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Exploring How COVID-19 Shapes the Professional Identities of South African Student Teachers

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Abstract. This article contributes to the literature on teacher identities by exploring how the pandemic affected the professional identities of final year student teachers at a South African university. The researchers collected journals and interviews from seven participants, and analysed the data through thematic analysis. The findings show that the participants' professional identities were enhanced or negatively affected by teaching in a pandemic. The participants whose professional identities were strengthened became more caring and hard working to support learners who had missed several months of school. Other participants, whose professional identities had been negatively affected by the lack of teaching practice, felt less confident and prepared to become teachers. While all the participants struggled with a heavy teaching load, one participant felt that the sheer amount of work prevented him from becoming a "relational" teacher. Schools and universities might strengthen pre-service teachers' professional identities development by discussing what support student teachers require to enact their preferred professional identities during the COVID-19 pandemic.

Keywords: professional identities; teacher identities; teacher education; teaching practice

1. Introduction

When teacher education programmes relied on remote teaching during the pandemic, student teachers were unable to teach in schools and had to conduct virtual, or in many cases, simulated teaching, online (Delamarter & Ewart, 2020; Nasri et al., 2020; O'Brien et al., 2020; Varea & González-Calvo, 2021). Research shows that teaching practice is not only important for professional development, but that it is also crucial for professional identities formation (Beijaard et al., 2000; Bullough, 1997; Makovec, 2018). In this study, professional identities are understood as the particular understandings that student teachers have about themselves as teachers, and their visions for the kinds of teachers that they want

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to become (Hsieh, 2016; Romylos, 2018; Timoštšuk & Ugaste, 2010). Teaching practice allows student teachers to gain an understanding of themselves that is grounded in a realistic understanding of their ability to manage the duties of a schoolteacher (Lamote & Engels 2010; Ma & Cavanagh, 2018).

Without these experiences, it is hard for pre-service teachers to judge their abilities, which could be why student teachers in one institution in Malaysia felt that they needed to spend more time teaching in schools to improve their ability (Nasri et al., 2020). Virtual teaching was particularly difficult for student teachers in courses with experiential components, such as Art, Physical Education and Science, who had previously used physical spaces, such as sports fields, classrooms and laboratories, to teach learners (O'Brien et al., 2020; Payne, 2020; Varea & González-Calvo, 2021). Future Physical Education (PE) teachers in one study felt saddened that they could no longer teach the subject using their body in person (Varea & González-Calvo, 2021). Student teachers studying PE felt a sense of anxiety around the COVID-19 restrictions that left them feeling uncertain about the place of Physical Education in schools and their future careers (Varea & González-Calvo, 2021; Varea et al., 2022). Since practicum in a school is essential to teacher development and professional identities formation, a lack of opportunities to teach in schools may make student teachers feel insecure and unprepared for the profession.

Apart from teaching practice, learning how to be a teacher in a global pandemic was challenging, and often times created uncertainties for pre-service teachers. In one study, student teachers became increasingly anxious about what the job market and prospective employment opportunities would be in the future (Delamarter & Ewart, 2020). The return to schools led to fears for some of contracting COVID-19 and worry about what teaching would be like with the new restrictions in place (Delamarter & Ewart, 2020). Research suggests that educators are able to respond to learners' needs by continuing to care for and provide them with academic and emotional support online (Delamarter & Ewart, 2020; Kidd & Murray, 2020).

Research on teacher education tends to focus on how student teachers develop subject knowledge, contextual knowledge, and pedagogical knowledge during initial teacher education (Goodson, 2014; Romylos, 2018). There is a general lack of research on the professional identities development of student teachers from Africa (Izadinia, 2012). At present, the few articles exploring how the global pandemic affects student teachers' professional identities have largely been conducted in Europe, the United States of America, Asia and Israel (Dvir & Schatz-Oppenheimer, 2020; Hadar et al., 2020; O'Brien et al., 2020; Nasri et al., 2020). Thus, there is little research exploring how the pandemic has affected the professional identities of student teachers from Africa. The article addresses this lack of research by discussing how the pandemic has shaped the professional identities of seven fourth-year student teachers from one South African university. In order to contribute to the body of knowledge, the researchers ask the following research question: "How have the professional identities of student teachers at a South African university been shaped by the COVID-19 pandemic?"

While it is important to consider how student teachers' professional development may have been impacted by the pandemic, it is also critical to explore the impact of this disruption on student teachers' developing professional identities. Since professional identities are fluid and dynamic viewpoints, subject to continual revisions by individuals (Morison 2013), disruptions, such as the pandemic, could cause individual student teachers in specific contexts to re-examine and re-shape their own professional identities.

3. Literature Review

3.1 The Effect of Online Learning on University Students

By April 2020, schools and universities closed for approximately 1.6 billion students worldwide due to the COVID-19 pandemic (UNESCO, 2020). In South Africa, all universities were closed from 18 March 2020, and even when students returned to university later in the year, teaching was still conducted online due to the threat of the coronavirus (BusinessTech, 2020; Crouch, 2020; Pretorius, 2020). When the universities closed, lecturers and students had to quickly transition from face-to-face learning to emergency remote teaching (ERT) (Agormedah et al., 2020; Aguilera-Hermida, 2020; Hodges et al., 2020).

