

AUTHOR:
Prof C Nel¹
Dr E Marais¹

AFFILIATION:
¹North West University,
South Africa

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ADDRESSING THE WICKED PROBLEM OF FEEDBACK DURING THE TEACHING PRACTICUM

ABSTRACT

COVID-19 affected the teaching practicum placement of approximately 650 fourth year BEd Foundation Phase student teachers at University N in April and July 2020. The teaching practicum is seen as a purposeful, organised, supervised, mentored and assessed educational activity required for the completion of a teacher education programme. During the teaching practicum, the provision of feedback from teacher educators as well as mentor teachers forms an integral part of the learning process and enriches student teachers' learning experiences. However, student dissatisfaction with feedback during the teaching practicum presents a "wicked" problem that requires a strategic partnership approach between the university and partnership schools as well as between the triad partners of teacher educator, mentor teacher and student teacher. The purpose of this exploratory case study is to provide an overview of student teachers' perspectives on the innovative use of a social annotation platform to ensure greater collaboration on the "wicked" problem of feedback by all partners during the "learning from practice" component of the teaching practicum. The results indicated that student teachers, teacher educators as well as mentor teachers were actively engaged "on the same page" with constructive dialogic feedback that assisted student teachers to make crucial adjustments to the core practice of explaining/modelling content.

Keywords: *Feedback; Perusal; teaching practicum; annotation tools; communities of practice; partnerships; student teachers.*

1. INTRODUCTION

COVID-19 necessitated the rapid move to teaching in an online or remote mode by most universities in South Africa as well as internationally (Asma, 2020; Moorhouse, 2020). This meant that many initial teacher education programmes (ITE) had to find ways to facilitate tasks that had traditionally been done in a face-to-face mode such as the teaching practicum component of these programmes. From a review of one university's communiques and the Department of Higher Education and Training (2015) policy and communiques as well as personal communication with partnership schools, it became clear that universities and schools would have to react innovatively to the challenges

posed by COVID-19. One of these challenges included arranging the online collaboration between teacher educators as well as mentor teachers in order to observe, assess and provide feedback to final year student teachers so that they could complete their teaching practice successfully. Approximately 650 fourth year BEd Foundation Phase student teachers at University N were scheduled for their teaching practicum sessions in April and July/August 2020.

Although the teaching practicum has been described as a crucial component of teacher preparation that has a “profound impact on student teachers” (Hammerness, Darling-Hammond & Shulman, 2002: 409), the results of the Initial Teacher Education Research Project (ITERP) indicated that the teaching practicum (i.e., work-integrated learning) was characterised by inconsistencies in the amount and quality of feedback and assessment (Deacon, 2016). Similarly, McNeillage (2013: par 18) states that teachers in Australia “don’t get the feedback they need to improve their teaching”. This feedback is even more crucial for student teachers who are on a steep learning curve from their first year. Sadler (2010: 535) states that, “for many students, feedback seems to have little or no impact”. Research has also shown that the quality of mentor teacher and teacher educator feedback varies, and that student teachers are often dissatisfied with the feedback they receive (Clarke, Triggs & Nielson, 2014). In this paper we assert that feedback, as perceived by student teachers, is a “wicked” problem (Rittel & Webber, 1973). Wicked is not meant to suggest that it is “evil”, but that feedback within an online “learning from practice” teaching practicum is a challenging problem that is difficult to solve because it involves multiple stakeholders with differing views and needs (Department of Higher Education and Training, 2015: 10). Being a “wicked” problem infers that relationships and interactions between key stakeholders are central to addressing the feedback issue, especially within an online environment, and that there is no single elegant solution. In order to address “wicked problems”, collective engagement is emphasised (Grint, 2008). This paper focuses on addressing the following research question, namely What are student teachers’ perspectives on the use of Perusall, a social annotation platform, to address the “wicked” problem of feedback during the “learning from practice” teaching practicum?

2. FEEDBACK DURING THE TEACHING PRACTICUM

Wenger’s (1998) Communities of Practice (CoP) theoretical framework forms the foundation for this study. Wenger, Trayner, and de Laat (2011: 9) defined CoP as a “learning partnership among people who find it useful to learn from and with each other about a particular domain. They use each other’s experience of practice as a learning resource”. A CoP between the student teacher, the mentor teacher and the teacher educator (i.e., university teachers) will develop if they come together around ideas or topics of interest (the domain) and interact with each other to learn together. Practice is defined as “the body of knowledge, methods, tools, stories, cases, documents, which members share and develop together” to address recurring problems (e.g., wicked feedback) in their specific contexts (Wenger, 2004: para 15). Tackling the wicked problem of feedback in this study calls for an acknowledgment and acceptance that responsibility for addressing the problem lie collaboratively with all partners within the teaching practicum community of practice. Learning occurs through social interaction with opportunities to negotiate meaning related to the complexities of lived situations. CoPs are not limited to face-to-face interactions (Murillo, 2008). In this study, the CoP is based on the premise that if all partners in the teaching practicum experience are given a space to complete tasks founded on social learning approaches, they will engage in social discourse through

their common purpose and shared experiences, thereby building collective knowledge and sustaining the online community of practice.

