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The value of using Flip in teaching practice: pre-service teachers' experiences

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Abstract

Studies have shown that Flip (previously known as Flipgrid) positively affects teaching and learning in the education sphere. This paper aims to articulate the value of Flip in the context of teaching practice. Over three weeks, pre-service teachers in their third year of study at university were required to submit videos of their lesson presentations. During this time, more than 3700 video submissions were made. As part of their final portfolio, the pre-service teachers reflected on two prompts: what they enjoyed and what they did not enjoy about submitting the videos. These reflections were subsequently analysed. The findings indicate that students respond positively to the use of Flip, which enhances their technological, pedagogical, and content knowledge. The results further reveal that Flip improves time management skills, equips students to teach in an online environment, and fosters collaboration with peers to refine lesson quality. The reflections presented in this paper provide insights into pre-service teachers' experiences with Flip and offer suggestions for improving its use as a virtual classroom tool. The authors recommend that faculties of education globally incorporate video recording into teaching practice to strengthen pre-service teachers' teaching capabilities.

Keywords: Flip, pedagogy, pre-service teacher training, teaching practice

Introduction

Due to the COVID-19 pandemic, and similar to other universities worldwide, South African universities have been faced with the transition from face-to-face classes to online teaching practices (Carrillo & Flores, 2020; Hojeij & Baroudi, 2021; Sepulveda-Escobar & Morrison, 2020; Wepener, 2022). This sudden change in pedagogy has required improvisation and innovation in the teaching practice (TP) landscape as well. While studying to obtain a teaching qualification, one of the requirements is that pre-service teachers must practise their teaching in a classroom as part of their work-integrated learning (WIL). WIL in the form of TP is a mandatory requirement for pre-service teachers to graduate and for their professional development (Flores, Santos, Fernandes & Pereira, 2014; White & Forgasz, 2016). As a result of the COVID-19 pandemic, schools were closed and visitors were prohibited from visiting schools, making it difficult or impossible for the pre-service teachers in the School of Education to gain access to the schools to do their usual and mandatory TP school visitations. Out of desperation, the search for TP alternatives started in 2020. These unforeseen circumstances have created the opportunity for teaching practice coordinators in the School of Education to question, test and evaluate a variety of online platforms that allow video uploads, to explore their suitability and effectiveness in serving as an alternative to face-to-face school lessons in schools. One such platform is Flip, and the School of Education opted to implement it as part of TP in order to provide pre-service teachers with the opportunity to demonstrate their teaching abilities.

Because the students were unable to visit schools physically, a 'virtual school visit' was organised to accommodate students during the COVID-19 pandemic. During the 3 weeks, more than 3700 video submissions of lessons presented by third-year education students were uploaded onto Flip. After 3 weeks of using Flip as a video submission platform, the researchers became

interested in discovering more about the value of using Flip from the perspective of pre-service teachers. The experiences of these pre-service teachers with using Flip during WIL have not been explored. The value of their reflections is twofold. Firstly, they shed some light on the positive and negative aspects of Flip during WIL which can provide suggestions on how to improve practices in a virtual school environment. And secondly, the reflections provide insight into the contribution video submissions on a platform such as Flip make to the holistic professional development of a pre-service teacher. This paper focuses on the latter.

Theoretical framework

The theoretical framework underpinning the study, to investigate the value of using Flip in TP, was based on the synthesised form of knowledge, namely technological, pedagogical, and content knowledge (TPACK) (Koehler & Mishra, 2009). TPACK, which was derived from Shulman's (1987) pedagogical content knowledge (PCK), can be used as a knowledge base for teaching which frames teacher education for information and communication technology (ICT) and can enhance teaching and learning over time (Koehler & Mishra, 2009). Yeh, Chan and Hsu (2021) describe TPACK as the overlap between three independent knowledge domains (i.e., technology, content, and pedagogy) and/or three mutually integrated subsets of knowledge (i.e., technological pedagogical knowledge, technological content knowledge and pedagogical content knowledge). The integration of the different knowledge areas of TPACK is displayed in Figure 1 below, with a newly added knowledge area of Contextual Knowledge (CK) by Mishra (2019).

