Purposeful Collaboration through Professional Learning Communities: Teacher Educators' Challenges

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Abstract. The Covid-19 pandemic has affected the teaching practicum component of initial teacher education programmes in significant ways. School-based placement could not take place, but teacher educators still needed to ensure that the teaching practicum component complied with policy. The aim of this study is to indicate how work-integrated learning teacher educators created professional learning communities among an entire population of 7 041 student teachers enrolled for the Baccalaureus Educationis degree, the challenges they faced and how they managed these challenges. The professional learning community model of Hord (2009) was used as a conceptual framework for this study. In this qualitative multi-site case study, document analysis was the primary data collection method. Journals and WhatsApp messages kept by the two work-integrated learning teacher educators and the minutes of virtual work-integrated learning meetings were analysed using narrative and thematic analysis. The findings indicated four main challenges, namely constituting the professional learning communities and developing the alternative task, dealing with issues related to group demographics and diversity, connectivity, technology and collaborating in learning in a remote environment, and lastly, providing continuous feedback, support and guidance. Recommendations for future practice are discussed.

Keywords: collaborative learning; professional learning communities; student teachers; teacher educators; work-integrated learning

1. Introduction

The Covid-19 pandemic has had a severe impact on initial teacher education, and specifically the teaching practice component, in various ways (Donitsa-Schmidt & Ramot, 2020; Flores & Swennen, 2020; Nel & Marais, 2021). The agendas of Faculty

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of Education meetings also reflected the pandemic mode – plans to ensure successful completion of the teaching practicum: Plan A, Plan B, and if all else fails, Plan C.

Work-integrated learning, commonly known as "teaching practice", is the trademark of initial teacher education and a required component of Baccalaureus Educationis (BEd) degree programmes (Department of Higher Education and Training, 2015; Reyneke & Botha, 2019). As universities and schools throughout the country moved their instruction online to ensure that Covid-19 protocols, such as social distancing, were complied with, a crucial problem emerged for teacher training programmes: the disappearance of classrooms, namely school-based placement, the main feature of collaboration between universities and schools. Work-integrated learning teacher educators at the university were tasked to create alternatives to the traditional school-based placement component that would still comply with the South African Department of Higher Education and Training policy (Nel et al., 2021). Several risk factors were considered during this discourse, including a media briefing by the South African minister of Basic Education where she stated that the department "highly discourage[d] people from visiting schools" (Motshega, 2020, p. 1) to curb infection. Communication from many of the almost 6 000 schools on the database of a South African university mostly indicated an unwillingness to host student teachers at these schools in 2020.

Communication from the Department of Higher Education and Training did not provide explicit guidance in terms of what would constitute acceptable alternatives for the required number of school-based placement weeks in order to complete the four-year BEd programme, as stipulated within the *Minimum Requirements for Teacher Education Qualifications* policy document (Department of Higher Education and Training, 2015). It was clear that the onus would be on individual institutions to meet the requirements while still adhering to protocols and placing the safety of student teachers at the forefront of their decisions. After negotiations with the Department of Basic Education, the Department of Higher Education and Training, and university management, one university proposed a non-school-based project for first- to third-year BEd students for the second semester of 2020.

Student teachers need opportunities to learn and practise skills needed for their profession, including those of successful collaboration. Darling-Hammond (2006, p. 305) states that "[p]reparing teachers as classroom researchers and expert collaborators who can learn from one another is essential when the range of knowledge for teaching has grown so expansive that it cannot be mastered by any individual". Furthermore, through learning about and experiencing collaboration during the preparation period, pre-service teachers can avoid having to learn, unlearn, and relearn what teaching and learning look like. Teachers can thus be guided to collaborate by establishing professional learning communities (PLCs) to work together to improve their own careers as well as the whole educational system. The purpose of this study was to address the following research questions:

- What challenges did work-integrated learning teacher educators encounter in, firstly, constituting student teacher PLCs, and secondly, emphasising collaboration as a process?
- How were these challenges addressed, if at all?