Maheady *et al.* (2019: 356) state that university-school partnerships are “essential to the successful development, implementation and refinement of clinically based teacher education programs”. The teaching practicum involves the placement of student teachers in the classrooms of mentor teachers who provide opportunities for professional learning experiences through collaboration in planning, teaching and assessment (Robinson, 2015). According to Haigh, Ell and Mackisack (2013), the success of the teaching practicum is one of the indicators of the success of teacher education programmes. Du Plessis *et al.* (2010: 328) state that “if, as research indicates, practice teaching is the single most powerful intervention in teachers’ professional preparation; then supervision [mentoring] is the single most powerful process in such intervention”. The ability of teacher educators and mentor teachers to provide effective feedback is key to the quality of the teaching practicum and the student teachers’ professional learning (Ambrosetti, 2010; Ellis & Loughland, 2017). The use of feedback is regarded as one of the most powerful strategies to improve learner achievement (Hattie, 2009) and the South African Council for Educators (2018:12) has listed feedback as one of the professional standards for teachers, namely “Teachers provide learners with constructive feedback that helps them understand how they can improve their learning”.

Boud and Molloy (2013: 205) define feedback as

...a process whereby learners obtain information about their work in order to appreciate the similarities and differences between the appropriate standards for any given work, and the qualities of the work itself, in order to generate improved work.

Boud and Molloy (2013: 698) state that “Higher education institutions are being criticised more for inadequacies in the feedback they provide to students than for almost any other aspect of their courses”. According to Boud (2015), feedback in clinical settings (i.e., teaching practicum) should be focused not only on the information that is given, but also on the effects that result. The only way to determine if information given during feedback has resulted in learning and, therefore, improved performance is if student teachers are allowed to act on the information in order to complete the feedback loop (Sadler, 1989). Feedback should be an ongoing dialogue between teaching practicum partners and student teachers should be observed repeatedly to ensure that they react to the feedback and make changes to their teaching practices. Hattie and Timperley (2007: 88–90) identified three important components of effective feedback, Where am I going? (i.e., establishing a clear purpose of goal), How am I going? (i.e., information about progress that is being made towards the goal), and Where to next? (i.e., further improvements that need to be provided in order to enhance progress).

Providing high quality feedback involves the ability to identify next steps for all student teachers on their learning journey during the teaching practicum after noticing a “gap” in their teaching of a core practice (Sadler, 1989). According to the Australian Institute for Teaching and School Leadership (2017:11) this requires:

- understanding what high quality performance looks like;
- the capacity to diagnose how the student’s work falls short of that level; and
- the ability to help the student see the gap and how to address it.

Feedback supports student teachers to understand what is to be done and how to improve their performance. It also enables a student teacher to judge and self-assess the extent to which their teaching practice must change in order to attain the criteria or standards of professional practice and which teaching and learning strategies are more likely to be effective with learners (Brooks *et al.*, 2019).

3. PERUSALL AND UNIVERSITY N'S TEACHING PRACTICUM

3.1 Features of Perusall

Perusall is an online, social learning platform that was originally designed to promote “high pre-class reading compliance, engagement, and conceptual understanding” (Miller *et al.*, 2018: 3). A recent addition to the *Perusall* platform is the use of video and podcasts. In this study, we utilised the *Perusall* platform in an innovative way to allow student teachers, mentor teachers as well as the teacher educators to engage in a learning cycle focused on core teaching practices (e.g., explaining/modelling content) by utilising the platform not only for reading, but also for video analysis. Teacher educators (i.e., university teachers) create an online course on *Perusall* by uploading the materials they wish to assign. The platform can handle a wide range of material types, including documents in PDF, e-book format, Word documents, Excel documents, snapshots of web pages, videos and podcasts. Once a library of readings or videos have been uploaded to the *Perusall* course page (cf. Figure 1), teacher educators can create reading assignments or video assignments/tasks (cf. Figure 2).