According to Mishra (2019), the three over-lapping circles of technology, pedagogy and content, in the centre, represent aspects of teacher knowledge indicated as the K in TK, PK and CK. Mishra (2019) added another layer (context knowledge) and described it as the teacher's knowledge of the context, which includes the teacher's awareness of the available technology, knowledge of the school, district, and national policies they operate within. This implies that contextual knowledge is something that we as teacher educators can act on, change, and help teachers develop (Mishra, 2019). The development of TPACK is "a multigenerational process" and it involves the development of deeper understanding of the complex web of relationships between content, pedagogy, and technology and the context in which it functions (Koehler, Mishra & Yahya, 2007).

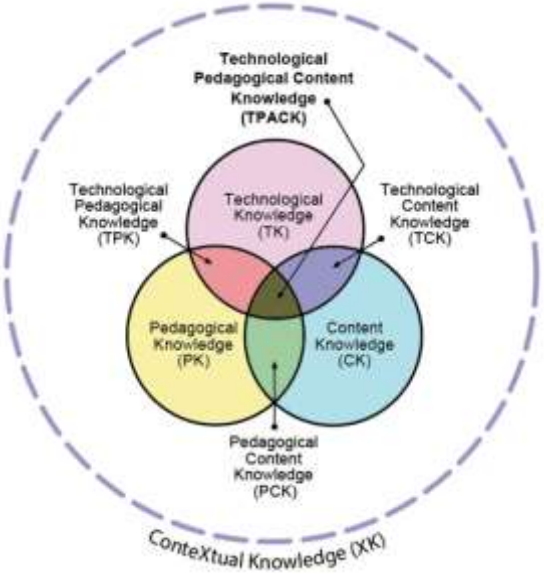

Figure 1. Revised version of TPACK

In this study, TPACK acted as a helpful framework for considering the knowledge bases the pre-service teachers have and how they need to develop certain knowledges when they develop and teach the lessons when using Flip. TPACK emphasises the importance of preparing pre-service teachers to make sensible choices in their uses of technology when teaching content to a specific group of learners and it plays an essential part in the development of good teaching practices with ICT (Bueno, Lieban & Ballejo, 2021).

Literature review

ICT is playing a role in education globally. Many studies have been done on the benefits that ICT has played in education (Akhmedov, 2021; Das, 2019; Li, Wang, & Gu, 2019). Some of the benefits include student-centred and self-directed learning; the production of a creative learning environment and the promotion of collaborative learning (Felix, 2021). Flip, as an ICT tool, lends itself well to collaborative learning because it is a social

learning platform. The platform allows participants to view, engage and comment on their peers' videos (Wepener, 2022).

It is evident from the literature that Flip has become a popular tool to be used by schoolteachers and university lecturers, and that there is great interest to explore its effectiveness in teaching and learning practices. Stoszkowski (2018) describes Flip as an online video discussion platform designed to empower students and learners and has found that Flip has a lot of benefits. Some of the benefits of using Flip are that it can help students to improve their confidence levels, motivate the introverted student, and the fact that it is perceived to be less intimidating compared to presenting to a physical audience (Hashim, Yunus & Hashim, 2018; Shin & Yunus, 2021). A study done by Green, Besser and Donovan (2021) showed that the use of Flip promotes creativity and formative evaluation of student learning. Flip allows students to interact and engage with each other in ways not possible before and in turn helps increase their social presence (Gurjar, 2020; Mahmoudi & Gronseth, 2019; Serembus & Murphy, 2020). Wepener (2022) agrees that lesson videos uploaded onto Flip and similar platforms can result in collaborative learning because students and lecturers (who have access to the Flip code or link) can view and comment on posted videos. This study addressed the following research question "What is the value of using Flip in teaching practice, and how do pre-service teachers perceive its impact on their technological, pedagogical, and content knowledge?"