In this paper, we used the term 'emergency remote teaching' (ERT) as most universities were focused on delivering content in the absence of face-to-face classes, instead of offering students well-planned and -resourced online learning (Hodges et al., 2020). ERT was challenging for African students who were less able to access reliable internet connections and printers than their peers from Eurasia, the Americas, and Australia (Aristovnik et al., 2020). The closure of the universities was disruptive for students, and caused many of them to experience negative emotions, including boredom, frustration and anxiety (Aristovnik et al., 2020). While learning remotely, students missed their normal routines and socialisation on campus, and the support that they received from the library or tutors (Aguilera-Hermida, 2020). The students found it stressful to study while being at home, because of cramped, noisy home environments, and being expected to contribute to housework (Aguilera-Hermida, 2020; Aristovnik et al., 2020). While some students coped with this situation by spending more time with family or on hobbies, others experienced mental health problems and increased substance abuse (Aguilera-Hermida, 2020; Chandra, 2020; Hellemans et al., 2020). Mseleku (2020) found that university students in developing countries with unreliable internet connections are more likely to be forced to study in cramped, noisy environments, which may strain their mental health.

University students from African countries found it difficult to learn online, as they were often less knowledgeable about their university's learning management system, and less able to operate computer software, compared to their peers from higher-income countries (Agormedah et al., 2020; Mark, 2020; Mulenga & Marbán, 2020). It is possible that a lack of preparedness and resources is why university students from Africa were the least satisfied with their universities' response to the pandemic (Aristovnik et al., 2020). This suggests that staff members from universities in lower and middle income countries could prepare students for ERT

by providing them with the necessary resources and knowledge to take part in online learning.

Though some students enjoyed learning online at their own pace, and were able to improve their grades, (Gonzalez et al., 2020), 24 million learners across the globe, mainly in Asia and sub-Saharan Africa, are at risk of discontinuing their education (UNESCO, 2020). South African students from rural areas or the socio-economic lower classes are at risk of dropping out of university during the pandemic, because they need to earn money when family members become unemployed, and they lack laptops and access to reliable internet (Azevedo et al., 2020; Seoole & Adeyemo, 2016). An increased drop-out rate due to COVID-19 is a concern in South Africa, where approximately 47% of students do not graduate from their initial degrees (Council on Higher Education, 2013; Department of Higher Education and Training, 2019). First year students from developing countries who are unfamiliar with the technology and learning platforms are particularly likely to drop out of university (Mseleku, 2020). A decline in the number of university entrants and an increased dropout rate in first year in South Africa would increase the high teacher turnover rates, which tend to be worse in rural schools (du Plessis & Mestry, 2019; Department of Higher Education and Training, 2015b).

3.2 How teaching online shapes teachers' identities

The pandemic had an effect on student teachers, and perhaps even more so on teachers who had to learn to teach remotely in a short space of time. In the first few months of the pandemic, teachers felt uncertain about how to teach, and reported that learning new ways of teaching online was very time consuming (Kaden, 2020). Beginner teachers in Israel also found that it was difficult to: operate Zoom, find a quiet place at home for teaching learners, manage late-comers and rude learners, and balance the education of their own children while teaching learners (Dvir & Schatz-Oppenheimer, 2020). ERT was challenging for teachers, because they do not receive the same cues that indicate level of comprehension and interest in a subject, which include non-verbal feedback, sense of energy or lack thereof, and silences in class (Christensen et al., 2022).

Despite the challenges associated with teaching online, teachers in several studies reported spending more time reflecting on their work and feeling a sense of excitement regarding the use of new pedagogies and the opportunities to work with learners in smaller groups (Dvir & Schatz-Oppenheimer, 2020, Kim & Asburn, 2020). Teachers supported each other emotionally and academically with online teaching as they co-taught or co-planned lessons, or divided the preparation of new material amongst themselves (Busutil & Rosienne, 2020; Román, 2021). However, teachers who experienced 'technostress' felt demotivated due to a lack of belief in their abilities to use technology and in their institution to support them during the transition to online learning (Panisoara, 2020). While teachers found ERT challenging, when supported by their institutions and colleagues they were more likely to see the changes as an opportunity to reflect on and to implement new pedagogical practices online.

4. Theoretical Framework

The authors used symbolic interactionism to explore how the professional identities of the participants were shaped by learning to be teachers during a global pandemic. The tenants of symbolic interactionism as articulated by Blumer (2004; 1969) are that: 1) the actions of people are based on the meanings that objects, including people, have for them; 2) people derive meanings from social interactions; and 3) through thoughts and actions, meanings are negotiated, transformed and enacted.

According to symbolic interactionism (Blumer, 1969), individuals ascribe meaning to people and objects based on social interactions, and they use thoughts, actions, and symbols to negotiate these meanings in particular contexts. A summarised version of the theory is presented in Figure 1 below:

