University of the Witwatersrand, all use Canvas or Blackboard Collaborate (Tekel, Bayir, Dulay, 2022) as their online teaching and learning systems. In relation to student resilience, online teaching became the key mode of teaching for content knowledge courses. However, this method was not used for the practical components such as teaching practice.

During school-based teaching practice, pre-service teachers are required to be physically present at schools (Bruinsma *et al.*, 2022; MRTEQ, 2015) in order to gain real classroom experience or “practical learning” (MRTEQ, 2015), through the classroom supervision of mentor teachers, who assist the pre-service teachers with planning and preparing lessons (Rusznyak, 2020), assist with developing teaching resources and assess student teachers when they teach (Gravett & Jiyane, 2019; Robinson & Rusznyak, 2020), providing them with feedback on lesson presentation and guiding them on classroom management (Gravett & Jiyane, 2019).

For the duration of teaching practice, pre-service teachers become part of the school staff and participate in the real-life activities of the school (Robinson & Rusznyak, 2020), such as sports and culture.

Student teachers also participate in in-service learning and in planning and implementing projects that will benefit the school (Gravett & Jiyane, 2019). None of this is possible online (Hill, 2021). However, since practical learning involves knowledge gained from observing the teaching of others (Rusznyak 2015; MRTEQ, 2015), the online platform satisfies the observing and teaching requirement of MRTEQ policy for pre-service teachers.

Challenges of Online Teaching

Morrison and Sepulveda (2020) identify a number of challenges presented by online teaching practice. Firstly, it does not provide students with the opportunity to demonstrate the combination of theory into practice in the real work environment. Secondly, there is a lack of direct interaction with school learners. This is what Morrison and Sepulveda (2020) call “lack of live teaching experience”. Thirdly, there is a lack of interaction between the university, school and students in the learning cycle. This lack of face-to-face interaction with classmates results in anxiety, poor motivation and low student participation (Morrison and Sepulveda, 2020).

Karkar-Esperat, 2018; Legg-Jack, 2020; and Martin *et al.* (2020) expand the challenges to include lack of opportunity for some students to practise what they have learnt. They observed that students received ineffective guidance to the delivery of technical training; there was a lack of prompt feedback from peers and a lack of clarity of concepts, as well as unpreparedness on the part of instructors (Karkar-Esperat, 2018; Legg-Jack, 2020; Obasa *et al.*, 2013).

Benefits of Online Teaching Practice

Jin (2022) asserts that, due to its convenience, online teaching created educational opportunities in terms of time, place, pace of learning and financial costs, for pre-service teachers to continue interacting with children (Hill, 2021) specifically during Covid-19 (Khurana, 2016). Costley (2014) suggests that technology causes students to be more engaged; thus, students often retain more of the information obtained remotely. Because new technologies are spreading rapidly on a global scale, technology is particularly relevant to pre-service students in enabling them to complete their teaching practice. Technology provides meaningful learning experiences as well as hands-on learning opportunities that can be integrated into all areas of school curricula. It provides students with opportunities to collaborate with and learn from their peers. These factors combined can lead to a positive impact on student learning and motivation and student resilience (Costley, 2014). The benefits of using technology for teaching practice promoted student resilience, as it gave them an opportunity to complete their teaching practice time (Costley, 2014).

Using Digital Tools to Teach Online

According to Arroyo, Quin, Paretti & Grove (2022) the use of digital tools for the online method of teaching and student interaction includes Zoom, Teams, video-conferencing, discussion boards, WhatsApp and the formal learning management systems (LMS) of the university (Maree,2021; Merisi *et al.* 2022). The use of digital tools suits students in lectures on theory, as well as pre-service teaching situations in which they can mediate their lessons and provide feedback on other students' lessons (Hermida, 2020).

There are two kinds of methods used in online teaching and learning: synchronous and asynchronous methods. Arroyo *et al.* (2022) explain the use of technological tools in these terms. Firstly, synchronously, a face-to-face interaction that is conducted digitally in real time is separated by the use of digital tools and apps such as Zoom, Teams or Google Classroom meetings (Hrastinski, 2008; Bergqvist, 2017; Merisi, 2022).

In online teaching practice, as much as the lecturer is engaging with the students at the same time, they both are not physically present to view how learners would react in a real classroom. The other method of teaching online is teaching asynchronously: learning materials are uploaded on the LMS and students engage with the materials at any time (Hrastinski, 2008; Ray, 2020). Asynchronous teaching could not occur for teaching practice, since teaching practice requires the presence of learners.