Methods

Data collection and sample

The research design was qualitative and exploratory because it focused on the experiences of pre-service teachers who used Flip as part of their WIL during their TP. The purpose of the study was to gain a greater understanding of the students' experiences and how they viewed the usefulness of the Flip platform for their professional development as future teachers. Rather than quantifying responses, it was important to explore their reported experiences in depth. The participants of the study were third-year pre-service teachers in the School of Education from a South African university. The reason for exploring the experiences of third-year pre-service teachers was because Flip was integrated into the WIL component of TP in 2021 at third-year level specifically. In total, 322 pre-service teachers were registered for the mandatory TP module. As part of their final portfolio (after completing the module), all third-year TP students were asked to reflect on various aspects of the WIL component, including their experiences with Flip as a "virtual school visit" platform. The following two reflective statements were provided: "What I most enjoyed about using Flip for virtual teaching was …" and "What I least enjoyed about using Flip for virtual teaching was …" The students could indicate if they would like their portfolio reflections to be used for research purposes or not. By indicating 'yes' and by signing the consent form they gave permission. The reflections of the 146 pre-service teachers (64% females and 36% males) who indicated yes were used to constitute the research findings. The boxes contain verbatim quotes to showcase the responses and reasoning of participants. Pseudonyms such as #1 and #2 were used to protect the identity of participants.

Data analysis

The reflections of the pre-service teachers resulted in qualitative data that provided in-depth descriptions of their perspectives and experiences with using Flip. Each pre-service teacher's reflection was analysed and coded using thematic analysis. Thematic analysis is useful because, as outlined by Braun and Clarke (2023), themes "contain diversity, but they have a central idea that unifies the diversity" (p. 3). First, codes were used to identify ideas and topics in the data. Thereafter the codes were collated together into 11 subordinate themes that were best representative of the data. The last step was to collate and group the 11 subordinate themes into two superordinate themes. The open-ended and non-leading nature of the two reflective statements led to diverse results which have been encapsulated in the description of the superordinate themes and supported by verbatim extracts from the pre-service teachers' reflections.

Ethical considerations

The pre-service teachers shared their experiences in a written assignment and were asked if their reflections could be used for research purposes. Only the pre-service teachers who gave consent were considered. Thereafter, a formal ethical clearance proposal was initiated. Before data analysis commenced, ethical clearance was granted by the university's ethics committee. All responses were dealt with anonymously and none of the pre-service teacher identities were revealed.

Results and Discussion

As previously stated, in total 11 subordinate themes were identified. These subordinate themes were then grouped into two superordinate themes namely, (1) the teaching environment and (2) teaching experience.

Theme 1: The teaching environment

The first theme speaks to how the participants experienced the 'virtual' teaching and learning environment. Mulang (2021) describes the learning environment as the place where the teaching and learning process occurs and it includes all classrooms (including libraries and tutorial rooms). However, due to the COVID-19 pandemic, the 'conventional' learning environment shifted towards improvision and adaptation. Higher education institutions had to consider alternative avenues and create teaching and learning environments where students could operate to be successful in their studies (Whittle, Tiwari, Yan & Williams, 2020).

In the case of this research, the participants recorded their teaching videos in their homes, in available venues at the university hostels, in their bedrooms or outdoor spaces. Participants associated the teaching environment with comfort and convenience. While some pre-service teachers would ask their family members to 'act' as learners (#2), some of them pretended to have learners present whilst teaching (#6 and #9). Because of the familiarity and privacy of these known spaces, participants emphasised how pressure, distractions and disruptions were minimised (in comparison to the traditional classroom environment) (#4). They were able to record their teaching videos during any time of the day and were not restricted to a set school timetable (#1 and #3). Some participants felt that the expectations to get dressed for the virtual teaching environment were different from the traditional teaching environment (#1).

> ***#1*** *It did not actually come with the extra weight of waking up every morning and going to school and having to struggle with the proper clothes to wear to school, but with Flipgrid you just had to wake up anytime and do the work.*
>
> ***#2*** *I was teaching only 3 leaners (my siblings). All the lessons were going in a logic way, it was easy to explain and to pick the challenges and strength of each learner then attend to it. Learners did not distract the class in all lessons. Learners were comfortable to ask where they do not understand until they get it. Learners were disciplined and easy to deal with in a way that no lesson was disrupted, and this allowed me to enjoy teaching and grow the passion of teaching.*
>
> ***#3*** *I could also record at any time I was ready to present, there was no set time I was supposed to record, as long I submitted by the end of the day.*
>
> ***#4*** *I enjoyed teaching in my own spaces and freedom, I didn't have to be under pressure of being with the lecturer and the mentor teacher who makes me really nervous, even when I am not satisfied I would just change my lesson and do another one.*
>
> ***#5*** *I was comfortable in my room and it was fun.*