2. The need for student teacher collaboration within professional learning communities

According to Barber and Mourshed (2007), teachers' competence is regarded as one of the most important factors affecting learners' learning and chances of success. Consequently, the growth of that competence is an important part of ensuring that learners' achievement and success are addressed. Research indicates that teacher collaboration is a crucial means by which this can be achieved (Carpenter, 2017). Initial teacher education programmes that are more practice-based and aligned with the realities of teaching in a school prepare student teachers better for the challenges they will face in their first few years of teaching (Greenhill, 2010). According to Long et al. (2021), interaction with and support from colleagues is essential for promoting work satisfaction and retention among teachers. In this article, we view collaboration as a process, namely "a domain-general skill that is important in its own right for work and life in society" (Evans, 2020, p. 5). The focus is on the nature and quality of the collaborative task and the interaction among the student teachers. By providing student teachers with opportunities to engage in collaboration within groups resembling PLCs, we hope to lay the foundation for student teachers' professional growth (cf. Damjanovic & Blank, 2021; Long et al., 2021). Research indicates that this type of collaboration that is focused on addressing learners' needs and success can be achieved in PLCs (Olsson, 2019; Reyneke & Botha, 2019).

In the *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa* (Department of Basic Education, 2011, p. 14), PLCs are defined as "communities that provide the setting and necessary support for groups of classroom teachers, school managers and subject advisors to participate collectively in determining their own developmental trajectories, and to set up activities that will drive their development". In addition, the Department of Basic Education (2015, p. 4) states that "PLCs can make professional development more relevant and effective". The importance of PLCs and collaboration is also emphasised in the *Professional Teaching Standards* document of the South African Council for Educators (2020), in which the following points are made:
Teachers collaborate with others to support teaching, learning and their professional development.

2.1 Teachers conduct themselves in ways that earn the respect of those in their communities and uphold the dignity of the teaching profession.

2.2 Teachers understand that the wellbeing of learners and the support of their learning requires communication and collaboration between teachers, parents, caregivers, other professionals, and the community.

2.3 Teachers are responsible for their ongoing personal, academic and professional growth through reflection, study, reading, and research.

2.4 Teachers participate in endorsed continuing professional teacher development activities/programmes organised by their subject associations, PLCs, higher education institutions, teacher unions and private providers.

2.5 Teachers provide supportive environments for the induction and mentoring of colleagues who are new to their school, as well as for pre-service and newly qualified teachers.

2.6 Teachers actively involve themselves in educational debates, curriculum development initiatives, and educational issues that affect them.

The work of teaching and learning in schools in the 21st century differs from how it was done in the schools of the previous century, as the work has become more collaborative in nature. As initial teacher education programmes are to train teachers that can work collaboratively in PLCs in order to enhance learners' learning and success, they need to be provided with opportunities to practise these skills. However, a study conducted by Dolezal (2008) indicates that there is hardly any use for PLCs in initial teacher education. Teacher preparation programmes have the challenge of engaging student teachers in learning the professional discourse and practices of primary and secondary schools. This statement reinforces Hollins's (2011, p. 405) declaration that the practices in the preparation of teachers for quality teaching, "at the core, mirror those which candidates are expected to apply in PK-12 schools".

We selected the PLC model developed by Hord (2009) as the conceptual framework for this study. This model identifies six dimensions, namely supportive and shared leadership, shared beliefs, values and vision, intentional collaborative learning and application of learning, supportive structural conditions, supportive relational conditions, and shared practice. PLCs can only be successful if there is supportive leadership from a person or persons in charge of the group. The leadership and ideas are shared in collaborative decision making. Teachers and student teachers working collaboratively share beliefs and a vision about ensuring that no learner is left behind and that success is within the reach of all learners. So, teachers and student teachers intentionally collaborate to ensure that their knowledge and teaching practice grow to ensure the continued learning of learners. PLCs can only be successful if both structural and relational conditions are addressed. Structural conditions refer to logistical aspects such as a place and time to meet and access to resources. Relational conditions refer to aspects such as building trust, learning to communicate respectfully, being supportive and caring, and learning to handle conflict (Hord & Tobia, 2012). The dimension of shared practice "involves the review of a teacher's behavior by colleagues and includes feedback and assistance to support individual and community improvement" (Hord & Tobia, 2012, p. 26).