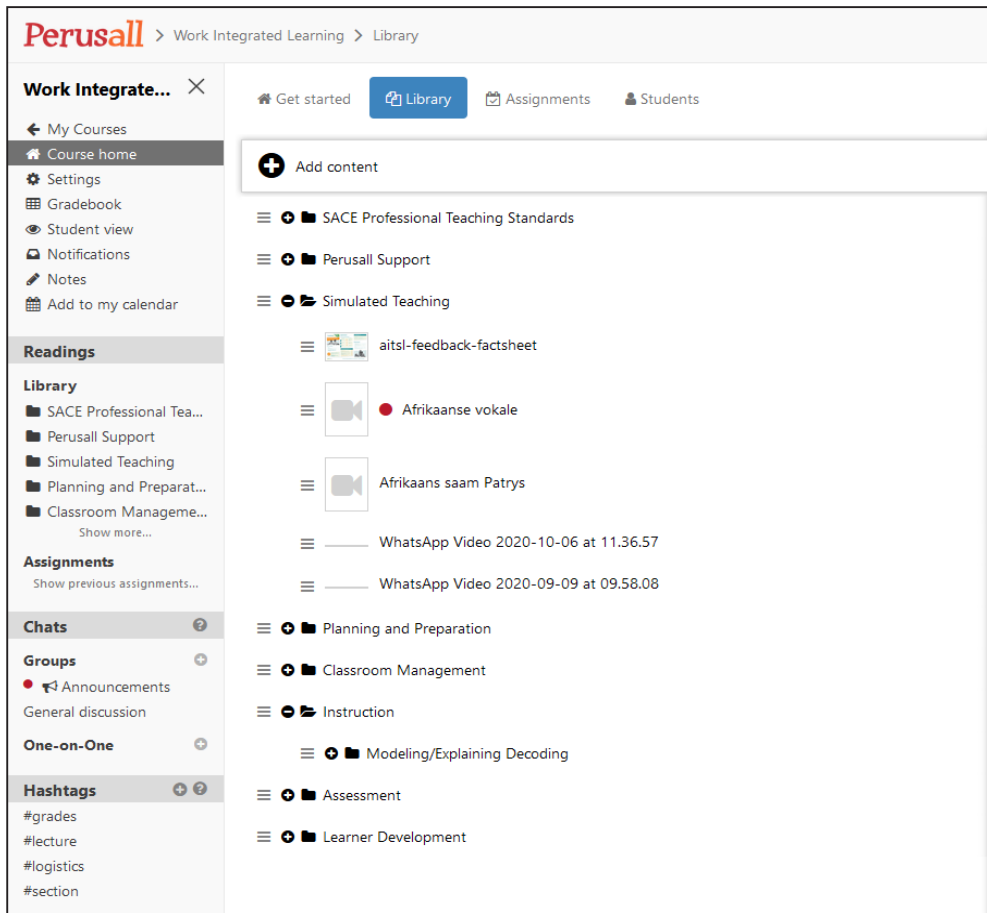


Figure 1: Library of readings and videos

https://app.Perusall.com/courses/work-integrated-learning-877641249/_/dashboard/documents/add

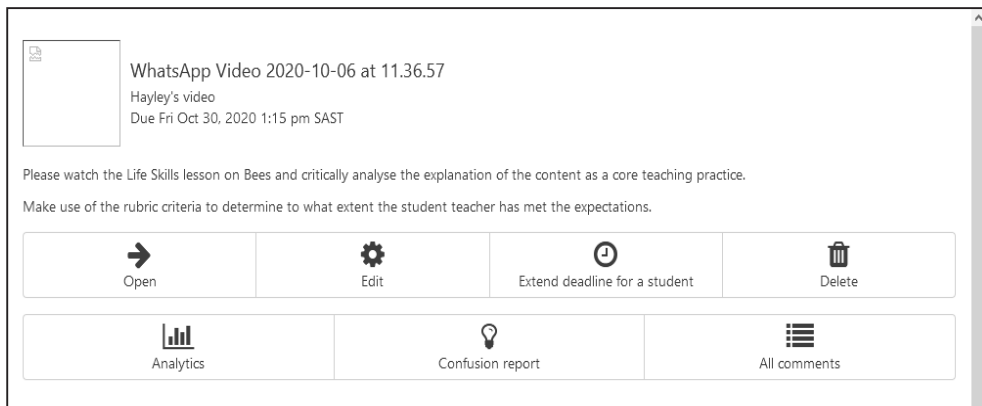


Figure 2: Video assignment

https://app.Perusall.com/courses/work-integrated-learning-877641249/_/dashboard

Once the student teachers have joined the teaching practicum course by using a code provided by the teacher educator, they are ready to begin. All their reading or video analysis assignments are stored in one location with clearly indicated due dates. The student teachers asynchronously annotate the assigned reading or video by posting (or replying to) comments or questions in a chat-like fashion (cf. Figure 3). However, *Perusall* is designed to be collaborative (Clarke, 2019). In addition to the student teachers, the teacher educators as well as the mentor teacher can contribute to conversations asynchronously by providing feedback on comments or questions made by the student teachers. The student teachers, teacher educators as well as the mentor teachers can also flag common inquiries by selecting an orange question mark or they can provide positive reinforcement to peer annotations by selecting a green checkmark (cf. Figure 3).