The virtual teaching environment was associated with made-up scenarios and simulated experiences. These experiences seem to have grown participants' confidence and made them feel more secure. Due to it being a controlled environment, they were able to plan and execute their lessons according to a set plan (#7). They were not confronted with unexpected situations or disciplinary challenges which could potentially derail the lesson and/or provoke anxiety (#10). They were able to visualise how lessons would

play off. Creativity and improvisation were the products of using their imagination (#6, #9 and #11).

> ***#6*** *I became more creative, because I had to improvise. Since I had no learners in my class, I made my own learners from paper. I lived myself into teaching and imagined that it was real learners to ensure that there is interaction amongst me and the learners.*
>
> ***#7*** *The learners are not there to ask you question, but as the teacher of that particular lesson you anticipate the questions they might have and try to deal with them in the lesson.*
>
> ***#8*** *I was able to create my own scenarios on how I would want my own classroom to be like even though there were not learners. It was more enjoyable for the fact that there were no live audience, and I could capture and correct mistakes and really try my best to show to the lecturers what I am capable of.*
>
> ***#9*** *I had to use my imagination and visualise a classroom full of learners and I had to make sure that my classroom was inclusive, I used pictures or materials that I think would be in a normal classroom, that triggered my creativity.*
>
> ***#10*** *The ability to interact with other students using videos. It was almost like having or being in a contact class or face to face in the real world, but without the pressure or the anxiety of presenting in a live classroom full of other students.*
>
> ***#11*** *I had to come up with creative ways on how I will have materials such as the writing boards and other things that a proper classroom had like the chalk board or white board. It took out a very creative side from me. I had to come up with ways on who I was going to teach, teaching imaginary learners was fun.*
>
> ***#12*** *It allowed me to present a lesson without any fear or pressure of the live classroom*
>
> ***#13*** *I saw it as a safe haven. I felt comfortable and could teach, without feeling as if a lot of people were looking at me.*
>
> ***#14*** *It was good practice before the actual visit to the school and I believe that every student would agree with it as when I went for the October/November school visit I was not as unsure, scared and confused as I was before the Flipgrid experience.*
>
> ***#15*** *It helps you to build confidence to tackle a real class.*
>
> ***#16*** *I have also liked the fact that we were doing the lessons without being supervised which made it easy for us to be confident enough to make that video a success without feeling under pressure and nervous to be watched by your lecturer because it was the first time we taught.*
>
> ***#17*** *I would laugh myself to death talking to myself, the first few videos were awkward, but I got used to it. I loved it when my family members would take videos of me and then when I ask questions they respond, and I had to start all over again. This was a calming thing to do especially with the pressure from other modules because I knew that every time I did these videos I would laugh rest assured.*
>
> ***#18*** *There was a lot less pressure on me during the virtual lesson because I was not afraid of doing mistakes, and also it allowed me to better observe myself which allowed for better reflection on what I thought I was doing well and what I thought I needed to improve.*

The teaching environment was identified as being non-threatening. Negative emotions and feelings such as feeling stressed, pressurised and fear were replaced by calmness, positivity and laughter (#17). The absence of a real audience was a major contributing factor (#13 and #16). Recording multiple videos over a three-week period allowed participants the opportunity to

reflect on challenges encountered and practise their teaching in an environment that they felt most comfortable in (#14 and #18). Participants highlighted that the simulated teaching environment prepared them for the real classroom context and the common challenges encountered in traditional classroom settings (#15).