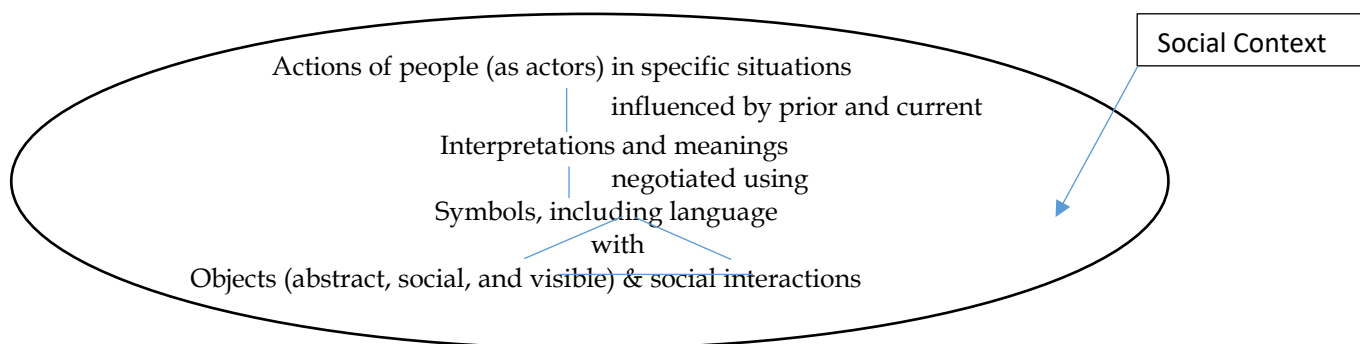


Figure 1: Symbolic interactionism based on the work of Blumer (1969)

When we apply this theory to the school context, objects are categorised as abstract (a view about someone), social (learners) or visible (resources). When a teacher or student teacher interacts with abstract, social or visible objects, the concept of being a teacher becomes personal and enacted (Vloet & van Swet, 2010). While actions may become routinised (Jones & Somekh, 2006), subjective meanings given to social interactions are open to re-interpretation (Snow, 2001). The theory acknowledges that people reflect on their social interactions and revise the meanings these interactions have for them, which makes it suitable for studying professional identities as dynamic and continually re-negotiated phenomena. The participating student teachers reflected upon their enacted professional identities and then interpreted and communicated their thoughts to the researcher through the use of symbols when writing in journals or speaking in interviews.

5. Research Design and Methodology

5.1 Paradigm

Interpretivism, with its focus on subjective meanings, was chosen as the research paradigm (Babbie, 2021; Kivunja & Kuyini, 2017) as we were interested in how the participants understood and constructed their professional identities in particular social contexts.

5.2 Research Design

This was the study of a unique case, as this was the first time that the participants experienced a disruption to the teacher education programme that resulted in a delay in graduation. This is a descriptive case study where we aim to understand and share the experiences of participants located in real-world settings using multiple sources of data (Creswell, 2009; Yin, 2012). There were seven separate cases in the study, which enabled us to compare the experiences and identities of the different participants.

5.3 Participants

The participants were selected to participate in the study using the stratified sampling technique. The 42 students in the programme code studying to teach languages and history to learners were divided into different groups. The participants were divided into groups according to gender and their subject combinations. If the initial 12 participants had taken part in the study, there would have been four male and eight female participants, representing the programme's population, which was 70% female and 30% male. Of the initial participants, there would have been an equal number of participants, four each, studying one of the following subject combinations: English and Afrikaans, English and Setswana, and English and History.

Unfortunately, not all 12 student teachers participated in the study as five potential participants decided to withdraw from the study due to workload. This resulted in a sample where only one of the remaining participants was male and the subject combinations were not equally represented. The small number and uneven gender and subject combination representation among participants should not pose a problem since previous symbolic interactionist studies generated rich accounts of the lives of diverse participants using one to seven participants (Barton & Hardesty, 2010; Carter & Montes Alvarado, 2019; Curry, 1993; Day, 1985). More information about the participants can be found in the table on the next page:

Table 1: Details of participants

Name	Sex	Age	Subject 1	Subject 2	Subject 3	Place	School type	Status
Participant A	F	26	English HL FET	English HL SEN	Afrikaans HL FET	Kimberley	Ex Model-C School	Temp
Participant B	M	25	English HL FET	English HL SEN	History	Delportshoop	Ex Model-C School	Temp
Participant C	F	28	English HL FET	English HL SEN	History	Kuruman	Rural School	SGB post
Participant D	F	24	English HL SEN	Setswana HL FET	Setswana HL SEN	Heuningvle	Rural School	Temp
Participant E	F	25	English HL FET	English HL SEN	Afrikaans HL FET	Kimberley	No fee school	Not yet appointed

Participant F	F	30	English HL FET	English HL SEN	Afrikaans HL FET	Warrenton	Ex Model-C School	Permanent
Participant G	F	22	English HL FET	ENG HL SEN	Afrikaans HL SEN	Kimberley	No fee school	Substitute

At the time of the research, four participants were studying to be English and Afrikaans teachers, one was studying to teach Setswana and English, and two were studying to be teachers of English and History. The participants taught the languages as a 'Home Language' (HL) meaning that their learners are expected to display a high level of proficiency in the language (Department of Basic Education, 2011). All participants taught learners in the Senior Phase (SEN), which includes Grades 7 to 9, and the Further Education and Training Phase (FET), which includes Grades 10 to 12.

5.4. Study Context

Teaching practice at this particular university takes place across all four years of the students' Bachelor of Education (B.Ed.) degrees. The fourth-year B.Ed. students have two teaching practice (TP) blocks. The first block is organised by the staff in the Teaching Practice Office who place students in schools. While the block is typically three weeks long, in 2020, due to student protests around the lack of funding, accommodation and internet access, the TP block was shortened to two weeks (Hoo, 2020a; Hoo, 2020b). The first TP block took place in mid-March in 2020, before the schools and universities closed during the COVID-19 lockdowns (UNESCO, 2020).