Activities such as simulations and quizzes (Bergqvist, 2017) can be used in online teaching and learning to enable students to complete their teaching practice. Simulations can be used when student teachers present their lessons, virtually depicting a classroom environment. Quizzes or other tools that can be used to understand a concept or task (Bergqvist, 2017) as part of the theory of teaching to be learnt for teaching practice.

The use of digital tools in teaching practice cannot be seen as a solution to problems, in education (Bruinsma *et al.*, 2020). However, it can be used as a platform for pre-service students to accomplish learning outcomes (Costly, 2014). The use of digital tools for teaching practice solidified students' completion of their teaching practice. For students, it meant that they had to have data available to access the course content timeously. The use of the online teaching for the lecturers meant they had to adjust to suit pre-service student teachers practical teaching needs (Bergqvist,2017).

Student Resilience

The intermittent disruption of university life caused by the pandemic upset the continuity and rhythm of student learning. To counter this, and to promote students' resilience, requires flexibility in the deliverance and management of programs. During the pandemic, student resilience was achieved through online interventions (Eri, Gudimetls, Star, Rowlands & Girgla 2021:1).

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There was a need for academics and students to undergo intensive training to support and facilitate online teaching and learning, making both academics and students digitally competent and resilient (Eri *et al.* 2021). Linked to student resilience is digital resilience: this requires that students adapt and overcome technological challenges when exploiting technology use during the changing trends in higher education during Covid-19 (Eri *et al.* 2021:3).

Sood and Sharma (2020), maintain that the main focus of literature on student resilience during the pandemic has been on student's psychological well-being, while attention was also paid to curriculum evaluation, students' learning outcomes and curriculum delivery. In terms of the delivery of practical components of courses, access to technological infrastructure created a challenge for pre-service students (Wu, 2020). Digital resilience on the part of students and academics was achieved when the university reconsidered design, development and implementation of course materials (Naidu,2021).

In response to the Covid-19 pandemic, students' resilience was achieved internationally when universities had to shift their methods of instruction to remote platforms. This mode of teaching worked for content knowledge courses, which adopted both synchronous and asynchronous method of presenting content (Brammer, 2020: 5). The importance of university leaders making institutions more resilient was demonstrated: they were obliged to discover patterns and opportunities for improvement and innovation in order to ensure curriculum delivery (Brammer, 2020).

In the United States, for example, teacher education programs switched to online instruction as a method of training pre-service teachers so that they could meet their prerequisites for teacher licensing (Jin, 2022:2). The development and use of online teaching by pre-service teachers created opportunities for them to continue interacting with children through Zoom and video calls (Hill, 2021).

Furthermore, according to a study conducted by Hill (2021), pre-service teachers at Pacific Oaks College, USA, did not complete their practical teacher requirements through onsite school-based teachings for the first time during the pre-service period. The college had to adapt its instructional approaches with the use of the online approach (Fletcher 2016, cited in Hill, 2021). Fletcher (2016), expanded on the use of online teaching, indicating that pre-service teachers were producing the same results, whether they trained on site in schools, or online.

In Turkiye, according to Sayir, Aydin & Aydeniz (2022), institutional resilience during teaching practice was achieved by means of lessons taught with distance education tools such as Google Classroom and Zoom meetings one day a week. Pre-service teachers made observations and practised with these tools during teaching practice.

Since systematic reflection and reflective practices reinforce the skills of apprentice teachers, video analysis of teaching was recurrently used to modify their instructional approaches (Hone & Riper, 2016). According to Nagro and Cornelius (2013, cited in Jin 2022:320): "Video analysis" is defined as "a teacher teaching a lesson that is videotaped and then the teacher watches the video for the purpose of analysing and reflecting on their own teaching performance." This emphasises that video analysis enables pre-service teachers to increase their knowledge on essential components of classroom interaction, challenges their existing knowledge and helps them make favourable decisions regarding their teaching (Hill, 2021). Their analysis of other teacher's teaching forms part of their reflective practice (Nagro, 2017; Jin (2022:8).

However, in contrast to Hill's assertion (2020), the interaction with children on an online platform did not work for pre-service students in South Africa because the majority of learners did not have access to technology during Covid-19. Learners in rural and disadvantaged areas lacked connectivity and access to data to connect with pre-service students (Parker, Morris & Hofmeyer, 2020). During the pandemic, to save the academic year, universities had to plan to continue their programs by means of virtual and remote teaching (Robinson and Rusznyak, 2020).