#19 *It was teaching us to again manage time during our lessons to at least cover the important concepts of the topic that I will be teaching at that time.*

#20 *I could adjust my lesson to the stipulated time period, which I will be able to manage in the future as well as adjust the content in that period of time.*

#21 *Time management was improved on single lessons because there was no disturbance, so the process of teaching was smooth.*

#22 *As time went by I started enjoying using the App, it saves time and makes one to think on their toes, I learned to respect time and use it wisely so that I can cover all the content that I have to present.*

#23 *I also learnt to work a strict stipulated time, and I learnt to cover the content with the time minutes that were given. Flipgrid really taught me that time management is very important.*

#24 *Because of Flipgrid I am now able to structure my learning objectives to be measurable within a specific time frame of the period that is given to me in the classroom, with the experience of Flipgrid I can now explain to a learner via a video in a shorter period to clarify their misconceptions.*

Theme 2: Teaching experience

The second theme speaks to a variety of practical aspects of participants' teaching experience using Flip. Participants placed significant emphasis on the pedagogical value of engaging with Flip and recording Flip videos. Firstly, participants indicated that using Flip improved their time management skills because they had to plan the short lessons carefully to reach the outcomes of the lessons (#21, #23 and #24). According to Alvarez, Sainz, Ferrero and Ugidos (2019), time management is an essential component of teaching and learning in the online environment because teachers need to reach specific lesson objectives within a specified timeframe. The fact that Flip only allows video submissions of a maximum of 10 minutes meant that they had to consider their pacing carefully whilst teaching the content (#22 and #23). Participants felt that they had to sensibly consider how they conveyed important aspects of the content so that learning would be the outcome (#19 and #23). This finding shows that time-restricted videos captured on a platform such as Flip can help pre-service teachers to consider carefully how they teach. Rather than providing elaborate explanations with repetitive statements, the time restriction on video recordings can assist pre-service teachers to think about concisely explaining the content. The authors are of the opinion that this is an important skill, especially in a world dominated by Instagram stories, Facebook reels and YouTube shorts of a few seconds in length. Flip can potentially train pre-service teachers to teach more content in a short period to learners who possess a shorter concentration span (Domingues-Montanari, 2017; Salo, Pirkkalainen & Koskelainen, 2019).

Secondly, participants felt that they had gained valuable teaching experience. With this teaching experience, participants gained more pedagogical insight, their confidence was developed, and they felt it prepared them for real-life classroom situations. The verbatim quotes #25 to #32 illustrate participants' appreciation towards having at least some access to teaching experience in the first place. Some participants felt that the posting of videos was ideal for pre-service teacher preparation and training (#26, #30 and #32), especially for pre-service teachers who have never had the opportunity to teach. The recording of videos significantly contributed to participants' ability to articulate themselves and develop their communication skills (#30 and #31).

A significant finding was that participants enjoyed viewing themselves 'in action' and that it had an impact on their professional development as pre-service teachers. They were able to watch

their videos of teaching lessons multiple times and reflect on the positive and negative aspects of each lesson. For example, mistakes made, the use of gap fillers and repetitive speech (#33 and #34). Thirdly, participants indicated that rewatching their videos and making notes provided them with the opportunity to be more cognisant of mistakes to be rectified in future (#33). This finding is interesting because during traditional school visits the lecturer would point out areas of concern.

#25 *I got an experience of teaching even though there were not learners. Being able to teach a lesson.*

#26 *Some students complained that they were not ready for school visits, the virtual teaching was the perfect way to go for them.*

#27 *I got to gain experience in the process of giving lessons (i.e., doing lesson plans, preparing content, presenting the lesson) without having to do contact lessons, but from home.*

#28 *I could build up my teaching confidence as well as skills that I picked up, the skills I still need to acquire and improve on as well.*

#29 *Flipgrid made things easier for me and was perfect start to train students teachers.*

#30 *I also enjoyed how it portrayed me as a teacher and how well I articulate myself, it has helped me learn a lot about my articulation, pacing and how I can better sequence my work and being considerate of time.*

#31 *My family were able to watch me present a lesson. My family motivated me more on what I should do better and what I should reduce from doing, for instance I was taking fast, and my family made me aware of it and I managed to find a solution to it.*

#32 *It really was a pleasant experience because it was for the first time ever in my life teaching imaginary learners I really feel like Flipgrid was preparing us mentally on how to handle different classroom situations.*

#33 *I have enjoyed watching myself and correcting mistakes in the following videos.*