The second TP block of six weeks was cancelled due to the COVID-19 lockdowns. Though the students recorded themselves delivering lessons using PowerPoint, which the lectures assessed, they fell short of the minimum number of weeks the government requires student teachers to complete (Department of Higher Education and Training, 2015a). In order to graduate, the 2020 cohort spent an additional three weeks teaching in schools in February and March of 2021, after which they could obtain their degree and register as teachers with the South African Council for Educators. Since the student teachers were no longer based on campus, they had to arrange teaching practice placements for themselves.

5.5 Research Instruments

The data sources were journal entries and online interviews. The student teachers wrote journals during two teaching practice periods, in March of 2020, and in February and March of 2021. The reflective journals of the student teachers are a rich source of data as they provide opportunities for student teachers to question and develop their daily practice and professional identities (Casanave 2011; Khanjani et al., 2018; Körkkö et al., 2016; Shadi & Soodman Afshar, 2019). The online semi-structured interviews, conducted during the second teaching practice block in March, provided participants with opportunities to share their teaching practice experiences, and how these experiences had shaped their professional identities.

Primary data was collected through reflective journals and semi-structured interviews. Semi-structured interviews are useful as they provide researchers with opportunities to ask similar questions to participants to provide a basis for comparison, and individualised questions for specific participants based on their personal circumstances (Wilson, 2014). The student teachers in the study had to write daily journals during teaching practice in 2020 and 2021.[†] The participants' journal entries varied in length from a few lines to half a page. After completing the daily journals, the participants wrote a reflection, which varied in length from half a page to a page and a half, on their teaching practice experience.

Each online interview lasted between 45 minutes to one hour. Though we tailored some of the research questions to each participant based on their journal entries and school context, typical questions asked can be found in Appendix 1. We recorded the interviews with the participants' permission. Each interview was transcribed and stored in a password-protected online folder. Ethical clearance to conduct the research was granted by the university, and each participant gave written consent to participate in the study. To protect the identity of each participant, we used pseudonyms when referring to them in this article.

To formulate the interview questions, we read participants' journals and conducted internet research on the participants' teaching contexts. As journals are rich artefacts of daily encounters (Khanjani et al., 2018), by reading the entries we gained an overview of the student teachers' experiences, and prepared a set of questions for the interviews. We also developed the interview questions through internet research, which was necessary as travel was restricted during the research due to lockdown.

To ensure that we understood the participants' contexts, we did internet research on the towns where the student teachers conducted teaching practice in 2021 through Google Maps and Google Earth. Google Maps was used as the satellite imagery available covers 98% of the world and it is trusted by over one billion users a month while Google Earth allows for a much more in-depth view of an area (Banerjee, 2020; Black, 2020; Martonik, 2015; Wadowsky, 2020). We used Google Maps and Google Earth to view the towns where each student teacher lived during the teaching practice block in 2021. While viewing the towns, we made notes about the town's services and amenities, size, and housing type, i.e. rural, suburban or peri-urban. These notes helped us to pose relevant questions about the schooling context to the student teachers during the interviews. We were thus able to obtain information regarding the possible challenges and support available to the participants at the different schools.

5.6 Data Analysis

We analysed the data using inductive thematic analysis as described in articles by Braun et al. (2015) and Terry et al. (2017). Firstly, we familiarised ourselves with the data by transcribing and reading the interview transcripts. Secondly, we generated codes through a systematic process of adding labels to data segments.

[†] More information on why the fourth year students conducted teaching practice in the following year can be found in the background section of the study.

Thirdly, we developed themes by clustering the codes into meaningful patterns. Fourthly, to clarify our understanding of the data, we created a visual map to illustrate the connections between the different themes. We discovered that the majority of the sub-themes could be grouped around the two main themes, positive changes to the student teachers' professional identities and negative changes to the student teachers' professional identities. In the fifth and final stage of the data analysis, we reviewed the themes to ensure each theme was clearly defined and named.

5.7 Triangulation

As suggested by Noble and Heale (2019) we used triangulation to increase the overall trustworthiness of the research, which includes the credibility and generalisability of the study. We used three of the four possible triangulation methods described by Fusch et al. Firstly, the data was triangulated through collection in different time periods and places. We collected data from the students' journals, which were written during teaching practice in March 2020 and in February and March in 2021. Then we conducted during interviews via Microsoft Teams with participants towards the end of the second six-week practicum. Collecting data over different time periods and spaces, through written journals and spoken interviews online, enabled us to track, engage with, and re-present the participants' shifting professional identities. Secondly, methodological triangulation was used as we collected data through three methods: internet research, student journals, and interviews. We prepared for the interviews by researching the participants' context and reading the journals. During the interviews participants had an opportunity to expand on the perspectives presented in the journals. Through examining the data in multiple ways, we deepened our understanding of the participants' identities and enhanced the depth of findings presented in the study. Thirdly, the researchers triangulated the analysis of the data. The two researchers analysed different participants' data, but met in person and conversed over email to discuss and formulate the research themes. This iterative and multi-perspective process enhanced the credibility, and possibly the generalisability, of the findings. As suggested by Kim (2016), researchers, wherever possible, presented the findings in the participants own words, to ensure that their reflections were presented in in their unique voices.

6. Findings

The chapter is divided into two sections. The first section shows how the findings are similar and different to previous research about how university students' attitudes to learning online. In the second section, the researchers provide the answers to the question, "How have the professional identities of student teachers at a South African university been shaped by the COVID-19 pandemic?" This discussion highlights the ways in which the pandemic positively and negatively affects the student teachers' professional identities.