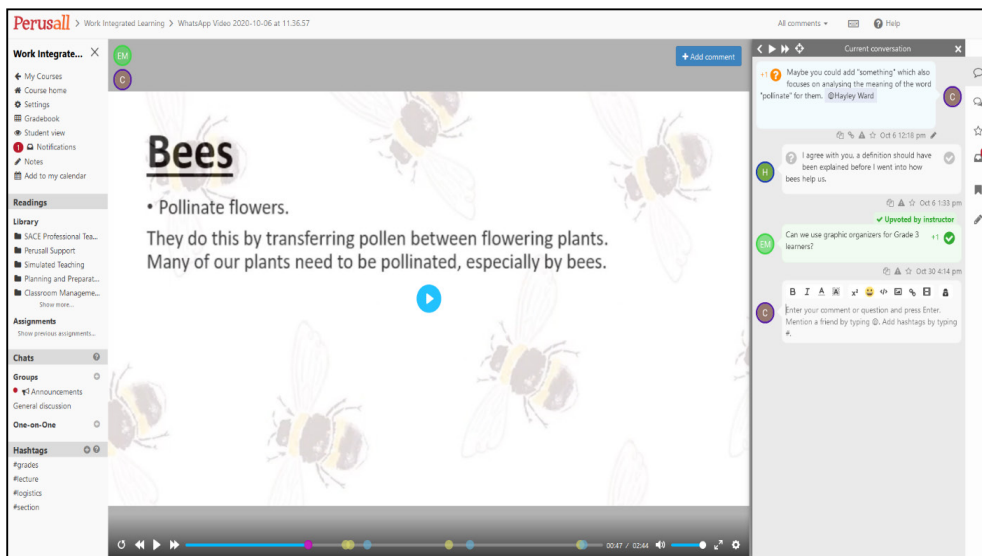


Figure 3: Collaborative engagement on a video assignment

<https://app.Perusall.com/courses/work-integrated-learning-877641249/whatsapp-video-2020-10-06-at-11-36-57?assignmentId=3mgPBsKZCAuBAHeLB&part=1>

Perusall has a built-in tool for teacher educators called the Confusion Report (Miller *et al.*, 2018) (cf. Figure 2). This report automatically summarises the most important areas within either their reading or video analysis that causes confusion or that is not clear to the students them about the core teaching practice being discussed so that the teacher educators or mentor teachers can address this in future discussions related to the practice. *Perusall*, therefore

automatically mines questions that students are asking about a particular reading assignment and, using a topic modelling algorithm, groups questions into three to four conceptual areas of confusion (Miller *et al.*, 2018: 6).

3.2 The learning cycle employed within Perusall

Within the *Perusall* platform we used an adapted version of the learning cycle framework developed by McDonald, Kazemi and Kavanaugh (2013). The framework was used to conceptualise the preparation of student teachers around core practices (e.g., modelling/ explaining content) they needed to master in order to become effective teachers while receiving feedback from teacher educators, the mentor teacher and from their peers (cf. Figure 4). The learning cycle is aligned with Wenger’s (1998) communities of practice that see learning as a collective activity between the triad of partners during the teaching practicum.

