Chapter 5

Reflections on a PGDip in Higher Education Studies at a South African university: An analysis using Shulman's knowledge categories

Walter Uys
Department of Information Systems
University of Cape Town
Cape Town, South Africa

Widad Sirkhotte
Stellenbosch University
Stellenbosch, South Africa

Sumayah Salie
Department of Pathology
University of Cape Town
Cape Town, South Africa

Introduction

Academics in South Africa are appointed based on their disciplinary expertise and do not require any formal education in pedagogics (Ndebele, 2022). This results in academics not necessarily having appropriate pedagogical knowledge and pedagogical content knowledge (Shulman, 1987); they may also not have deep knowledge of teaching in the context of diversity (Northedge, 2003), a stance towards and approach to decoloniality (Lebelo et al., 2021) and in relation to academic and

student vulnerability (Behari-Leak et al., 2019). It is generally considered that a sound knowledge of theoretical content and research methods in the disciplines, such as those offered by advanced degrees, is no longer sufficient for academics in higher education institutions (HEI) (Aziz et al., 2010). Moreover, with the advent of the Internet and generative AI (artificial intelligence) - Gen AI (Smolansky et al., 2023), a predominant emphasis on disciplinary knowledge that can be easily sourced by Gen AI will devalue the role of the professional educator in higher education, if academics do not have a sophisticated understanding of how higher education can contribute to knowledge building and human flourishing and how the role of the higher education teacher contributes to those aims.

University educators can acquire teaching and learning competencies and skills in many ways, including through collaborative or inquiry-based learning, professional development (PD) courses, workshops, seminars, discipline-specific conferences on teaching and learning, as well as learning from colleagues or from formal teaching qualifications such as the PGDip in Higher Education Studies (HES) (hereafter, the PGDip) (Kerka, 2003; Oleson & Hora, 2014).

Kerka (2003) argues that it is difficult to prove whether academic development courses make a difference; however, there is general consensus that professional development for educators is linked to improved teaching and learning outcomes. Guskey (2002:46-47) has developed five questions to evaluate whether professional development for teachers makes a difference by asking (1) what were the participants' reactions, (2) what knowledge and skills did they acquire, (3) was the implementation supported by the organisation, (4) did participants effectively apply the new knowledge and skills, and (5) what was the impact on (their) students? We focus on Guskey's second question to evaluate our own knowledge and skills development in the PGDip, from the perspectives of the participants (the authors) of the programme. In particular, we explore the following three research questions:

- How has the PGDip shaped us as professional educators in our disciplines?

- What knowledge and skills were developed as part of the programme?
- How have the different modes of teaching and learning (online, face-to-face, hybrid) impacted our learning?

One of our first encounters in the PGDip was watching a short video clip played in class by the course convenor about Father Guido Sarducci's five-minute university (Novello, 2007). In this clip, Father Guido proposes a university degree based on the notion that, five years after taking a course, students only remember about 5% of what they learned. In effect, he only teaches the threshold concepts of a few courses in five minutes and then has a graduation ceremony with photographs, snacks and a certificate. This poignant clip caused us to reflect on what we as PGDip participants would likely remember from the course a year after completing it and likewise what our students might retain from our own courses.

We chose to evaluate our own critical reflections on the programme to gain insight into the knowledge and skills which we acquired through the PGDip. We applied Shulman's (1987) knowledge categories as a theoretical lens when reflecting on the different kinds of knowledge which we gained from the programme. We start by examining the research context followed by a reflection on the PGDip in South Africa, including the PGDip at UCT (University of Cape Town), on which this chapter is based.

Research context

According to the Universities South Africa (USAf) Strategic Framework, a key purpose of higher education in South Africa is to impact the social, economic and cultural well-being of the country and the diverse South African population that it serves (USAf, 2021). The successful achievement of this purpose depends on how academics teach and nurture students, how knowledge and skills are taught, how values and attitudes are imparted and how universities respond to the challenges of meeting the learning needs of students. Fundamentally, how academics have been professionally equipped to teach is paramount to the success of this mission.

The University of Cape Town was established in 1918 to serve predominantly white English-speaking students who came from the elite and middle classes (UCT, 2023). However, the institution is transforming the space and its offerings physically and culturally as a means to accommodate a wide diversity of students and staff from different backgrounds. Learning about the higher education history and landscape, reflecting on teaching and learning experiences as a way to transform ourselves and our professional practices are rarely touched on in disciplinary courses, but it is integral to the PGDip at UCT.