6.1. Student teachers' responses to learning online

Research shows that that university students find studying in small and noisy home environments stressful (Aguilera-Hermida, 2020; Aristovnik et al., 2020). Participants C and D found it distracting to study at home in a small noisy space

with frequent requests from their children or families. The participants, like their international peers, reported feelings of boredom, frustration and anxiety (Aristovnik et al., 2020). The uncertainties created by the pandemic made Participant A feel unsure about her ability to do well in her studies.

Emergency Remote Teaching (ERT) is particularly challenging for students in Africa where the internet is not as reliable (Aristovnik et al., 2020). Several participants (A, B and D) commented on how poor signal made it difficult to learn and submit work online. Participants A, B and F found it difficult to participate in ERT when monthly mobile data from the university was not sent on time or was depleted before the end of the month. Participant A and F also found it challenging to study off-campus when their areas had power cuts.

Previous research suggests that university students in Africa may be less prepared than their peers for ERT, because they are not as familiar with computer software and the university's learning management system (Agormedah et al., 2020; Aristovnik et al., 2020; Mark, 2020; Mulenga & Marbán, 2020). While Participants E and F had felt unprepared to learn online, Participant B felt the lecturers' use of the learning management system had prepared him to learn online prior to the pandemic. This suggests that African students studying the same degree may feel more or less prepared for online learning.

While university students in Africa are the least satisfied with their universities' response to the pandemic (Aristovnik et al., 2020), the participants in this study appreciated the support for ERT provided by their lecturers. Despite this support, Participant E found learning on her own difficult as she was *"in an environment where you have to solve things yourself"*. This shows that the asynchronous online learning required the students to be more self-reliant than with face-to-face classes. Even though lecturers were available over calls on Microsoft Teams or emails, Participant C chose not to approach her lecturers and said she tended to solve problems on her own. This suggests that some students may need to be reminded or encouraged to make use of the available support.

6.2 Positive Changes to Participants' Professional Identities

6.2.1 *Becoming a reflexive teacher.* Similar to the findings in the study by Kim and Asburn, where teachers became more reflective in response to teaching in a pandemic, four of the seven participants reported that they had become more reflexive. During the final teaching practice block, Participant A realised the importance of reflection for the first time.

"I think I did it because, it [reflection] was one of the things that.. was required for the TP file, but looking back I do reflection every day when I, get from work [...] I [did] not really reflect until now! [...] I've seen that reflection is quite important, because you can see how you grow from one point. So I wish I could have taken it more seriously."

Whereas before, the participant only reflected to fulfil a requirement for teaching practice, she now reflected each day in order to improve her practice.

Participants D, E and F also used reflection to improve their practice. Participant E used reflection to *“improve the things that didn’t work in class”*, and Participant D asked her learners to reflect on her classes each day to *“try to come up with different ways to improve my teaching skills”*. She believed that *“reflecting has helped me in a way, because now my learners get to understand me better, I get to teach them, in a better way”*. Her learners’ reflections showed her what content she should focus on during the limited class time she had with alternative groups of learners. After reflecting, Participant F could *“see the process as you grow as a teacher”*. She enjoyed seeing how much she had grown as a teacher during her final TP block.

6.2.2 *Becoming a more caring teacher.* While an ethic of care has always been important to the teaching profession (Delamarter & Ewart, 2020; Kidd & Murray, 2020), three of the participants found teaching in a school in a pandemic made them more caring as teachers. Participant A found it challenging to teach *“demotivated”* learners with ill or unemployed family members. She said that she had become more *“compassionate”* towards learners with challenging home environments. Despite teaching in challenging circumstances, the participant remained committed to assisting learners, stating that, *“I always just try to push my learners to do the best that they can, and that’s the kind of teacher that I really hope...that I portray to them as well”*. She worked hard in order to help her learners succeed in life, and found that aspects of her job were rewarding.

“So it makes me happy that they excited to come to my class and they excited to work. And I wish that, that is something that I can carry with me in this long, very long journey that I am that I am about to embark”.

This shows that while teaching in a pandemic is challenging, the participant tried to maintain her motivation by focusing on the positive impact that she had on learners.

Participant B, the only male participant in the study, said that as he became more aware of the struggles that his learners encountered due to COVID-19, he became a more caring teacher.

“There’s other factors also where you find that some learners don’t come to school based on, certain family issues... So now you have to.. be considerate of, those learners”.

He mentioned that learners whose parents lost their jobs found it more difficult to concentrate on their schoolwork, and tried to support them by covering as much of the work as possible at school.

Participant G realised that the pandemic placed enormous stress on her learners’ mental health. To ensure that her learners could reach their full potential she became more patient when explaining the content, and spent more time after school explaining the work to them. She became aware of the importance of mental health, after a course on teenage suicide prevention, and wanted to be *“someone they [her learners] can talk to”*. Teaching in a pandemic had helped her become more attuned to learners’ needs, and more willing to help them with academic and personal issues.

6.2.3 *Being a parent to the learners.* In a literature review study, Sabbe & Aelterman show that teachers identify with and try to adopt the role of a caring and nurturing parental figure in learners' lives. Participant D, realised that she should be "*a parent to the learners*" in her reflection on the 2020 practicum. In her interview, she said that being a parent to learners is necessary for them "*to be able to feel free around you*". To help the learners open up to her as they would to a parent, she offered the following advice:

"[...] so as a teacher you need to sit down with the learner, and, really, ask her questions, be, make her be open, her or him, be open to you, and as a teacher, you need to be open as well, so that learners can feel free to talk to you."