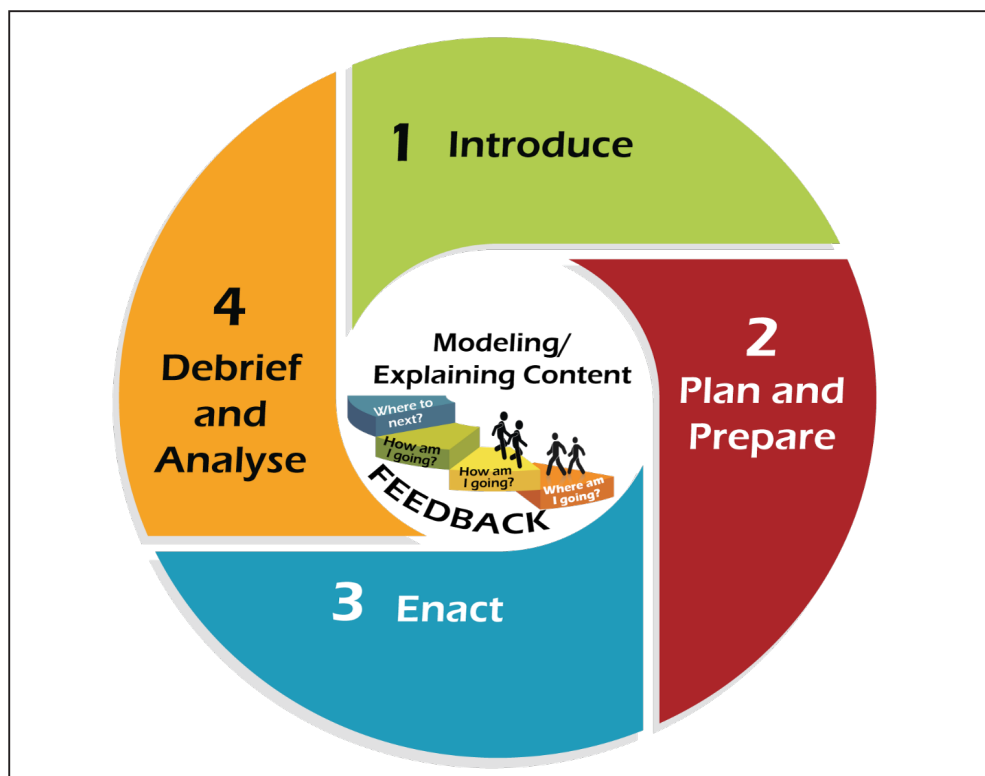


Figure 4: The learning cycle used on the *Perusall* platform
 (Adapted from <http://inspire.washington.edu/index.php/the-learning-cycle/>)

1 For a detailed discussion of *Perusall*'s functionality the article by Miller *et al.* (2018) can be consulted.

During stage one, the student teachers are introduced to a core teaching practice, namely explicitly modelling/explaining content (University of Michigan, 2020). The student teachers learn about the core practice and develop a lens for noticing important characteristics of what good practice looks like. Teacher educators (i.e., lecturers) introduce the core practice by uploading a video representation of the core practice (e.g., a teacher modelling/explaining content) onto *Perusall*. During this stage, the feed forward question: Where am I going? is explicitly addressed. The teacher educators use a rubric that outlines the core features of good modelling/explaining practice (e.g., clarity, coherence and cohesion, sequence, accuracy, sufficiency, connection with learners' experiences, metaphor, analogy, simulation or model usage, example, demonstration, experiment, graphic or image usage, misconception illustration, etc.) and they also link the criteria used in the rubric to the exemplar video used in this stage so that student teachers know what they are trying to achieve in their practice. The teacher educators as well as the mentor teacher make annotations on the video, highlighting the core characteristics that student teachers should strive for (cf. Figure 3). Each participants' annotations are highlighted in a different colour (cf. bottom of Figure 3). The student teachers are also given the opportunity to ask clarification questions or to make comments on *Perusall* (i.e., engage with the feedback).

During the planning and preparation stage the teacher educators and mentor teacher prepare the student teachers to engage with the core practice of modelling/explaining content. Teacher educators, mentor teacher and student teachers collaborate to think more deeply about the structure of the core practice, and plan and try out their tasks. On *Perusall*, the student teachers were given an article to read about effective instructional explanations (cf. Kulgemeyer, 2018). The teacher educators, mentor teacher as well as the student teachers could comment or ask questions by annotating the text. Student teachers could also tag their peers to engage with them on any issue they wanted clarification on or just wished to share ideas. The confusion report highlighted that student teachers were not sure how to choose explicit examples to explain concepts and how to ensure that their explanations were relevant to the grade level. During this stage, the teacher educators provided all participants with the opportunity to rehearse, in the form of an online micro-teaching session, their "lessons" with a focus on modelling/explaining content that needed to be covered in the Foundation Phase Curriculum and Assessment Policy Statements². The student teachers made PowerPoint presentations with voiceovers or PowerPoint presentations with self-recordings of themselves in the corner of the PowerPoint to model/explain the content. They then sent the recordings to the teacher educators via WhatsApp and the teacher educators uploaded the recordings to *Perusall* where all participants in the teaching practicum triad could engage with their lessons. The lessons were no longer than five minutes in length and only focused on modelling/explaining the content. Rehearsals/micro-teaching within the *Perusall* environment allowed the provision of a space where student teachers could approximate enactment of the lesson. During the rehearsal/micro-teaching, the student teachers could try the practice in a safe space with access to the feedback (i.e., How am I going?), thinking and expertise of peers as well as the teacher educators and the mentor teacher. The student teachers, therefore, received clear guidance on how to act upon the feedback in order to improve their enactment of the lesson towards the stated criteria and standards.