Research indicates that the implementation of PLCs is a successful strategy for addressing and sustaining the successful learning of learners (DuFour, 2007). However, many teachers continue to work independently and in isolation from their colleagues; hence, fostering collaboration in most schools is a challenge. DuFour and Marzano (2011, p. 1) point out that "no single person has all the

knowledge, skills, and talent to lead a district, improve a school, or meet all the needs of every child in his or her classroom". Therefore, initial teacher education programmes need to play their part in providing student teachers with opportunities to practise collaboration skills within PLCs.

3. Methodology
3.1 Design
As context was crucial, a qualitative case study approach was employed to examine the initiatives implemented within a BEd programme at one South African university. The case study allowed for the "exploration of a 'bounded system' or case" (Creswell, 1998, p. 61). Bounded systems are typically bounded by time and place, and a case may be a programme (Creswell, 1998). A case study "allows investigators to retain the holistic and meaningful characteristics of real life events" (Yin, 2009, p. 4). Zeichner (1999, p. 9) notes that case studies in teacher education programmes provide "a close-up and detailed look at particular teacher education activities and show what a teacher education programme looks like from the inside, from the perspectives of students and faculty". The perspectives of the challenges faced by work-integrated learning teacher educators in trying to enhance student teachers' collaborative skills by placing them in PLCs provide a richer, fuller "inside" perspective – essentially, the study of the lived experience (cf. Glesne, 2006).

3.2 Participants and sampling
The South African institution where this study was conducted is a unitary, integrated, multi-campus university with three campuses (i.e., multi-site) offering a BEd programme in a contact and open distance learning delivery mode. The total number of students taking part in the study included the entire population of first-, second-, and third-year students registered for the work-integrated learning module (i.e., teaching practice) in the second semester of 2020 (cf. Table 1).

Table 1: Number of students in the BEd programme

Qualification name	BEd
Year level	2 020
1	2 560
2	2 290
3	2 191
Total	7 041

In addition, 16 postgraduate students were appointed as facilitators to assist us (two work-integrated learning teacher educators) with student teacher inquiries and monitoring the PLC progress. An administrative assistant was tasked with initially constituting the communities and managing the process of ensuring that all of the student teachers made contact with their community members. Ethical clearance was obtained from the ethical committee of the university, and gatekeeper permission was also attained from the university.

3.3   Data collection methods

Documents can be regarded as a valuable source of information within qualitative research, as they help researchers to understand the phenomenon at hand (Creswell, 1998). The standard approach to the analysis of documents focuses primarily on what is contained within them. Documents are viewed as pieces of communication between a writer and a reader that contain meaningful messages. Document analysis can be understood as the study of existing documents, either to understand their substantive content or to illuminate deeper meanings that may be revealed by their style or coverage. For this study, the following documents and artefacts were collected: journals, WhatsApp messages and voice notes kept by us, and the minutes of work-integrated learning meetings focused on discussing the alternatives to school-based placement.

3.4   Data analysis

The data collected were analysed using both a narrative and a thematic analysis approach. Thematic analysis was used to identify themes in the data, and narrative analysis was used to examine how the themes were used in our narratives during meetings and on WhatsApp voice notes. Narrative analysis seeks to acknowledge the context and understand phenomena through the meanings that speakers assign to them (Cortazzi, 2014). Thematic and narrative analysis is often used together in research as complementary approaches not only to search for patterns and themes (thematic analysis) but also to interpret the meaning and reasoning behind the presence of those patterns and themes in context (narrative analysis).

4. Findings and discussion

An analysis of our journals, WhatsApp messages, and voice notes and the minutes of meetings indicated four themes highlighting the challenges we were facing during the study. The following themes emerged: constituting the PLCs; dealing with group demographics and diversity; connectivity, technology, and collaborating in an emergency remote environment; and providing feedback, support, and guidance.