She felt pleased when learners felt comfortable enough to approach her when they were struggling with the material. She was able to learn which learners in her class were not working "*because of the circumstances at home, or, maybe the problems in their lives*". As a parental figure she was able to balance having fun and being serious with learners.

"I'm very friendly to learners, but they know when I mean business, I mean business, we have our time of joking and we have our time of getting serious".

As someone who feels that "*I treat them as my children*", she wanted learners to be able to share their problems with her, to have fun in her class, and to be able to concentrate on their work.

6.2.4 *Being a hard worker.* Teachers faced increased workloads during the pandemic (Kaden, 2021). Participants D, E and F realised that they needed to become hard workers to cope with the workload of a teacher in the pandemic. Participant D said that the teachers in her school taught the final year learners every day, and then had to spend time teaching learners in other grades after school and on the weekend. Participant E's mentor encouraged her to do her best, and she started to teach extra classes, which she felt had helped her to develop "*endurance*" as a teacher. With less contact time, Participant E had been "*forced*" to be well-prepared to ensure that the shorter periods with cohorts of learners were productive.

6.2.5 *Learning to adapt.* In the literature, the term 'practice shock' refers to the serious adjustments that first year teachers have to make as they assume the duties and responsibilities of a teacher for the first time (Kaçaniku, 2022). Participant C has to adapt to a very different home and school environment in 2021. In 2020, her family took care of her first child, and she was pregnant with her second child. While she enjoyed the convenience of learning online when she fell ill and could learn in the hospital, she found being pregnant during TP to be an emotional experience: "*I was pregnant last year, so I was experiencing a bit of my own personal emotions [...]*". Despite the difficulties she faced, she enjoyed teaching practice at the well-resourced and diverse school where she was placed by the TP Office. She explained how her enjoyment of the school environment increased her motivation: "*My experience [...] of the school really contributed to my passion for teaching as it demonstrates a workplace where one is able to grow and become a life-long learner*".

While the TP Office had organised that the previous school visit take place in the same city as the university, the students organised their own practicum to ‘catch-up’ on the weeks missed due to the pandemic. When the participant could not find a post in her city, she began teaching in a disadvantaged rural school in a different town. Though she found it challenging to teach in a school with few resources, she felt that she could use what she had learnt from lecturers about the different teaching strategies and media, such as chalkboards and overhead projectors to “*accommodate learners*”. As a single mother, it was difficult for her to find affordable childcare and fulfil the teaching practice requirements at the same time, and she began the final TP block a week later than her peers.

6.2.6 Feeling prepared to teach online. Participants A and D, like the teachers in the study by Dvir and Schatz-Oppenheimer (2020), enjoyed learning to teach online. Participant A felt prepared to teach online, because she had learnt online during the pandemic.

“So, the fact that we had, we had that year, where we had to be trained to do the whole teams situation and also submitting all your assignments online and your file online. It really prepared me [...]”.

Participant D felt able to teach online, because of the online teaching the students completed when they could not go to schools.

“[...] so it’s only my last year where I go to do everything online, of which I think it, helped me, because now we don’t know what the circumstances might be, and, we can’t predict now, but, I think it also prepared me for the unforeseen circumstances, whereby now my learners will be good if ever we have to, go online and teach learners online”.

Since both participants felt prepared to teach online, they stated that the final three weeks of TP, which were mandated by the government, were “*unnecessary*”.

Participants D and F felt that the additional teaching practice was unnecessary because of their appointments at the schools. As Participant D explained:

“I mean we are teaching every day, we are learning every day, it’s more like we are doing our practicals every day, so this teaching practice was really unnecessary, for me”.

The student felt that her current experiences had already prepared her to teach, and that she should not need to submit her journal and lessons to the TP Office in order to obtain her qualification. Participant F, the only student teacher permanently appointed at a school, felt even more strongly that the additional TP block was unnecessary, as she was already fully responsible for her own classes and learners.

6.3 Negative Changes to the Participants’ Professional Identities

6.3.1 Feeling uncertain about my role. Several studies have spoken about the anxieties that student teachers and teacher faced during the pandemic (Delamarter & Ewart, 2020; Varea & González-Calvo, 2021; Varea et al., 2022). In

this study, two participants felt uncertainty due to their performance of the role of a university student and a class teacher.

Participants A and F felt that it was harder as temporary teachers to fulfil their obligations as students. Meeting these obligations made Participant A feel “... *far more anxious, than I would have been* [if she had completed the practicum as a student teacher without performing the duties of a temporary teacher]”. Participant A said that performing the roles of teacher and student made her feel uncertain about her identity as a teacher.

“...this has really been.. it’s really tough, it’s really stressful. Because now we expected to be, adults again, but also then again we’re students, so-so, we haven’t really made the transition yet. It’s still one foot in one foot out”.

Fulfilling the roles of a student and a teacher at the same time added to the uncertainty and stress that participants felt while living and working in a pandemic.

6.3.2 *Feeling less confident about my teaching.* In the study by Nasri, et al., the student teachers felt that they would have been more prepared to teach if they had conducted teaching practice in a school. Participants B, E and G also felt that submitting pre-recorded lessons was less effective than going to schools. Participant B felt that he was less prepared at the start of his post as a temporary teacher because of his lack of experience.