PGDip programmes in South Africa

Academic development is an important aspect of the professionalisation of higher education (Behari-Leak, 2017; Leibowitz et al., 2016; Nkonki et al., 2014). A formal offering such as a PGDip can bring together theoretical, contextual as well as practical aspects of teaching in higher education (Skead, 2018). It integrates who we are as academics with what we know and how we teach (Skead, 2018).

Leibowitz et al. (2016) conducted an extensive, multi-institutional study to inquire about the professionalisation of academics in South African universities. Using a social realist perspective, they found that academics can develop their agency if a conducive environment for professional learning exists. Professional learning opportunities enable participants to challenge their beliefs about teaching and learning, observe excellent teachers (as role-models), conduct critical conversations with colleagues, navigate the tensions between research and teaching, adopt good teaching practices and collaborate on scholarly research across institutions.

Many studies have shown that the disciplines wield great power over the academics (Henkel, 2005) and that it is critical to provide a safe space for academics to develop their own identities (and biographies) as educators, to come to grips with the intersectionality of their students' pedagogic needs and their own agency as critically reflective teachers. Moloi and Chitumva (2017) and Ndebele (2022) emphasise that PGDips not only offer participants general teaching and learning knowledge but also

examine the relationship between pedagogic knowledge and disciplinary knowledge. They should facilitate the development of professional teaching identities, by supporting participants to shape their teaching philosophies and highlighting the importance of critical reflection. PGDips focus on the social context of teaching and learning and what it means to teach in student-centred ways.

Theoretical perspective

Vorster and Quinn (2015) identified the different domains of knowledge that were introduced in an early PGDip and then used aspects of Legitimation Code Theory to analyse how this knowledge was re-contextualised in the curriculum. This study was mainly from the perspective of the designers of the PGDip. For this study, we were specifically interested in understanding what knowledge and skills we (as the participants) acquired as a result of the PGDip programme. To theorise this perspective, we use Shulman's (1987) knowledge categories, a widely used framework in education that allows for the classification of pedagogical knowledge (Roness & Smith 2010; Grossman et al., 2009; Cochran-Smith & Zeichner, 2005).

Shulman (1987) proposes seven knowledge categories. *Content knowledge* pertains to knowledge of a particular subject - its histories, theorists, concepts, topics, literature, philosophies and debates. *General pedagogical knowledge* refers to broad principles and strategies of classroom management and organisation and how to include and engage a diverse class of students in discussion. *Curriculum knowledge* is knowledge about an educational system, instructional materials, different courses and programmes in terms of level, outcomes and ways in which content can be structured and organised into different topics as part of a course or lesson. *Pedagogical content knowledge* is the combination of content knowledge and general pedagogical knowledge that enables the teacher to be an expert on teaching a particular subject. It includes knowledge on how to go about sequencing and teaching threshold concepts in a specific subject. *Knowledge of learners and their characteristics* is knowledge of students' learning needs, preferences, their

backgrounds and contexts, and include the languages students speak and where they come from. *Knowledge of educational contexts* is about knowledge of educational systems or structures of a particular school or higher education institution, educational and institutional policies, communities and cultures. The final category refers to the *knowledge of educational ends, purposes and values* and their philosophical and historical grounds. It includes knowledge about learning objectives and dispositions needed in a particular career field.

An additional knowledge category that was not part of Shulman's (1987) initial knowledge categories is referred to as the *technological pedagogical content knowledge* (TPACK) (Mishra & Koehler, 2006). TPACK refers to knowledge about tools or technologies and how to use and integrate them into the classroom to enhance teaching and learning activities. In the following section we explain our research design and discuss the use of Shulman's (1987) knowledge categories, including TPACK, as a basis to analyse our reflections.

Research design

This is a qualitative study that draws on the critical reflections of the authors on our experiences as students in a PGDip at UCT. UCT's offering from the Centre for Innovation in Learning and Teaching (CILT) is open to anyone who has an undergraduate degree and relevant teaching experience in higher education at the time of enrolment.

The PGDip at UCT has a strong emphasis on transformation and decolonial imperatives and emphasises the development of students' critical voice and reflexivity (Behari-Leak et al., 2019). It consists of three core modules and an elective. The modules were convened and taught by different educators. The core modules in the course are: Learning Theories in Higher Education (LTHE), Assessment in Higher Education, and Course and Curriculum Design. The electives are: South African Education in Context, Online Learning Design, and Researching Practice in Education. The number of students differed in each module of the UCT PGDip during our years of attendance:

- Learning Theories in Higher Education (LTHE): 13 students;

- Assessment in Higher Education: 14 students;
- Course and Curriculum Design: 16 students;
- Elective: Online Learning Design: 30 students (which all three of us chose).