4.1   Challenge 1: Constituting the professional learning communities

The first challenge included aspects such as developing a meaningful task and the *Protection of Personal Information* (POPI) act. As mentioned, the Covid-19 pandemic brought about unprecedented challenges for teacher education, one of which was that students not only had to learn in an online format but also communicate and collaborate with one another remotely. Teacher educators, therefore, had to adapt all existing course requirements. As student teachers could not be placed in schools for work-integrated learning, teacher educators had to find innovative ways to bring the classroom to the student. This should ensure learning from practice in a situation where learning in practice would not be possible. The task below was an effort to employ PLCs to challenge student teachers to critically reflect on their current understanding of schooling and challenge the dominant discourses they upheld, while at the same time actively engaging with learning material for the course. Creating a meaningful task that would contribute to learning, as well as the development of their personal and professional identities, proved to be a significant endeavour.

The task

The task that the student teachers were required to complete is provided in Table 2.

Table 2: Group task

Design the ideal school that brings together the philosophies and approaches to teaching and learning that you have been exposed to, as well as the practical considerations that you feel would be most effective and engaging to all stakeholders in the educational system. In doing so, please make sure that you address the following: • The basics (name, logo, etc.) • The physical space • The teachers • The learners • The learning • The curriculum • The activities • The system The motivation for your ideal school should also be a critique of the current schooling system in South Africa. You are welcome to use parts of the system that you consider to be effective, but be innovative and creative in the alternatives that you suggest!

The POPI act

A total number of 7 008 student teachers, spread out across the entire country, had to be divided into PLCs in 2020. In South Africa, the POPI Act (2020) regulates the sharing of personal information and sets conditions for the protection of personal data. This act spells out definite consequences should an institution not adhere to this law and freely share the personal information of student teachers. The implication of this for universities is that no email address or telephone number of a student teacher may be made available on public platforms such as learning management systems. This legislation created a challenge for this study which was aimed at enhancing collaborative learning among student teachers in PLCs. Innovative thinking was, therefore, required to create a system where student teachers would be able to connect with one another and form PLC without violating the POPI Act. The learning management system of the university offers teacher educators the option of posting forum topics where student teachers can engage with one another. In order to address this challenge, we posted a list of student numbers and PLC numbers (thereby not sharing any personal information) on the forum. Each individual student teacher then had to post their email address or telephone number in the forum for their specific PLC. Once all six of the PLC members had willingly shared their contact information, one student teacher had to accept the leadership role and create a communal PLC on WhatsApp or Google Docs where they could work.

The students did not have the option of not sharing their detail, as they needed to complete this task in order to pass the module. Despite several attempts to motivate the students to make contact, an additional challenge was experienced, as some of the students did not reply to numerous requests to initiate contact with their PLC members. This prevented the PLCs from starting with their

collaborative task, as they were still waiting for some individuals to join. This challenge was addressed by appointing an administrative assistant who continuously monitored the PLCs. After the first due date for PLC constitution had passed, the assistant removed all students who had not made contact. A second set of PLCs was created for the initial non-responsive student teachers to join. This action was repeated four times on a weekly basis to ensure that the PLCs could effectively progress with their tasks, while students who did not make contact still had the opportunity of joining a new PLC rather than joining their initial PLC late and possibly causing conflict and frustration among the community members. A due date was also set for the PLCs to submit contracts accepting their responsibility and committing to personal accountability in their collaborative task (cf. Table 3).

Table 3: Group contract

Group contract: Individual members' responsibilities
As a member of this professional learning community, I agree to: • respect group members, demonstrate sensitivity, and encourage learning;   • be fully committed to the group task and the individual responsibilities I have been entrusted with;   • work according to the agreed timeframe;   • give and receive feedback about my work and participate in group discussions;   • attend all meetings unless the group has been informed of anticipated absenteeism;   • agree to resolve conflict according to the group's process as soon as it arises;   • ensure that all group members contribute equally to the task by addressing problems as they arise;   • agree to collectively read and edit the final group presentation; and   • provide contact details and respond to group communication when and where required.   Name: _____ Student number: _____   Group number: _____ Role: _____   Colour you will be using in the Google Doc to indicate your contribution: _____

4.2   Challenge 2: Dealing with group demographics and diversity

The second challenge included issues with regard to gender and race, campus and mode of delivery, age and level of study, language, teaching practice experience, socio-economic circumstances, and educational background.