“I would have loved it to do more practice, being in the real environment, and an authentic environment. [...] So I think if I had more opportunities, to be in a teaching environment I wouldn’t have, been confused like I was, for the past [...] week I experienced the confusion.”

He strongly felt that teaching in a school would have prepared him more for teaching than submitting pre-recorded lessons online.

Similar to teachers who relied on physical cues and bonds with learners to teach (Christensen et al., 2022; Varea & González-Calvo, 2021; Varea et al., 2022), participants E and G missed face-to-face interactions with learners, as Participant E explained: “[...] *there wasn’t interaction with learners, where I say that the learners would grasp the information I am trying to get across to them with the lessons*”. Participant E felt like she could not determine from the written feedback given by the lecturers whether the learners would have understood her lesson.

6.3.3 *Feeling under pressure as a new teacher.* Besides the usual ‘practice shock’ that first year teachers experience (Kaçaniku, 2022), participants B, D and F experienced additional pressure as new teachers teaching in a pandemic. Participant F was appointed as to teach ‘English Home Language’ to final year students, the majority of whom speak English as an additional language. As she had to prepare and teach lessons for classes split into cohorts while completing her degree, she felt as if the spotlight was on her, and described this as “*the magnifying glass is on me*”.

Participant B also felt that he was “*under pressure*” as a new teacher.

“It’s just that, now, at the moment that I am actually doing the job myself and the responsibility is mine of the administration and so on, I think I’m feeling the pressure now, because now.. I am not just here for a day or a week. I have to do everything on my own, unlike the first time”.

While the participant was learning from the subject advisors, his mentor and the other teachers, he admitted that teaching is more challenging in a pandemic. As he taught cohorts on different days, he had less time with each class, and fell behind on his work. It is likely that the pressure of being a new teacher was worsened by teaching in a school environment which he described as having too few teachers and textbooks for the amount of learners.

Previous studies have shown that teachers supported one another during the transition to online learning (Busuttil & Rosienne, 2020; Román, 2021). During the transition from student teacher to educator in a pandemic the support that Participant D received helped her to deal with the heavy workload. While the participant pressure from being a new teacher in a pandemic, the support she received from her mentor and subject advisor helped her to mitigate some of the negative emotions she felt.

“Yes, during the first week I was really worried about that, because now, I... I was worried that maybe I am going to fall behind, with regards to [...] completing the syllabus on time and giving the learners the formal tasks, but then, [...] with the mentoring of teachers and the help of teachers, I can say now, it’s difficult yes, because now you don’t get to see learners every week as you are supposed to, but now it’s better, I don’t stress much as a I was stressing before, because of their help.”

The support from others helped her to cope with worry and other negative emotions caused by having to finish the syllabus by the end of the term while having to teach her learners on alternate days.

6.3.4 *Unable to be the teacher I wanted to be.* By the end of the previous practicum, Participant B said he felt more prepared to become a teacher, “*I am not as anxious to go to the teaching and learning environment now*”. In spite of initially feeling more prepared to teach, the pressures he was experiencing as a teacher due to COVID-19, possibly combined with the reduced amount of TP, created a situation where he was unable to be the teacher that he wanted to be.

“I would like them to see me as an individual [...]. So at the moment I’m only like a vessel that is trying to do my job, based on how the learners react or how the learners, behave around me. But I would like to, give learners more opportunities to realise that they can, just, be learners around me.”

He had wanted to be a “*relational*” teacher, but due to the additional workload in the pandemic, he felt he had to focus on delivering to content in class and that he had no time to develop relationships with the learners.

6.3.5 *Stalled professional growth and development.* Participants C, D and F thought that their professional development had been negatively impacted by learning to be a teacher in a pandemic. Participant F felt as if she was rushing to teach according to tight timeframes, and explained that *“I think I would thrive more under normal circumstances”*. Participant B’s career was negatively impacted by the additional teaching practice block. While he felt that this block was necessary, he could not qualify as a teacher and had to take a temporary post with a lower salary, and he was unable to enrol in a postgraduate degree in 2021.

Participant C had a particularly challenging situation at her school where she had to cover for colleagues teaching different classes.

“[...] the schools are really short of staff, so most of the time, you couldn’t even focus on your own classes, or [...] what you were really there for, because most of the time you were then placed in a class just to supervise a class, because there’s no teacher there. And like I said with my personal growth and milestones that I took now, it’s really, become very, very complicated.”

The challenges the participant experienced made her feel less confident in her abilities.

“[...] with the job hunting, that’s not going so well, the new milestone in my life, the teaching practice and everything at hand, I wouldn’t say that I’m the ideal teacher that I see myself to be, uhm, in the sense that, I do still lack confidence in some areas”.

She remained confident that with more teaching and life experience she would become the teacher she wanted to be.

“[...] I think once, [I] fully get, enough experience of the classroom environment the learners the context, the expectations and responsibilities of the school, and, how to juggle your own life and school responsibility,, I think I would be able, to become the ideal teacher that I see myself to be.”

She described this *“ideal teacher”*, as someone *“that leaves learners with some type of legacy”*, and ultimately prepares them to be *“better citizens in the society or even the world at large”* and enables them to *“take with them what they have learned at school into the workplace or even into the future.”* Despite her passion for the profession, she felt that the current circumstances had a negative impact on her future and career.