We were the only three academics or students from UCT who enrolled in the PGDip during the period 2020 to 2021. Key details of the researchers pertinent to the study are summarised in Table 5.1:

Table 5.1: Key participant details

Participant	Discipline/ field	Teaching experience	Qualifications
Author 1	Information Systems	Senior lecturer for several undergraduate and postgraduate courses	Diploma in Datametrics, PGDip (IS), B.Com (Honours), Master's degree in Commerce, PhD, PGDip HES
Author 2	Higher Education	New lecturer in a postgraduate course, with university tutoring and school teaching experience.	BA (Media), Diploma in Islamic Studies, PGCE (Postgraduate certificate in Education), B.Ed (Honours), Master's degree in Education, PGDip HES
Author 3	Health Science	Guest lecturer and undergraduate Science programme facilitator	Diploma in Islamic Studies, BSc (with Honours), Master's degree in Science, PhD, PGDip HES

One of the main aims of the PGDip is the development of reflexive (reflective) educators (Dison, 2016). Fundamentally, the process of reflection (re-)evaluates experiences, beliefs and knowledge in light of new insights or evidence (Kember, 2001). Reflection can operate at different levels and during different stages of an experience or event and has different meanings depending on the stage and the level (Kember et al., 2008). Critical reflection

involves a change in belief and requires some time between the initial experience and the development of new insights (Kember, 2001:174).

For this chapter, we use the concepts of reflection-in-action, reflection-for-action and reflection-on-action to describe the different stages of our reflections (Munby, 1989; Schön, 1983; Stynes et al., 2018). Reflection-in-action describes our reflections during the course; we engaged in reflection-for-action in preparing for the course and our teaching and employed reflection-on-action for our reflection on our learning and teaching practice after the course. Reflection-on-action is useful for learning and theory building and is also used by Shulman (2013) to inform his knowledge categories where "reflection" and the "wisdom of practice" are incorporated (Munby, 1989: 32).

As participants of the course, we were provided with access to our course documents by the course convenors. Our data included our own evaluation of our course tasks, assignments, forum discussion posts on the learning management system, portfolios and personal reflections that we completed as part of the PGDip.

After the course was completed, we met to discuss our experiences of the course. We each drafted a critical reflection outlining our key learning experiences and insights gained over the two years which we then shared with each other. We dedicated approximately 60 minutes to critically reflect on each module, after which each of us shared our experiences and asked each other questions for clarity. Focus group reflection is a valid data collection instrument where there is no hierarchy between the researcher and the participants, i.e. the participants *are* the researchers (Stynes et al., 2018). These group reflections were recorded and transcribed using MS Teams and Otter.ai. Our focus group reflections were guided by questions based on Shulman's (1987) knowledge categories. These systematic reflections provided us with broad themes (Shulman, 1987) to explore in our analysis of our key learnings in each of the modules. Data from our initial discussion and the focus group transcripts were then analysed using a content analysis approach (Elo & Kyngäs, 2008). This entails coding data based on known themes, categories

and concepts as well as looking at new emerging themes (Elo & Kyngäs, 2008). The results of our analysis are discussed in the following section.

Findings and discussion

The findings broadly follow the core themes that were identified from the theoretical framework as formulated by Shulman (1987) including TPACK (Chai et al., 2013). In addition, there were new themes that we identified in the process of coding our data, that did not fit with Shulman's (1987) and the TPACK knowledge categories, which were added to our final conceptual model.

Content knowledge

Content knowledge includes all the knowledge that we have of our disciplinary subjects as well as what our students need to learn (Shulman, 1987). Additionally, we added content knowledge of the field of teaching and learning that we learned from the PGDip. Three aspects stood out for us in our reflections, namely: feeling knowledgeable about the discipline of HES, learning about decolonisation in South Africa, and gaining further insights into relevant theories and practices in HES.