2 The Curriculum and Assessment Policy Statement is a single comprehensive and concise policy document, introduced by the South African Department of Basic Education for all the subjects listed in the National Curriculum Statement for Grades R–12. CAPS gives teachers detailed guidance on what they should teach and how to assess in South African schools.

During the enactment stage, student teachers had the opportunity to enact the lessons they had planned, prepared and rehearsed during the previous stage. The student teachers once again submitted a PowerPoint presentation with voiceover or PowerPoint with an insert of them modelling/explaining the content to the teacher educators who uploaded the video files to the *Perusall* platform. Once uploaded the teacher educators, the mentor teacher and peers engaged with the lesson by making annotations asynchronously. The student teachers had the opportunity to participate in the dialogue with the other partners. In addition, the mentor teacher used the PowerPoint with voiceover or PowerPoint with video insert in her own classroom with the Grade 3 learners as part of her own lesson where she would have explained the content (e.g., a life skills explanation on How animals help us – the bee) to the learners. The mentor teacher then commented on the student teacher's lesson on the *Perusall* platform providing her own feedback on the lesson as well as giving the learners' feedback (e.g., Did they understand? What was confusing? etc.). During this stage, student teachers were provided with additional feedback in terms of How am I going?

During the debriefing and analysis stage, student teachers revisit and learn from their enactments, making sense of the core practice and how it was delivered. The student teachers commented on their lessons by applying the criteria set at the beginning of the learning cycle. The comments made by the student teachers also reflected their judgements about the level to which they satisfied the criteria and they could engage with the teacher educators, the mentor teacher as well as their peers on how successful they had been (*cf.* Boud, 2013). During this stage, participants analyse practice in order to address the feed up question, namely Where to next? This required student teachers to take into consideration all previous feedback provided by the teacher educators, the mentor teacher and their peers as well as the learner comments reported by the mentor teacher.

4. METHODOLOGY

4.1 Research design

In this article we chose to use a qualitative approach that originated from our desire to gain an understanding of final year student teachers' perspectives on receiving feedback on their teaching practicum videos from peers, teaching practice lecturers as well as a mentor teacher on a social annotation platform called *Perusall*. The qualitative research design chosen for this study was a single exploratory case study. The case study allowed for the "exploration of a 'bounded system' or case through a detailed in-depth data collection involving multiple sources of information rich in context" (Creswell, 1998: 61). Bounded systems are typically bounded by time and place, and a case may be a programme, event, activity or individual (Creswell, 1998). The case study "allows investigators to retain the holistic and meaningful characteristics of real life events" (Yin, 2009: 4). Yin (2009) states that the case study is often used when the purpose of the research is to answer how or why questions. Within the BEd initial teacher education programme at the university, a group of five student teachers who would have been placed at the same partnership school for their teaching practicum was the bounded system to be investigated. This case study was viewed as instrumental as the question of interest was the participants' perspectives on the formative feedback received from peers, teacher educators and a mentor teacher on a core teaching practice, namely their modelling/explanation of content. Zeichner (1999: 9) notes that case studies in teacher education programmes have "provided a close-up and detailed look at particular teacher education activities and show what a teacher education program looks like from the

inside, from the perspectives of students and faculty". The pre-service teachers' individual perspectives of receiving formative feedback by various partners in the teaching practice component of an initial teacher education programme will provide a richer, fuller "inside" perspective; essentially, the study of the lived experience (Glesne, 2006).

4.2 Participants and participant selection

In this study purposive participant selection, also called judgement participant selection, was used in order to deliberately choose participants that possess certain qualities and that were located in specific contexts. One school in a district in one of the provinces in South Africa was selected to participate in the study. The school was chosen because it functions as a partnership school for the faculty of education that accommodates final year students for their compulsory teaching practicum placements. One teacher within the Foundation Phase who regularly acts as mentor teacher to the student teachers volunteered to participate in the study. The researchers are two teaching practicum lecturers at the university responsible for the work-integrated learning module of the BEd programme with specialisation in Foundation Phase (Grade R up to Grade 3). Five student teachers who would have completed their teaching practicum session at the partnership school were invited to participate in the study. During the study, which took place while the university was implementing online teaching, the student teachers were situated within four of the nine provinces in South Africa. The student teachers participating in the study, were in their final year of the programme and specialised in the Foundation Phase. Ethical clearance was obtained from the university ethical committee as part of a larger work-integrated learning national project and all expected protocols were followed. An independent person, a parent at the partnership school, sent a document to all the invited participants via WhatsApp explaining the collaborative purpose of the study and what would be required from each of them. Participants indicated their consent by signing a consent form and sending it to the first author via WhatsApp. Participation was voluntary and any participant could withdraw at any time without providing reasons.