#34 *I was able to see myself present a lesson and notice a few bad habits like repeating words or phrases while engaging with learners that I now know I should rather avoid.*

#35 *I got to see what kind of a teacher I am. Also, I got the opportunity to interact with myself and be open.*

#36 *I enjoy the shooting of the videos as it was very motivational to see yourself teach and to see how encouraging it looks.*

#37 *I could reflect on my lesson based on the video I made before I get into the real world of teaching, get my wrongs right and for effective learning to occur. It was very motivational and motivating to see that I have come this far with my studies. It has also shown me that I had the potential and shown passion for teaching.*

However, it is common for pre-service teachers not to be able to recall that they made the mistakes in the first place (often because of high stress and anxiety levels). The authors argue that recorded videos allow pre-service teachers to witness presented lessons' shortcomings first-hand which can potentially be more credible and constructive than a lecturer pointing them out. Viewing themselves in action does not only increase pre-service teachers' confidence but also their autonomy and self-belief, all of which can contribute to student success and longevity in pursuing a teaching career.

Fourthly, participants emphasised the contribution Flip made to their ability to understand and use technology to teach online and/or virtually (#40). This is especially important because this will increase their confidence when using technology and, therefore, strengthen their TPACK (Koehler & Mishra, 2009). The development of TPACK is "a multigenerational process" and it involves the development of deeper understanding of the complex web of relationships between content, pedagogy, and technology and

the context in which it functions (Koehler et al., 2007).

#38 *The virtual teaching is important as the world moves towards the 4th industrial revolution and it equip us as student teachers with skills and knowledge to conduct classes in online platforms.*

#39 *I also enjoyed the virtual teaching and it encouraged me to start a YouTube online channel that provides free lessons on various subjects. I will start this venture next year when the schools start.*

#40 *I believe that the virtual teaching also improved my technical skills as I have now gained some knowledge and experience as to how to teach online and how to be successful at it which is very important in these times.*

#41 *Virtual teaching helped me to be able to think critically and creatively on how to go about employing media and teaching strategies virtually thus it prepares us as future teachers to be equipped to deal with such situations when they arise in the future where we will be compelled to teach online.*

#42 *I enjoyed using Flipgrid as it somehow made me gain more knowledge on how to work with online platforms as a student. It gave me problems, but I really will like to use it again in future, it is something that helps one to gain knowledge and interact with the other learners online.*

#43 *Flipgrid gave me an opportunity to develop voice and to learn how to present myself in an online platform. It allowed me to experience the use of technology on different angles and to have confidence with the use of it. Though it was difficult in the beginning, it gave me light on how to tap into the new use of gadgets and at a later stage I actually started to enjoy it and found that Flipgrid is an easy way of learning.*

Participants recognise that technology is an integral part of teaching and learning and that they should be able to use technology effectively (#38). Using Flip was empowering because some participants indicated that they are considering pursuing online and/or remote teaching opportunities (#39 and #42). We believe that Flip (and similar video recording platforms) can assist pre-service teachers to enhance their technological skills and online presence which can give them greater access to teaching opportunities.

#44 *With Flipgrid, teaching and learning can be perfect or amazing since as a student teacher if there was anything that can be improved in the recorded lesson, there was a chance to record another lesson that is improved.*

#45 *We could rewind or change what we did not like about our presentation, something that does not happen in a regular class setting.*

#46 *It provided me with a platform where I could watch myself and reflect about my own style of teaching.*

#47 *With the feedback that I got from my lecturers through Flipgrid, I was able to constantly improve my manner of presenting lessons and teaching material.*

#48 *I had to repeat the video repeatedly until I was satisfied.*

#49 *The Flipgrid experience also made it easy for me to learn from my mistakes and also know how to fix them.*

#50 *We could edit our videos in a sense of perfecting them, whilst if we were in the actual school, it would have not been a case because we do not have a chance to go through our lesson plans and notes.*

#51 *I would listen to the video when it was completed, and if I made any mistakes, I could start again and repair them. In contrast to a real classroom, if I make a mistake, the lecturer will point it out to me.*