Feeling knowledgeable, empowered and confident

Content knowledge in the PGDip relates to knowledge about higher education: its key theories, concepts, models, topics, histories, debates and so forth. We gained a better understanding of how to apply the various knowledge components to our own practices. Author 2 explains a newfound ability to take part in discussions about teaching and learning:

> In this module, I really became aware of the use of assessments…[and] in the same period, I had to deal with academics who also had questions about assessments and how this was possible to do online. I remember working on a postgraduate course, where the lecturer wanted the students to take the exam with the cameras on…and it was about surveillance. So fortunately, I was also doing assessments and I could give input on that…[through

> asking questions such as]...what are you trying to assess? What are you doing to the students by having the cameras on? So I could have that conversation. (Author 2)

Learning about these concepts in higher education gave us insight into how we design our own courses as well as learning a language to speak to colleagues about different teaching and learning processes in our disciplines. Author 1 experienced value in learning new vocabulary:

> The readings were guiding us towards having...insights around relevant theories and things that can help us in both assessing and designing assessment...So we've got a new vocabulary which we learned as part of this course... (Author 1)

This new vocabulary allowed us to introduce this new knowledge in our teaching practices and to engage with our colleagues in greater depth about the pedagogic aspects of our disciplines.

Pedagogical knowledge

General pedagogical knowledge refers to the strategies and principles that guide our classroom practice (Shulman, 1987). This aspect not only includes the explicit aspects of teaching, but also the more tacit ways of being as higher education teachers (Barnett, 2005).

Professionalism of lecturers

From our reflections, one aspect that stood out was the respect and professionalism of the lecturers on the PGDip. In the words of Author 2:

> This was the very first time that I was part of a course where there were three academics. And I thought... how is this going to play out in Zoom... because in the online session, it's not always easy to control who's speaking when, and people speak on top of each other. But that never happened... so it was really done professionally. And

> I thought that they must have made arrangements prior to the session, and spoke about who was going to cover what part, or who was going to answer what. So... for me... thinking about when I was a co-teacher with three others [afterwards], it was nice to have seen it first and then do it, especially in the online space. (Author 2)

This high-level of professionalism allowed us to observe and experience facilitation performed well so that we could replicate it in our own teaching.

Different teaching styles

We experienced different lecturer personalities and teaching styles throughout the PGDip. Some lecturers were more casual than others in their classes, which created a comfortable environment where we could be ourselves:

> He wasn't formal. But not completely informal. He was sitting on his couch... And his music during break time - he plays music, going back to earth and then people sit here. (Author 1)

> In the Learning Theories (LTHE) classes, I felt like a student, whereas in the other courses, I felt like a peer. It felt to me more as if it was peer to peer learning. (Author 3)

The different lecturer styles made us more comfortable with our own approaches to teaching. Furthermore, the lecturers used various teaching strategies to start conversations with us, as well as illustrating how to engage students using online tools. Examples from our reflections include:

> I felt that he was really approachable...and he always asked us, do you have any questions?...[he] was inviting us to associate... (Author 2)

> She asked us to draw how we saw teaching and how we saw learning. And that, I felt, was genius, was ... a good way for us to start conversations about our own schooling, how we

> understand teaching and learning, and to show that there's not one way of doing it. There's multiple ways, and that hit home. (Author 2)

Through this, we learnt that there is no set way of being. It also made us more comfortable with *who we are* as lecturers, rather than trying to imitate or take on a different persona of *who we are not*.

Responding to sensitive topics

Another key pedagogical learning was about how to respond to sensitive topics or hold a particular viewpoint because of one's background or race:

> There was someone who raised a sensitive question and I was curious on how she would answer that as a white person. And she was very professional about it. She didn't agree or disagree, you know, she left it open. So, I admired that, because sometimes we find ourselves in those situations as lecturers, [and] how would you respond to that [question] was a good example of that. (Author 2)

> ... And I think because they are modelling educators ... we are getting a sense of how an educator could or should behave in a particular situation. And that gives us... modelling knowledge, but [also] gives us insights into the kind of knowledge that we would need, which then would relate to pedagogical knowledge that we could apply in our own practices. (Author 1)

We also learnt how to prepare for the different modes of teaching and learning; and how things can be out of your control at times:

> A big part of the learning was also for us to experience the learning of the educator as we're going along. Because again, they were not prepared to go online. And if we're going to be looking at it in the different modes of teaching, that means that we actually had a better learning

> experience…we were also learning from our side so that we could then use that in our own teaching]. (Author 1)

Although the above example refers to technological pedagogical knowledge which is discussed later, it is important to reflect on how the lecturers on the course adapted to the challenges before them, and how we modelled our own responses in our own contexts after them.