Since, according to MRTEQ regulations (2015), student teachers are required to complete their teaching practice at schools, then in on-line programs one can ask: how can they be mentored by in-service teachers? How will they develop lessons using teaching aids, or observe their mentor teachers' teaching, and how will the student teachers teach learners so that their mentors can provide constructive feedback (Gravett & Jiyane,2019)?

Student resilience was gained at a University in the North, South Africa, when pre-service students completed their teaching practice through asynchronous teaching. Pre-service teachers recorded four of their lessons that they taught and produced photos of themselves teaching. These were sent via e-mail to the teaching practice assessors (Merisi, Emekako, Legg-Jack, Mpundu & Lubombo 2022), whose research showed that the asynchronous teaching program did not have any link to the stipulations of work-integrated learning found in the MRTEQ policy. However, it showed that students completed their teaching practice and that final year students were able to qualify.

Based on the evidence provided above, this article seeks to find out how teaching practice occurred at one university. To achieve the outcomes of the objective, the article uses a conceptual framework of student resilience.

Conceptual Framework

This article uses the evidence-informed framework, BRiTE of Mansfield, Beltman, Broadley & Weatherby-Fell (2016).

BRiTE is the acronym for “building resilience in teacher education”, a framework that proposes four themes that are important for building pre-service teacher resilience: 1) relationships, 2) well-being, 3) motivation, and 4) emotions. These themes are embedded in the following: building resilience and having conceptual understanding, relationships, well-being, motivation and emotions. Each of these embedded themes are discussed to show how it reinforces resilience in pre-service students. When building resilience, pre-service teachers need to understand what resilience is and why it is important for them as novice teachers. When pre-service teachers build resilience, it encourages action instead of focusing on personal and contextual limitations, building on their capacity and catering for ongoing learning and improvement.

Relationships play a critical role for pre-service teachers in strengthening their resilience. Communication and establishing relationships, engaging effectively with fellow learners and joining professional social networks assists students’ in being resilient. It gives them a sense of belonging, engagement and responsibility and creates a positive mindset. Student well-being can be promoted through yoga for stress reduction (Mansfield *et al.*, 2016) and on developing emotional competence. Professional well-being includes the ability of the students to set boundaries, reflect on their teaching practice and employ time-management strategies. All of these contribute to the students’ emotional and psychological health.

The use of motivation will promote student resilience by developing the students inner drive to progress towards the end of their program. Students must build on strategies that include goal-setting to sustain their commitment to enhance their efficiency. Finally, students need to manage their emotions through optimism, hope, empathy and courage. They need to build on strategies that develop positive emotions and use humour to reduce emotional tension.

Methodology

This study adopted a qualitative methodology, using document analysis to analyse and evaluate the online course guide for teaching experience, which is publicly available. According to Bowen (2009), printed documents that is publicly available can offer affordances of context, background and historical insight. Armstrong (2021) declares that documented information is analysed and interpreted to generate an understanding of its context. When using document analysis, the content in the printed document is examined and interpreted to give reasons to develop empirical knowledge from it. The empirical knowledge helps to elicit meaning and gain understanding of the content (Bowen, 2009). The online course guide that provides guidance on student teaching requirements will be analysed systematically.

During the analysis process, the researcher provides a brief background on the program itself and how it was implemented, then, the following will be considered for analysis and evaluation:

- the content of the guide and its relevance to teaching practice
- the theories and philosophies used to ensure student learning
- how the program contributed to student resilience during the pandemic
- a comparison between the school-based teaching practice and the online teaching practice program.

The next section discusses how, in an alternative delivery structure such as online digitalization, teaching practice processes were followed that successfully provided access to and assessment of the practical components of pre-service teachers during the pandemic in 2021.

Online Teaching Practice and Students' Resilience during the Covid-19 Pandemic

In developing the online program, the university followed the guidelines provided in Communique 2, received from the CHE (2021), as follows:

- ...(T)he universities may develop supplementary activities that cover not more than half of the annual TP weeks that have been included in the accredited CHE program for the year
- These include simulated teaching, extended micro and peer teaching, analysis of teaching practice from different sources (videos/DVDs, etc), portfolios, the *Teacher Choices* module and other appropriate activities.

The online teaching practice program was developed as a supplementary activity, using constructivist theory and incorporating inquiry-based design of the 5 Es (Bybee, 2009).