4.2.1 Gender and race

A total of 7 008 student teachers across the three campus sites and the open distance learning cohort had to be placed into PLCs. Table 4 gives an outline of the student teacher population in terms of gender and race per campus.

Table 4: Gender and race per campus

Qualification name	BEd			
Year	2020			
Gender	Race	Campus A	Campus B	Campus C
Female	Unknown			2
	African	1 052	904	779
	Coloured	13	380	21
	Indian/Asian	1	76	6
	White	3	1 786	107
Total female		1 069	3 146	915
Male	Unknown			1
	African	669	312	392
	Coloured	4	98	5
	Indian/Asian	1	12	3
	White	0	373	41
Total male		674	795	442
Grand total		1 743	3 941	1 357

4.2.2 Campus and mode of delivery

Although the university is a unitary institution, teachers are very seldom given the opportunity of collaborating across the campus sites. This collaborative task within PLCs was the first time in which we grouped student teachers across the campus sites, as well as the open distance learning cohort, into PLCs to work together. Table 5 gives an outline of the number of student teachers per campus and mode of delivery.

Table 5: Number of student teachers per year group

Qualification Name	BEd
Year level	2 020
1	2 560
2	2 290
3	2 191
Total	7 041

4.2.3 Age and level of study

Another challenge that presented itself was the age and year level of the members of the groups. Traditionally, the general trend is that contact students are younger students who tend to come to university directly after completing their schooling. The age of the contact students in this cohort ranged from 19 to 21 years old. Distance students tend to be older, and many of them are employed full time, either in education or outside of the education sector. The age of the group members could, therefore, vary greatly, which had implications for the life experience and perceptions that they brought to the PLC. Including first-, second-, and third-year students in one PLC could also be a source of tension and difference within a PLC. The intention was for the more senior students to act in a mentoring role towards the first-year students, but due to their varying ages and life experience, that was not always the case.

4.2.4 Language
Another obvious challenge that had the potential to create a lot of tension in PLCs involved the home language and language of instruction of the community members. At the university, two languages are offered as the medium of instruction, namely English and Afrikaans. The groups were constituted in random ways to promote multilingualism among the students and adhere to the language policy of the institution. A number of emails from students to us indicated that not all of the members felt at ease being in a community with members who spoke other languages. Table 6 gives an outline of the language distribution at the different campus sites.

Table 6: Number of students per language in the BEd programme

Language	Campus A	Campus B	Campus C
Afrikaans	6	2 177	121
English	116	660	129
isiNdebele	18	15	10
isiXhosa	78	68	84
isiZulu	35	103	155
Other language	155	187	169
Sesotho	69	185	522
SesothosaLebowa	17	29	19
Setswana	1 116	469	75
siSwati	76	17	25
Tshivenda	9	5	11
Unknown	1	2	4
Xitsonga	47	24	33
Grand total	1 743	3 941	1 357

4.2.5 Teaching practice experience
The students in the groups represented different year levels within the BEd programme. Therefore, these student teachers differed in terms of the time they had spent in school-based placement; for example, second- and third-year students had been placed in schools for some teaching practice blocks prior to the pandemic, while the first-year students had never experienced teaching practice placement. As the academic year starts in February, these students had barely been at university for two months when the pandemic hit South Africa. Whereas the second- and third-year students had a point of reference of being on the other side of a desk in a classroom, the first-year students had only their own schooling to use as a very limited point of reference.

4.2.6 Socio-economic circumstances
When student teachers go for their school-based placement, we try to ensure that they are exposed to different and diverse schools, as stipulated within the *Minimum Requirements for Teacher Education Qualifications* (Department of Higher Education and Training, 2015). South Africa is a country with a vast array of school environments, from extremely prestigious private schools where monthly tuition exceeds the salaries of most South Africans and well-resourced schools with the newest technology to under-resourced schools with classrooms that have only the bare basics in terms of furniture and staff. Many of these schools have feeding schemes that provide learners with their only meal of the day. Weather

elements, such as flooding, affect the daily lives of the learners at under-resourced schools. Moreover, approximately 60% of the students enrolled at the university in question are able to study only because they have a government-funded bursary, which means that many of them come from the above-mentioned poorly resourced schools. Students tend to go back for teaching practice to the type of school where they completed their schooling (Goldhaber et al., 2021); however, it is crucial that they experience different contexts to sensitise them to the challenges most South Africans face in trying to receive quality schooling for themselves, or later, their children.