Reflection and feedback activities

The participants on the course came from different disciplinary backgrounds that require different ways of teaching and learning. Since the PGDip is located in the social sciences field, we engaged in activities that were somewhat new to some of us. One such activity was the feedback provided on our reflections on course readings, on our learning on the course and on our teaching practices. The feedback on our reflections made us realise the value of reflection. We recognised that it was not just a "tick box" exercise; it was meaningful, especially when the feedback was given by a lecturer we respected:

> What I found interesting about the way of doing reflections was the fact that somebody was commenting on it… I got insightful comments from Lecturer B. And so I liked that aspect of how to use reflections because…[it is] useful for tracking your own personal growth from a student's perspective… (Author 3)

In some courses, reflection exercises were open for reading and commenting on by peers, which also presented opportunities for learning. The guiding questions that accompanied the reflections also played a role. In other courses the reflections tended to be more about the learning from the readings, whereas some tended to focus on the student's personal being. Having experienced different reflection exercises and how they were set up, we were inspired to use and adapt reflections in our own teaching contexts in different ways.

Pedagogical content knowledge

Through the multi-disciplinary nature of the programme, we learned things that were relevant to our own disciplines, from the facilitators and our peers. This allowed for a richer application of the theories and assignments to our own teaching contexts:

> I think it is [the] realisation…that the disciplines are different, and they have different … styles and approaches to teaching, etc. Because … I [was] striving towards a universal kind of teaching approach, like more a philosophy of teaching, you know, finding something that works…So, for me, the learning was that there are different styles has changed my teaching practice. (Author 1)

Much of the learning in the programme occurred because of the varied pedagogical approaches employed by the facilitators of the four courses, the inputs by fellow course participants, the guest lectures by participants from the previous year's courses as well as the constant self-reflection activities that we were engaged in.

Pedagogies of vulnerability and socially just teaching (Lebelo et al., 2021; Behari-Leak et al., 2019; Winberg et al., 2016) were further explored as part of the pedagogical content taught in the programme. For instance, in the LTHE module, decolonisation in the disciplines was purposefully discussed. In addition, students were required to share their views and what was happening in their own institutional contexts.

Curriculum knowledge

Curriculum knowledge, as defined by Shulman (1987), refers to knowledge of how our courses fit into programmes and qualifications and how to structure lessons in our own curricula.

Knowledge about designing curricula and courses

One of the curriculum knowledge areas that we learnt about was how designers think when designing curricula and courses. This provided us with key understandings of the kinds of decisions that are made during the design process and how course design can be of advantage or disadvantage students. Furthermore, it gave us

insight into how to approach curricula and course design in our own contexts:

> The biggest…learning…was the storyboarding, …the visual aspect of it. And I also liked the fact that it was very methodical in terms of giving you a very specific way to do this, and then you do the next step. …I found that very helpful. (Author 3)

Experiencing learning in the online course delivery mode further influenced the way that we approached the design of our own courses. We noticed that the relationship and communication between lecturer and students were somewhat compromised in the online mode compared to when we met each other in person. This experience presented us with an opportunity to consider how to go about teaching and learning in an online mode so that it does not feel awkward or unnatural. We also noted that relationship-building is important and needs to be factored in when designing courses and curricular activities.

Learners and their characteristics

Knowledge of learners and their characteristics entails knowing our students' learning needs and contexts (Shulman, 1987). We elaborate here on how a greater understanding of ourselves as students led to a greater understanding of our own students and their contexts.

Gaining a better understanding of our students and their structural locations

The PGDip and the period during which we were enrolled in it, made us more aware of our own students' learning needs and situations. For example, Author 2 noted:

> [I] think about how I can make assessment fair, thinking about the different backgrounds of the students and their experiences, and also thinking about the online ways of doing that, …knowing that students may have data cost issues, some might have different speeds of laptops or

> not even have a computer, and they might be using their phones...

The PGDip also prompted us to think more deeply about our own online courses:

> I needed to think...more deeply on how I would redesign that [my own IT] course for the online space...And being part of an online course that was being delivered during the pandemic, allowed me also to learn new tools, techniques and strategies, which I could then you use in my own course design. (Author 1)

This led us to think critically about the factors that students face and what approach may be needed to ameliorate their constraints.

Students' challenges viewed through our own experiences

Learning in emergency remote and online modes resulted in students experiencing isolation, being overwhelmed, and several other emotions that were unusual in the classroom environment. As students in the PGDip, we experienced our own personal challenges:

> I was going to deregister from the course, but [Lecturer B], ... encouraged me and said... we can assist, we will help you as far as possible, we will help you to finish the course, if that's what you'd like to do... (Author 3)

It is crucial for lecturers to be aware of and sympathetic to the various situations and emotions that students may be faced with during times of transition. Throughout the programme, we experienced how the lecturers demonstrated support and compassion in their own unique ways. This in turn made us more aware of the challenges that our students faced and how to support them in appropriate ways.