Analysis of an Online Programme Used for Teaching Practice During Covid-19

The Context of the Online Teaching Practice Program

The online teaching practice program was accepted as a supplementary program by the CHE as part of the six-week, school-based teaching practice. Due to Covid-19, the number of weeks of school-based teaching practice for all undergraduate education students was reduced to four weeks. In order for these students to satisfy the CHE requirements for their qualifications, they were required to complete this two-week online program in addition to their four-week, school-based teaching experience. (Refer to Table 1, below.) The tasks comprised the watching and analysis of videos on classroom management, lesson plan preparation and virtual lesson presentations using the inquiry-based design of engage, explain and evaluate strategies (Bybee, 2009).

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Teaching practice for all undergraduate education students occurred in the third term of the university calendar, from 5 August -18 August 2021. From March 2021 to October 2022, all theoretical programs were presented online, either synchronously or asynchronously, through the LMS of the university (University Website, 2021). To provide students with access to online teaching and other activities, the university issued students with laptops and data so that, by the time school-based teaching practice began, students were already equipped to complete the online program.

The students were also provided on the LMS with the prescribed readings to assist them in completing their activities. The teaching experience guide, *Guide to Successful TE* (Wits University, 2021) was the main prescribed reading, outlining the necessary content requirements for the program. The content consisted of the rationale for lesson planning, lesson plan templates, assessment rubrics, notes on classroom management, professional conduct and from the role of tutors.

In 2021 there were 1856 students registered for the undergraduate and post-graduate programs in teacher education. The compulsory practical component of the Initial Teacher Education (ITE) programs had to move to an online platform due to the lockdown rules occasioned by the pandemic. The online teaching practice program was developed by the author and facilitated by selected university tutors who acted as mentors. Tutors were allocated to students according to a ratio of 1:22. Students had to complete tasks both asynchronously and synchronously. Mentor tutors facilitated the program virtually through Zoom, Teams, Google Classroom, WhatsApp group meetings and video-conferencing, by means of the LMS of the university. All of the 1856 students completed the program in 2021.

There were four tasks, with three activities per task. Table 1 below shows the tasks and activities that all undergraduate education and PGCE students had to complete.

Table 1: Tasks and activities used for the online teaching practice program
The tasks were divided into asynchronous and synchronous activities.

Tasks/Activity	Activity 1	Activity 2	Activity 3
Task 1- Classroom management and learner discipline	Watch the video on learner discipline	Analyse the video on learner discipline	Provide strategies for learner discipline & classroom management
Task 2. Engage strategy on lesson planning	Watch the video on engage strategy	Prepare a lesson plan using the engage strategy	Present a virtual lesson to your group and tutor demonstrating how you use the engage strategy
Task 3.	Watch the	Prepare a lesson	Present a virtual lesson to

Explain strategy on lesson planning	video on explain strategy	plan using the explain strategy	your group and tutor demonstrating how you use the explain strategy
Task 4. Evaluate strategy on lesson planning	Watch the video on Evaluate strategy	Prepare a lesson plan using the Evaluate strategy	Present a virtual lesson to your group and tutor demonstrating how you use the Evaluate strategy

Asynchronous Activities

For this part of the program, students were provided with internet links to videos, so they could watch presentations on how to control a class, disrespect in the classroom, what is meant by classroom management and classroom management mistakes. Students were required to watch and analyse the content of the videos as preparation for providing feedback in a synchronous group discussion with their tutor. Guiding questions on classroom management and learner behaviour problems were provided in their online guide.

Students also had to watch the videos on the strategies summed up by the terms engage, explain and evaluate (ByBee, 2009). They then had to use the lesson rationale to prepare three lesson plans using those strategies (ByBee, 2009) in readiness for an online virtual lesson presentation to their student group and the tutor. The lessons had to be subject or phase specific.

Synchronous Activities of the Online Program

The synchronous activities took the form of discussion forums and lesson presentations for both the tutor and the students. For the tutor, time was set aside to provide guidance on how to develop lesson plans and then present feedback on the student's lesson presentations. The grouped students' discussion was held virtually with their tutor. Students provided feedback on the challenges and suggestions presented in the videos on classroom management. The students also presented their lessons virtually to their student groups. After each lesson presentation, individual students commented on it.

Discussion

In this article, I have outlined some of the strategies used during the online teaching practice program associated with student's limited exposure to real classroom experience. In particular, I have argued that the different modes of online teaching practice ensure student resilience through the use of digital tools. Specific reference was made to the asynchronous and synchronous modes, as they were used for student preparation. In this section, I have reflected on the use of videos for reflective practice and how it can benefit students during teaching practice.