Fifthly, as already identified in previous sections, Flip also provides an opportunity for reflection. Teachers are often referred to as 'reflective practitioners' and pre-service teachers are often expected to reflect on their teaching journey as well as the strengths and weaknesses of

their lesson plans and lesson presentations (Anderson, 2020; Farrell, 2019). Having access to recorded videos of lessons is beneficial for reflection. Reflection seems to take place more organically on this social learning platform. The reasons are that: (1) pre-service teachers are aware that their peers and lecturers will be watching their teaching videos and (2) they can delete the video, make improvements to their lesson and re-record the video. Rewatching recorded lesson videos and rerecording lessons results in pre-service teachers practising their teaching (probably more in comparison with face-to-face lessons) and they can improve on the quality of lessons presented (#44 to #51).

Lastly, the significance of collaborative learning was highlighted. According to Erkens, Jaspers, Prangsma and Kanselaar (2005) and Teasley and Roschelle (1995), the most accepted definition of collaboration is the process of building shared understanding through interaction with others, where participants are committed to or engaged in common goals and problem-solving. Collaborative learning is a social constructivist pedagogical model that enhances learning and is regarded as one of the approaches that provides the most benefits to current teaching in higher education (Cecchini et al., 2020; Merono, Calderón & Arias-Estero, 2021). In the case of this research, all pre-service teachers had one goal – to teach lessons in an appropriate and well aligned manner to ensure quality teaching and learning. Having access to one another's lesson videos gave the pre-service teachers access to an archive of a variety of lessons. Participants indicated that it was an invaluable learning experience because they could observe their peers and learn from their approach to teaching (#53 and #55). It also contributed effectively because their peers' videos motivated them to improve their teaching, to be more creative and to assess their lesson submissions (#52, #54 and #56). Some participants (#57) indicated that they appreciated feedback from their peers.

Conclusion

In exploring the experiences of pre-service teachers engaging with Flip, light was shed on the value this social learning platform adds to pre-service teacher development and training. The impact of this platform on their pedagogical journey is multifaceted and extends into their holistic development as future teachers.

#52 *Flipgrid allows students to view other students' videos and this motivated me to do my best on my videos.*

#53 *Flipgrid made it possible for me to be able to engage with other students, submit my videos and I was able to learn through other students' videos on what to do and how to do it.*

#54 *Flipgrid also allowed me to have access to other students' lesson videos where I was able to assess my lessons with theirs and do self-reflections.*

#55 *Somehow, I found Flipgrid interesting because I had to watch other students' presentations to see how they are doing and learn something from them.*

#56 *I enjoyed listening and watching videos of my fellow student more than anything on Flipgrid. I could watch others videos to get an idea of how to go about doing an activity if I did not understand and it really helped me to see other ways of approaching the activity other than my approach. I could learn other techniques that I can use on my videos from just watching others videos and it was the best way ever. I could even assess the work of others on my own just to give a few pointers on how they could have done it better and this gave me a lot of ideas to use in every video that I had to submit on Flipgrid.*

#57 *There is a student-to-student option for responses, which means that everyone in the class may see and comment on each other's video, even if we did not make it ourselves.*

#58 *I loved that I could have seen my classmate's videos and that also helped me to improve my video lessons. It was a learning experience.*

The first superordinate theme underscores the significance of the teaching environment, which shifted dramatically due to the pandemic. Participants found comfort and convenience in familiar spaces, allowing for

reduced pressure, fewer distractions, and enhanced control during the lesson presentations. This simulated environment acted as a preparation ground for the challenges encountered in traditional classrooms, offering a unique opportunity for reflection and skill development.

The second superordinate theme highlights the practical aspects and pedagogical value of using Flip. Pre-service teachers honed their time management skills, learning to convey content concisely within a limited timeframe. Participants recognised Flip as a platform for understanding and utilising technology in teaching, vital in enhancing their TPACK. The ability to review recorded lessons facilitated organic reflection, allowing pre-service teachers to identify areas for improvement and actively engage in refining their teaching practices. The Flip platform fostered collaborative learning, fostering motivation, creativity, and a shared learning experience. It is clear that Flip is a valuable resource for preparing pre-service teachers in a cost- and time-effective manner.

Disclosure statement

No potential conflict of interest was reported by the authors.

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