Educational contexts

Knowledge of educational contexts goes beyond the knowledge of our roles as educators in higher education; it is also about knowledge of institutional policies and practices (Shulman, 1987). Two particular aspects stood out for us about the context during emergency remote teaching (ERT), namely the course load and the decolonisation imperative in South African higher education.

Course load and pacing

The Online Learning Design course was the most taxing because of the high workload. It was an activity-rich course filled with readings and assessments that often required learning a new technology or software before using it. In addition, the online mode had intensified feelings of anxiety and exhaustion amongst the students. One of the participants describes the course as a "monster of a course," based on all the tasks involved.

This course was extended from the one-week full-time course in the face-to-face mode to a two-month course in the online space. This experience had thus made us cognisant of how we ourselves may be designing our courses in ways that times, credits and course activities are misaligned.

Decolonisation in the South African Higher Education context

Another key theme that stood out for us was the decolonisation of higher education; what it was, and why it was needed and how to go about it:

> And I liked the whole theme [in] LTHE about the dominant culture, about decolonisation, and how assessment carried on with that. And it was really interesting coming from a white man... I thought [Lecturer A] would not touch on it, but he did. The whole programme made us aware of how we can decolonise the curriculum, how we need to be as teachers, as lecturers. (Author 2)

> She spoke about decoloniality. That actually made me feel very uncomfortable because I remember thinking... I'm

> a person of colour, and decolonisation is supposed to be about previously disadvantaged people of colour, but I have always felt like I don't understand it... (Author 3)

In many ways, conversations about decolonisation made us more aware of the injustices, in the higher education context and in everyday life. It has also made us more critical and conscious of how we are in relation to our own contexts. These are not concepts that were widely discussed in our disciplines. And again, merely having these difficult conversations in the PGDip classroom allowed us to look beyond our primary disciplines to what has been on the horizon all along.

Educational ends

Knowledge of educational ends refers to knowledge of the purposes and values of education and how these relate to the coursework (Shulman, 1987). The programme changed our views on educational ends and to translate this idea into our coursework.

Changing our understandings of the purpose of education

A key theme that stood out for us was the value or purpose of education, particularly in relation to different types of assessments and their uses. We began to question our own understandings and how these had been formed. As author 3 notes:

> One of the things that really stood out and stayed with me was the notion of formative versus summative assessments. And because it was something that I was not familiar with, my understanding of assessment was always just 'it's the means to either passing or failing'. (Author 3)

As a result, our understanding shifted. We began to think and question the ways in which students' knowledge was being assessed and for what purposes:

> The other thing that stood out for me was the fact that there was a power dynamic, [I also questioned whether]

> we do things this way because it's always been done in this way? (Author 3)

Author 2 had a similar experience when learning about the use of assessment in gatekeeping which motivated her to contribute to the revision of her department's assessment policy. She notes:

> And gatekeeping - I was really shocked about how our systems are used to gate keep. Because I know that there are a lot of students that are very talented, have a lot of potential, but because maybe something happened in their life that they couldn't pass the exam... And [with] that mark, they can't get into university... And I... felt like I needed to do something, you know. And I know my department was working on assessment policy at that time. And I wanted to contribute in that way. (Author 2)

In this way, the insights from the PGDip helped us to change the way that we designed our courses.

TPACK knowledge

A new construct, added to Shulman's pedagogical content knowledge, is technological pedagogical content knowledge (TPACK) (Chai et al., 2013). TPACK examines how the lecturer integrates technological knowledge with content and pedagogical knowledge in their courses (Chai et al., 2013).

How to use new technologies in teaching and learning activities

People have different knowledge, skills and confidence when it comes to using technologies, particularly in their own courses. The activities and assignments in the PGDip often involved using digital tools and platforms that we were not familiar with. These included tools such as creating digital videos about our experiences, using applications like *Padlet*, *Jamboards* and *Miro* to brainstorm our ideas with others in an online mode:

> I'm not very comfortable using technology. And this was an online course. And the idea was that you use different technologies. And so, sort of integral to using technology is the fact that you need to learn the technology before you can say...make a digital story. You need to be able to make a video and you need to ... [know] about lighting... [and] editing a movie and putting in slides... so the technology part really stretched me. (Author 3)

Having to perform certain tasks in an online mode as well as experiencing it live, presented us with opportunities to become comfortable with technologies and simultaneously learn how to use them in our own teaching. However, there were differences in approaches when teaching with others in our own courses, particularly with lecturers who had not undertaken the PGDip. We often felt that we had to justify our actions or choices and at times needed to re-conform with what the course convenors wanted. Another barrier to using our newly acquired TPACK and skills was time constraints which prevented us from creatively and meaningfully incorporating these new tools in our teaching and learning activities.