I also reflect on contextual diversity and the use of the 3 Es as constructivist theory that promotes teaching and learning in teaching practice.

Using Videos as Reflective Practice

The use of technological apps is in accord with the argument of Ray (2020) and Hrastinski (2008) that students and mentor lecturers can engage with the videos asynchronously at any time. The use of technology and the apps replaced the usual school-based teaching practice. The analysis of the videos assisted students in providing a systematic reflection that strengthened them as pre-service teachers and built on their resilience to complete their teaching practice course. In teaching, reflective practice is valued when students are learning to teach (Rusznyak, 2022), and the viewing of videos and reflecting on them was used to stimulate reflective practice and helped student teachers to see teaching from different perspectives (Penny & Coe, 2004). It allowed them to recognise aspects of teaching that they had not previously noticed.

The videos thus gave students an opportunity to correct their mistakes without having a tutor present to inform them of their mistakes (Bryan & Recesso, 2006). Video viewing and reflections thereof provided an effective feedback strategy that helped students to improve their teaching (Penny & Coe, 2004). Video analysis is also discussed by Hone & Riper (2016) as a modified instructional approach for apprentice teachers. This is in agreement with Jin (2022), who refers to video viewing as systematic reflections that strengthen pre-service teachers.

Furthermore, Nagro (2017) asserts that video analysis enables pre-services teachers to increase their knowledge of essential components of classroom interaction, challenge their existing knowledge and helping them make favourable decisions regarding their teaching skills. He further affirms that, when pre-service teachers watch and analyse the teaching of others, this forms part of their reflective practice for improvement. The use of video analysis asserts that when pre-service teachers reflect, their observations prepare them for the real classroom experience.

The viewing of videos and reflecting on them promoted the achievement of student resilience during the pandemic. However, one needs to ask how students see the “critical consciousness of the relationship between school, society and students” that Robinson and Rusznyak (2020) refer to. Teachers must have knowledge and experiences of diverse school contexts (Rusznyak, 2015) which can be experienced only when they are physically present in the classroom. Online teaching practice was an alternative method used for students to accomplish learning outcomes of teaching, instead of working with live bodies in a contextually diverse classroom setting (Rusznyak, 2015).

Contextual Teaching

Online teaching and learning miss out on “learning about the different contexts” in which they are confronted by the diverse challenges children face (Rusznyak, 2021). Schools are built in diverse communities and contexts, and when a student attends a school for teaching practice, they are exposed to the different communities and contexts that MRTEQ (2015) refers to. However, during the online teaching practice, students’ homes became the teaching context, because of lockdown rules, therefore the online teaching practical did not expose the students to the complex and differentiated nature of South African society, as recommended in the ITE policy (MRTEQ, 2015).

The use of online group teaching and student group presentation and feedback solidified what Gilakjani (2013) refers to as “cooperation and active involvement” among students. However, it did not allow the students to demonstrate specific competencies, such as classroom management, control of learner behaviour or the application of practical pedagogical knowledge acquired during the methodology classes (Yan & He, 2010). Teaching is a social construct, but the online program refutes socially constructed learning. However, the use of online teaching practice did provide a platform for student social engagement (Jikakjani, 2013). Constructivism and technology both centre on the formation of learning situations and atmospheres. The online learning settings used tools of knowledge to build on students understanding of team work through the media. The social engagement that Jikajani (2013) refers to can be equated with the presentation of lessons to the group, and to the feedback of students in the group. It also provided a means for students to support one another as they utilised different tools and learning resources (Jikakjani, 2013).

Online teaching practice during Covid thus became a technicist exercise (Rusznyak, 2021) to complete the required weeks of teaching practice, rather than the students having gained the experience of real classroom teaching, for which they must be physically present (Merisi *et al.*, 2022). The online teaching practice program was based on the philosophy that learners need to apply constructivism to build their own understanding of new ideas. The constructivist theory and the implementation of three of the 5Es was used. The use of the 3Es, engagement, explanation and evaluation, showed the connections between what learners knew and how the students would engage with their learners. For the explanation of the lesson plan, students had to demonstrate how a lesson mediating new concepts and skills would be introduced. Finally, students had to demonstrate their competency by evaluating the learners through an assessment.