4.2.7 Educational background

The challenge presented by the diverse educational backgrounds of the student teachers is that in one PLC, there might be students from very privileged backgrounds together with students who had never had any experience with or exposure to a well-resourced school. The challenge in terms of educational background not only involved the schools where the students came from themselves or where they chose to complete their teaching practice but also referred to the resources they themselves had available to collaborate on the task.

4.3 Challenge 3: Connectivity, technology, and collaborating in an emergency remote environment

This challenge posed issues of internet access and connectivity, access to data, and experience using technology.

4.3.1 Internet access and connectivity

Internet access in South Africa remains elusive to most people, and frequent access to the internet is restricted to a small part of the population (Dataportal, 2020). Wi-fi is not freely available in public spaces, and the reality for this cohort of students was that many of them only had access to the internet or even access to devices when they were on campus and could use the computer rooms. These computer rooms were, of course, out of reach at the time due to campuses being closed. The collaborative task was thus designed to offer equal opportunities for both students who did have internet access and students who were struggling with connectivity. They were scattered all over the country, and even if they had the financial means to use internet cafés, these establishments were still closed due to the high level of lockdown, or the students could not afford to spend the hours there needed to collaborate with their fellow PLC members. As continuous collaboration was essential, once-off or intermittent access to the internet would not suffice.

4.3.2 Access to data

Although the university was committed to providing all students with data for the duration of the lockdown, many students did not have access to smartphones or laptops to use the data they were provided with. After deliberations with mobile phone service providers, the university learning management system became zero-rated, and students could access this crucial platform without using any data. To add to the challenges many students faced regarding connectivity, prolonged periods of loadshedding prevented many students from collaborating on the task.

4.3.3 *Experience using technology*

In addition to challenges regarding the availability of internet access and data, many students had very limited knowledge of and experience in using digital technology for learning (cf. Al-Ansi, 2021). The first-year students only had one or two months of experience in using the university's learning management system. Ways in which we tried to address this challenge included creating tutorial videos, using forums to make contact with the groups, and using the chat room to communicate with facilitators and other functionalities to access resources. In addition to a lack of experience with the learning management system of the university, students also experienced challenges related to the use of the Google suite of products (Google Docs, Google Forms, etc.). Some students also had only a very basic knowledge of using Microsoft Office products such as Word and PowerPoint. In order to address these challenges, postgraduate facilitators were appointed to assist with training via tutorial videos.

4.4 Challenge 4: Providing feedback, support, and guidance

The fourth challenge included issues of support and individual accountability and roles.

4.4.1 *Support*

Providing continuous support for more than 1 400 PLCs remained a challenge throughout the process. Facilitators were appointed to assist with challenges with regard to technology, communication, and conflict resolution. However, the number of emails received soon made it clear that we had to put additional measures in place to address this challenge. A decision was made to provide the students with a section on frequently asked questions (FAQs) in order to address common and repetitive issues arising in the communication from the various PLCs. The FAQs section was added to a live Google Doc where questions and answers could be added as they emerged. This turned out to be a very helpful tool for both facilitators and students.

4.4.2 *Individual accountability and roles*

It was quite evident that PLCs would rather send an email to a facilitator or the work-integrated learning teacher educators than watch the tutorial videos or reading the FAQs document. It was important to teach these students the responsibility of accepting ownership for their work and their role within their PLCs. They had to learn to follow prescribed steps and use the relevant communication channels. Conflict in the groups had to be dealt with first by the peacemaker and group leader (as per roles assigned at the beginning of the task) (cf. Table 7) before involving facilitators and teacher educators. During the first phase of the collaborative task, training was provided to the student teachers so that they could optimally fulfil these roles. Not only did this empower the students, but it was a pre-emptive measure to address the challenges that were anticipated to occur during the duration of the collaborative task.