Knowledge of the self as teacher

This category refers to the identity that the person forms as an educator in higher education as a result of changing their perspective from being a disciplinary expert to becoming an expert in teaching the discipline. For Tajfel and Turner (2019:283), this relates to one's self-image or self-identity that is "derived from the social categories to which he perceives himself as belonging." In our case, we required the break from our own disciplines to develop the requisite pedagogical knowledge through the PGDip.

Personal goals

There are different reasons why academics enrol in a PGDip. Author 3 wanted to learn strategies on how best to teach her specialist knowledge. Author 1, who had more than 10 years' teaching experience at various universities in South Africa, wanted acknowledgement of their expertise through a formal

qualification. Author 2, on the other hand, who had completed several postgraduate education qualifications from various universities in South Africa, enrolled to gain institutional recognition of her knowledge. However, the PGDip provided more than we wanted upon enrolling:

> Because I was doing my PhD and focusing on my teaching...I thought...it might be a good idea to do [the PGDip]. And there were also talks in the industry...[that]...it might become a requirement for educators to have a PGDip. (Author 1)

> I have a teaching background. I did a BA, PGCE, B.Ed Honours and my Master's in Education. So why I wanted to do the PGDip at UCT was...to have studied at UCT, because I always felt [out of place] amongst my colleagues and other people because I didn't study at prestigious universities like UCT. (Author 2)

For us, key reasons for embarking on the PGDip entailed exploring different career options at our university, gaining confidence and skills to enhance our teaching and working with students, to gain insights about the South African higher education context, to obtain a teaching qualification or for acknowledgement of our achievements as teachers.

Becoming comfortable with ourselves

In observing other lecturers in the PGDip, we in turn became more comfortable with our identities as lecturers:

> Just watching... like learning how to be, how to be with others, how to be when difficult questions are raised, how to still be respectful, and how to be yourself. I think that is what I take away from them [(lecturers)]. (Author 2)

Learning about the role of an educator in higher education shifted our understanding of ourselves in that we wanted to become the best educators that we could be. Author 3 shared her initial feelings about feeling like an imposter-type educator.

> I felt really, like I was sort of posing as an educator and wasn't really an educator. But what I found interesting was the exercise of who you are, and how you see educators. And you know, I think that is the first question we should ask … to think of an educator that inspired you or something like that. And that exercise was so powerful that it committed me to the PGDip. (Author 3)

In some ways, we all arrived at the notion that there was a certain type of individual that was suited to higher education. And being involved in the programme made us realise that we just needed to be ourselves; that there is no "ideal lecturer".

Multi-disciplinary knowledge

Multi-disciplinary knowledge (Lim & Richardson, 2022) refers to knowledge about other disciplines in the context of teaching and learning in higher education. This required us to go beyond our own fields to learn from participants from other disciplines.

Learning from others

Part of the richness of the PGDip at UCT is that it draws on a range of disciplines and allows students from diverse disciplinary fields as well as participants from other institutions to learn about how teaching and learning happens in different contexts, and how concepts, theories and tools are applied in those contexts:

> I also enjoyed the case studies where different academics were invited to share how they were applying certain topics or approaching course design. So, it was nice just to see something different and something real. (Author 2)

> I do remember Sergeant W from the defence force, you know, 'Attention!' and that kind of stuff and getting to grips with understanding from her view how she teaches military personnel certain things which is completely different to how we do [things] in academia… [It made me aware that] there isn't just one way to teach…. (Author 1)

Through the multi-disciplinary nature of the programme, we developed pedagogical content knowledge from the facilitators and our peers that was relevant to our own disciplines. This allowed for a richer application of the general educational theories and assignments to our own teaching contexts. It also resulted in a deeper and more relevant understanding of ourselves and our educational practices in context.

Revised Knowledge Categories

We found that some of the knowledge that we obtained and reflected upon did not fit Shulman's knowledge base categories. These are aspects such as knowledge about the self as teacher, multi-disciplinary knowledge and knowledge about the different modes of teaching and learning. We therefore suggest that two additional constructs should be included in Shulman's knowledge base categories; namely, *knowledge of the self as teacher* and *multi-disciplinary knowledge* and that *course delivery modes* be added to the TPACK category. This brings us to a revised depiction of Shulman's (1987) knowledge categories.