Using the constructivist theory in online teaching, students were able to draw on their existing knowledge, beliefs and skills. With a constructivist approach, students were able to synthesise new understanding from prior learning (lectures prior to Covid) and new information when they developed their lesson plans (Bybee, 2009).

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Kanuka & Anderson (1999) further expand this notion of constructivism in online teaching by indicating that the students they observed created knowledge dissemination; this occurred when students exchanged knowledge on individual development rather than a physical social setting (Kanuka & Anderson,1999).

When students planned their lessons, they used the lesson design and the rationale for lesson preparation that was used for on-site, school-based teaching practice. There was no adaptation of the lesson plan for online teaching. When presenting their preparations, students did not include the use of online tools such as discussion boards or online boards to demonstrate the content, as one might do in an actual class.

Robinson & Rusznyak (2020) emphasise that at the core of teaching, knowledge-focused interactions must occur between students and teachers. This is consistent with Shulman’s (1987) pedagogical reasoning and constructivist teaching. However, students were unable to consider the various knowledge bases that were possible through focused course content because they were teaching to a computer screen with live people connected online. Teaching online, students did not need to make immediate changes to their pedagogy, as they were not engaging with learners in a real classroom or catering for their needs. In contrast, Jaleel & Verghis (2015) confirm that the integration of a multimedia approach within constructivist theory creates a dynamic knowledge production system.

The table below demonstrates how knowledge is constructed during online teaching practice in relation to face-to-face onsite teaching practice. The table shows how both methods of teaching practice are similar. I compare the school-based teaching practice guide and the online teaching practice guide to show the similarities between the two modes of teaching practice.

Table 2: A comparison between school-based teaching practice and online teaching practice, based on their guides.

Onsite school-based teaching practice	Online teaching practice
Planning – Student plans and prepares up to sixty lessons. The number of lesson plans per cohort of students differs, based on the year of study	Student develops three lesson plans due to limited time constraints
Lesson presentations to tutor: Presentation of two lessons onsite with learners Tutor observes and assesses.	Three lessons presented through MS Teams, Google Classroom and the LMS of the university.
No pre- or post-discussions held on classroom management skills. Student required to observe and learn	Pre- and post-discussions held with tutor on classroom management skills, once videos were watched. No

these skills while they are onsite	application of this to the classroom due to lockdown confinement.
Student teacher observes mentor teacher teaching, to learn pedagogy	Student observes peers teach and watch videos to provide feedback
Mentor teacher and university supervisor observe student for summative evaluation	Mentor tutor observes student for lesson presentation credit
Assessments: Summative assessment of lesson presentation. Assessment for teaching	Formative assessment of lesson presentation. Uses assessment of practice
Reflective journal: Student keeps a reflective journal to record teaching practice experiences	No reflective journal kept.
Submission requirements: Student had to assemble a teaching-practice file, submitted after teaching practice, recorded as part of their lesson delivery mark.	No submissions required. Student required to participate in the program and contribute to the discussion forums.

From the above table, it is clear that the online teaching practice program was a toned-down version of the school-based teaching practice used to promote student resilience. The online program focused on key aspects, such as classroom management strategies, lesson planning and lesson presentations. The viewing of videos compensated for the lack of mentor-teacher observations.

Conclusion

This article drew on literature from different countries, learning theories and the relevant educational policy to show student resilience in the Education faculty toward Covid 19. This was a period of time when the global pandemic affected many teacher education programs. In order for pre-service students to meet the prerequisite for teacher qualifications, they were required to complete their teaching practice online. The online program was of particular value to students who were located in various parts of the country. Tutors were able to assess the practical course components online, through the delivery of lesson presentations, group interactions and lesson planning. The use of videos and video analysis played an important part in the students' development as teachers.

Although the online program did not meet the requirements of CHE or MRTEQ and was not ideal for teacher training, it suited the need for the completion of students' qualification. The online program offered students a unique opportunity to experience a distinctive type of teaching practice other than that of the normal school situation. While the online program attempted to mimic the real classroom, cognitive and face-to-face aspects of teaching with digital tools, it will never be able to match the direct involvement of classroom management and classroom teaching in reality.

Recommendations

1. Curriculum designers need to ensure that the practical components of teaching qualifications are embedded in the methodology of the teaching specialisations.
2. Methodologists should share the practical components in such a way that it becomes part of the summative assessment for qualifying students.
3. More simulated on-campus teaching practicum needs to be practised to overcome adversities such as pandemics.
4. Since school-based teacher training involves working with humans directly, there should be limited online teacher-training practicums.

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