4.3 Data collection methods and procedure

The following data collection methods were used in this study: semi-structured individual interviews via WhatsApp video call as well as a short survey conducted via *Mentimeter* (interactive presentation software). In addition, the comments on the lesson artefacts (i.e., feedback on the video lessons) were analysed to determine the type of feedback that was given by the participants.

4.4 Data analysis

When analysing the data, the guidelines provided by Erlingsson and Brysiewicz (2017) were used for doing content analysis. The initial step of the content analysis entailed reading and re-reading the transcribed WhatsApp video calls, the survey data conducted via *Mentimeter*, as well as the comments made on the video artefacts by all participants in order to get an overview of all the datasets. The text was then divided up into meaning units. This was followed by labelling the condensed meaning units by formulating codes and then grouping these codes into themes such as *Perusall* as platform, Where am I going? How am I going? and Where to next?

5. FINDINGS AND DISCUSSION

At University N, student teachers get feedback from their mentor teachers during the first three years of their teaching practicum. It is only during their fourth year that teacher educators (i.e., university teachers) go out to the schools and summatively assess the student teachers' lessons. They are assessed twice in their fourth year and they are assessed by different teacher educators. In addition, during this summative assessment, the mentor teachers are not present and there is seldom, if ever, any dialogue between the teacher educator, mentor teacher and the student teacher. Against this background, the student teachers made the following comments that relate to the theme of *Perusall as platform*:

This is the first time, that I received feedback from my teacher educator, my mentor teacher and even my peers at the same time – within *Perusall* we are literally on the same page.

While watching the video, I could see exactly where the teacher educators, the mentor teacher or my peers were making comments or asking questions. Usually we receive feedback when the mentor teacher has time and then it is at the end of the day, because after my lesson, the teaching must carry on. By the time I get my feedback which is usually no more than 5 minutes, I will have forgotten what I had said when and exactly how my lesson unfolded.

The feedback we received via *Perusall* was definitely more of a dialogue between all of us – during the teaching practicum it is often a monologue from the mentor teacher and I just listen. Here I could engage with my teacher educator and mentor at the same time and their comments were focused on the same thing. It actually felt as if I was getting help to improve my practice.

On this platform, I am actually learning something because my lecturer and mentor are giving me feedback on the same thing. During teaching practicum, the one comments on my classroom discipline and the other one talks about content or my good introduction. Here I felt we were all focused and pulling in the same direction.

The cool thing about *Perusall* was that I could see good examples of the practice, we could discuss it, I could practise as well as actually read about something specifically related to what I was trying to do. I experienced an alignment between theory and practice.

The findings seem to indicate that *Perusall* provided the opportunity for student teachers to actively work together with all key stakeholders in the teaching practicum to critically engage with their teaching practice and receive feedback that was timely, constructive and aimed at improving their practice. All stakeholders were also “on the same page” and pulling in the same direction. The focus seemed to be on closing the gap between their current practice and the criteria or standard that was set for the practice and which they were striving to achieve. The word cloud presented in Figure 5 summarises the student teachers' perceptions of the feedback they received by the triad of partners on *Perusall*. Word clouds or a word collage are visual representations of words that give greater prominence to words that appear more frequently. The words indicate that the student teachers were of the opinion that the feedback they received on *Perusall* was helpful, focused, timely, rigorous, to the point, helped them to improve on specific aspects and that the feedback functioned as a global positioning system (GPS) for them (i.e., where am I going?).



Figure 5: Word cloud on feedback received on *Perusall*

Regarding the theme of *Where am I going?* the student teachers stated that:

In the past, I only received a mark. I never received any feedback which I actually had to react to – meaning I couldn't show the mentor teacher whether I actually improved on my practice or did something better. I would do a next lesson and get more or less the same feedback or feedback on something totally different.

I was always chasing marks and didn't really think about how good my teaching was.

The discussion we had around a good lesson at the beginning and how the teacher educator and mentor teacher made us aware of what to look for in a good explanation and the questions that guided us, really made me think about the practice and what I had to do to achieve that.

Nicol and Macfarlane-Dick (2006) noted that exemplars are effective ways to depict the required criteria or standards and enable the student teachers to make a direct comparison between their own teaching of the core practice and that of the exemplified standard in the exemplar. Brooks *et al.* (2019: 15) state that the “clarification of criteria and standards at the beginning or at least during the learning cycle orients learners towards purposeful actions designed to satisfy or exceed the learning intent or goals”.