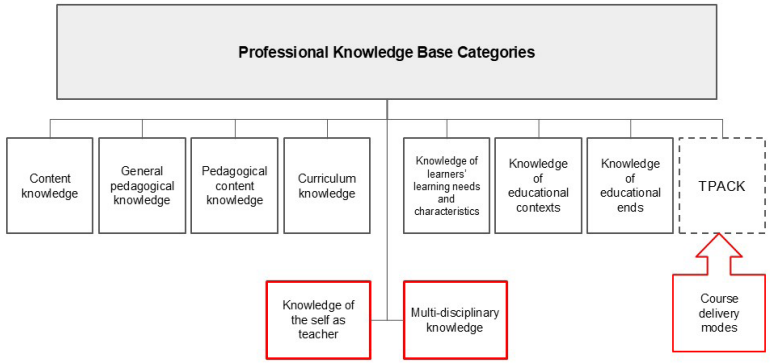

Figure 5.1: Revised Shulman's (1987) Knowledge Base Categories

We believe that knowledge of the self as teacher is an important knowledge category. This is because knowing who we are, our biases and ways of being in a social space, helps us to make more insightful decisions regarding our teaching practice, and to be

more conscious as teachers. There is no clear knowledge category in Shulman's (1987) knowledge categories where knowledge of the self as teacher would fit, besides the related construct of "knowledge of the learner and their characteristics." It is suggested that knowledge of the self as teacher is created as an additional construct considering the importance of a teacherly academic identity. This idea is in line with Beijaard et al.'s (2000) view that teacher identity is a critical knowledge component of teaching.

Multi-disciplinary knowledge (Lim & Richardson, 2022) refers to knowledge about other disciplines in the context of teaching and learning in higher education. This can include multi-disciplinary content knowledge, multi-disciplinary pedagogical knowledge as well as multi-disciplinary curriculum knowledge. We suggest that multi-disciplinary knowledge be added to Shulman's knowledge base categories or that the knowledge of educational contexts category be extended. This recommendation adds to the work of Behari-Leak (2017), who argues for the need to re-examine the (de-)colonial support of individual disciplines and simultaneously embrace the multi-disciplinary tensions inherent in the PGDip. This category does not imply in-depth content knowledge, but refers to knowledge of how learning theories and teaching decisions are applied in different disciplines.

We further recommend that the TPACK model (Chai et al., 2013) be expanded to include knowledge of *course delivery modes* and their affordances. We suggest that courses such as Online Learning Design continue to be offered in an online mode even in times where face-to-face or hybrid delivery is possible. In this manner, students on the PGDip can experience what it feels like to be a student in the online mode. This provides them with greater insight into what is needed for their own courses as well as a rich set of ideas on how to teach in the online mode. For the other courses in the PGDip, we suggest a hybrid format with a strong emphasis on face-to-face interactions. This is so that students and lecturers can learn about each other through physically seeing each other and being present in the same classroom, i.e., modelling behaviour as teacher and student, respectively.

Conclusion

In reflecting upon and analysing our learnings in the PGDip, Shulman's (1987) knowledge base categories allowed us to evaluate how the programme has shaped us as professional educators in our disciplines by highlighting the knowledge competencies that remained with us more than a year after we completed the programme.

The programme also professionalised the field of higher education teaching for us, giving us access to role models who exemplified different ways of being a teacher in higher education. Through the multi-disciplinary nature of the programme, we gained access to pedagogical content knowledge across disciplines that were not familiar to us. We also gained curriculum knowledge that contributed to our capacity to design our own curricula and courses.

Throughout the programme we gained a better understanding of our students and their challenges through our personal experiences of being students again. Our knowledge of educational contexts improved by better understanding our course loads as well as understanding decolonialisation in our own contexts. We also started to view the purposes of higher education in a different light. Most importantly, we learned to apply technology (TPACK) in our own teaching and learning activities.

We created relationships and a higher education network with our classmates and lecturers, whom we continue to consult on various topics, issues, and projects in higher education. In doing so, we realised the importance of knowing ourselves, including our personal goals and becoming more comfortable with our changing roles as educators.

Finally, we recommend that two additional constructs should be included in Shulman's (1987) knowledge base categories; namely, *knowledge of the self as teacher* and *multi-disciplinary knowledge* and that *course delivery modes* should be added to the TPACK (Chai et al., 2013) knowledge categories.

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