Table 7: Preparing PLCs for their roles

Group leader:
- Spokesperson for the group. Communicates with the facilitator.
- Monitors the progress of individual members.
- Assists in allocating roles, responsibilities, and duties within the group.

- Ensures that all members have an equitable share in the project. - Constantly checks that all members understand the expectations. - Recognises conflict and addresses it in collaboration with the peacemaker.
Energiser: - A dynamic, caring member of the group - Sets goal dates in collaboration with the group leader. Makes adjustments where necessary. - Motivates and encourages the group. - Facilitates the process of group members getting to know one another. - Promotes positive relationships among group members. - Keeps discussions on track by monitoring progress. - Has a good sense of when a topic has been sufficiently discussed and when the focus of the group should shift. - Reassures and supports members when they become stressed or anxious. - Is a reflective thinker who can analyse the group dynamics and climate and promote a positive atmosphere.
Peacemaker: - Encourages continuous communication among the members. - Manages conflict situations. - Manages conversation to achieve an appropriate balance so that all members participate in a meaningful way. - Should be invitational, rather than confrontational. Asks members for specific rather than general contributions. - Works towards inclusion and celebrating diversity in terms of culture and abilities.
Wild card: - The innovative and creative thinker of the group who can be provocative and argumentative. - Can suggest new, creative, and alternative ways of looking at the assignment. - Their plans are often impractical due to their highly creative nature, but their ideas can spark more practical and alternative thoughts in other members. - The "idea" person who communicates the thoughts on the big picture and provokes group discussions. - Seeks connections between past, current, and future discussions. - Effective at sourcing a variety of resources.
Reality checker: - Often the loner of the group who enjoys working away from the rest of the group. - Listens to what others have to say and explains it back in their own words. - Asks for more information and provides clarity on both content and process. - Will ask questions to find factual evidence for group members' opinions. - Summarises what has taken place, points out departures from the plan, and brings the group back to pertinent issues. - Doublechecks data, resources, and bibliographies for accuracy.
Tech wizard: - Ensures a professional final product. - Collects the content and produces artwork, sound, etc. - Collaborates with the wild card on the creative side of the project and with the reality checker on insuring that all components have been included. - Collaborates with the group leader on the quality of the content.

The greatest source of conflict seemed to be language issues, various opinions on work ethic, and resistance to collaboration. The complaints highlighted the student teachers' lack of experience in and commitment to collaboration and sharing ideas on issues related to the completion of the task; individualism was at

the forefront of most of the complaints. These complaints were addressed as far as possible by the intervention of the facilitators and teacher educators.

5. Conclusion and recommendations

Before the onset of the Covid-19 pandemic, campus-based students only had experience in face-to-face classes and had not been required to learn or collaborate in PLCs in an online format. Most of them had probably worked in groups before where they knew their group members. None of the students had ever worked collaboratively across campus sites and modes of delivery and with such diverse community members. The results clearly indicated a number of challenges in trying to get student teachers to collaborate on a task within PLCs. Experiencing challenges is, however, not a reason to discontinue trying to offer student teachers the opportunity to practice professional skills in structures that will one day resemble what is required in their school working environment.

This study has indicated the value of PLCs as a pedagogical tool for enhancing the personal and professional development of student teachers. Recommendations for future practice include a proactive effort to anticipate challenges and identify areas where additional support may be needed. Using student facilitators can provide such support while at the same time freeing up teacher educators to focus on core academic requirements. Utilising technology such as live Google Docs to continuously communicate with students not only ensures that teacher educators remain on top of challenges as they arise but also creates more space to work towards reaching the aims of the collaborative task without spending too much energy on logistical matters. The success of creating PLCs lies within the fostering of a sense of individual accountability in student teachers. It is, lastly, recommended that an opportunity such as this is utilised to embrace, rather than avoid, diversity within communities of students working together. This not only reduces potential conflict situations but also creates a platform for student teachers to work towards meeting the graduate attributes of the institution, thereby preparing them to meet the professional standards of their chosen career.

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