The student teachers' comments related to *How am I going?* included:

You are doing well! But I never got any feedback in terms of where or on what aspects I needed to improve.

I usually got a well done, or I liked this activity, your confidence is very visible. I thought I was really good at this teaching thing.

On *Perusall* I could really engage with not only my lecturer but also the mentor and my peers with whom I would have been placed at the same school on my teaching. I could ask so many questions and while reading up on the practice, which was also put on *Perusall*, I could actually ask my lecturers or the mentor for clarification and support if I didn't get it.

I was starting to really think and reflect on what I was doing.

The findings indicated that the student teachers were far more aware of their practice and getting the input on how to improve from the triad partners; the allocation of marks and boring repetition of the same lesson format was not the focus. The *Perusal* platform allowed for feedback not to be given in isolation, but rather with guidance with the feedback message (Hounsell *et al.*, 2008). The dialogue between the triad partners seemed to promote thinking, reflection and the exploring of understanding.

Comments made by the student teachers that relate to the *Where to next?* theme include:

I kept on getting feedback in terms of what I should focus on and what I should address in a next lesson. I knew what to do to improve my practice.

I have been getting 85-90% for all my lessons during my teaching practicum from year 1 to year 3. I always thought what I was doing was really good. This experience of focusing on only a small component of teaching – modelling to Grade 3 learners really made me realise how much I've got to learn.

I was exposed to so many mentor teachers' teaching that I didn't know what was acceptable or what was unacceptable. Having exemplars and criteria to work towards really provided a guiding light.

I know exactly what to focus on next to make my explanation even better. I could take action immediately.

The findings indicate that the student teachers were allowed to self-reflect on their lessons as well as incorporate the guiding feedback from the other stakeholders. Each of the student teachers also knew where they were going. The collective input to the individualised feedback process seems to support what Sutton (2012: 39) calls an "ethos of care".

Findings from this study where *Perusal* was utilised as a platform to provide the student teachers with a safe space to facilitate their "learning from practice" (Department of Higher Education and Training, 2015: 10) have implications for the feedback provided by the triad collective during the teaching practicum component of initial teacher education programmes. Where am I going? was identified as an important process to help clarify for the student teachers the learning intent and success criteria of the teaching practices they need to enact. Teaching that emphasises feeding up principles can facilitate student self-regulation (Nicol & Macfarlane-Dick, 2006) and enable students to be more likely to receive and use feedback (Hattie & Timperley, 2007). How am I doing? should not be focused only on the allocation of marks and "well done" "good job" feedback. Where to next? is a vital stage of the feedback process as it closes the gap between where student teachers are now and where they need to be (Sadler, 1989).

6. CONCLUSION

Providing feedback during the teaching practicum is a wicked problem at the best of times. Depending on who you ask and what the context is, perceptions on the type, quality, nature and effectiveness of feedback will differ. COVID-19 forced most higher education institutions online and allowed many teacher educators within faculties of education to reflect critically on how they were supporting their student teachers. Internationally and in South Africa, teacher quality and effectiveness are under constant scrutiny (Bahr & Mellor, 2016; Deacon, 2016;

Gravett, 2020). Research has highlighted the inadequacies of the feedback provided to student teachers during the teaching practicum (Deeley *et al.*, 2019; Ellis & Loughland, 2017). By their very nature, wicked problems involve numerous stakeholders, each with different perspectives on the problem, its causes and possible ways of addressing the problem. Any attempted solution will fall short and will require further improvement. We support the argument of Alford and Head (2017:397), calling for a more “realistic standard of success in dealing with wicked problems”. To state that these problems can be solved is to set up a standard that “is not only impossible but also perhaps unnecessary”. We argue that stakeholders (e.g., teacher educators, student teachers, and mentor teachers) should not try to “solve” the wicked problem of feedback but make progress towards improvement or towards better managing the feedback. Wicked problems involve changing behaviour. We believe that *Perusall* is a valuable tool, one of many, for teacher educators to have in their toolkit to ensure that “learning from practice” experiences provided within faculties of education for the teaching practicum are utilised far more effectively. The provision of formative assessment check points throughout the learning from practice learning cycle within *Perusall* provided the student teachers with multiple opportunities to demonstrate their knowledge, understandings and skill with the implementation of a core teaching practice. It also provided the teacher educators as well as the mentor teacher the opportunity to provide scaffolding as well as build an evidence base of how the student teachers were tracking towards achieving the criteria/standards for the core teaching practice under investigation (e.g., modelling/explaining content).

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