“[...] the thing that really, frustrates me about everything is that, I think that I could have got the job or position by this time already [...], but because everything was still so incomplete, it blocked a lot of opportunities for me, where I’m still, sitting without a job and job hunting.”

This was a very disappointing situation for the then 28-year-old participant, who had waited many years to gain access to funding to allow her to fulfil her dream of becoming a teacher. As she had a School Governing Body (SGB) position, with a lower salary and fewer benefits, she was still searching for a better paying public school post.

7. Conclusion

This study sought to uncover how the professional identities of student teachers at a South African university have been shaped by the COVID-19 pandemic. Fortunately, most of the participants felt that their professional identities had developed in positive ways by teaching in a pandemic. Some participants said that they were more caring toward learners as they knew that they were experiencing challenges at home due to the pandemic. A few participants mentioned that they had become hard workers to ensure that they taught learners in cohorts with less time at school the same amount of content.

Despite these positive experiences, the participants found it challenging to perform in their temporary, or in one case, permanent post, while completing the last three weeks of practicum in order to obtain their degree. They also reported that balancing the duties of a teacher in a pandemic and those of a student teacher was very stressful.

Not all the participants' professional identities were affected positively by the pandemic. Three of the seven participants felt that their professional identities had been negatively affected by becoming a teacher in a pandemic. The participants mentioned that they would have learnt more and felt more confident as teachers if they had been able to go to schools. One participant felt that teaching different cohorts of learners in less time meant that he had no time to enact his preferred professional identities.

8. Recommendations and Implications

Three of the participants' professional identities were negatively affected by becoming teachers in a pandemic. This suggests that support for new graduates entering the profession in a pandemic may be insufficient. In increasingly busy school environments, teacher professional identities development may be neglected. While resources are stretched in education institutions, more attention needs to be paid to teacher professional identities. Discussions with beginner teachers could provide much-needed opportunities to identify what support they need from their university and school to realise their preferred professional identities. Without this support, it is possible that struggling beginner teachers will decide to leave teaching, contributing to the already high teacher turnover rate in the profession.

Due to the pandemic, student teachers may be unable to complete the amount of days to fulfil work integrated learning requirements specified by the government. If teachers need to spend additional days at schools to obtain their degree after their finishing their coursework, the authors of the study recommend that the amount of paperwork, assignments, and submissions be drastically reduced. This would assist student teachers entering into the profession under difficult circumstances to complete their final practicum placement. The second recommendation is that the work of the TP Office should be properly capacitated. At the university, the few staff members working in the TP Office were unable to individually follow up with the student teachers in the large cohort while handling school placements and virtual teaching platforms. Since the Office does

not have a discretionary budget, they were unable to financially support students with small purchases, such as data. The participants were no longer eligible for financial aid from the government or bursary funders and had to cover living costs, which was particularly if they had children, without the salaries of teachers in full-time posts.

9. Limitations

When five potential participants withdrew from the study, there was only one male participant remaining, which meant that the data was not representative of the population where 30% of the student teachers were male. Future studies could ensure that the sample is representative of the population in terms of gender.

The small sample size prevents complete data saturation, which is most likely to occur when there are between eight and twelve participants in a study (Hennink et al., 2017). However, the sample of seven is large enough for an initial piece of research, as studies show that most themes can be identified after five or six interviews (Francis et al., 2009; Guest et al., 2006; Morgan et al., 2002). Thus, this study presents the majority of the themes and sub-themes in the findings; future studies with a larger number of participants could produce a richer account of how COVID-19 affects the professional identities of student teachers in developing countries.

The researchers were unable to visit the schools where the students conducted teaching practice in 2021 as these schools were located across the Northern Cape province when travel was restricted in order to reduce the spread of COVID-19. Through the use of internet research and focused interview questions about the school context, the researchers attempted to understand the participants' experiences. In future, researchers could visit the schools where students conduct teaching practice to gain first-hand experiences of the schooling context.

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Appendix 1

Interview questions

- Why did you decide to become a teacher?
- How do you feel about the subject or subjects that you teach?
- What did you learn during the TP block in March at ... school?
 - What positive or negative experiences did you have at the school?
 - Did these experiences change the way you think of yourself as a teacher?
- What kind of teacher do you see yourself as and why?
- When and how often did you write your reflective journals?
 - How useful was writing in the journal for you?
- How much did you know about learning online before the pandemic, did you feel prepared to learn through Moodle and MS Teams before COVID-19?
- How effective did you find preparing and submitting lessons instead of going to schools for TP
- Could tell me a little bit more about that school that you are teaching in?
 - The school is a large/small school in a suburban/rural/peri-urban area, how does this affect this affect you as a future teacher?
- Did COVID 19 affect how you see yourself as a teacher, why or why not?
 - How did the pandemic affect your teacher development?
 - How does pandemic affect how you teach?
 - How did you find coping with the pandemic while studying to be a teacher?
- How has COVID-19 affected the learners that you teach?
- How effectively did the university handle your teacher development during the pandemic?
 - What more could the university have done to support you as a future teacher during the pandemic?
- How do you feel about the current compulsory TP block?
 - Was it necessary for you to gain the knowledge and skills to teach in the future?
- What have you learned from teaching at ... school during these last three weeks?
 - What are the biggest challenges and successes that you have faced as a teacher at this school?
 - How much a part of the school have you managed to become during this TP block?
- If you have a mentor teacher, how much have they supported you during this teaching practice block?
- What are your future plans regarding your career?