

## **Self-study enabling understanding of the scholarship of teaching and learning: An exploration of collaboration among teacher educators for special and inclusive education.**

While teaching is increasingly being accepted as a discipline there is a growing emphasis on teacher educators researching their own practice to advance the scholarship of teaching and learning (SoTL) (Loughran & Russell, 2007). This study sought to explore the extent to which self-study contributes to teacher educators' understanding of the SoTL within the discipline of teaching. While self-study is generally accepted as a scholarly approach (Kitchen, 2015) the aim here is to address the call for self-study researchers to evince a commitment to a practice-based and theory-building research agenda by linking with public theories (Vanassche & Kelchtermans, 2015), in this case the SoTL (Kreber & Cranton, 2000). Additionally given that self-study is collaborative (Loughran, 2010) findings here may help to somewhat address the dearth of knowledge about teacher educator collaboration (Heldens, Bakx & den Brok, 2015). A self-study approach was adopted to explore a journey of two teacher educators as they designed, implemented and evaluated new modules in special and inclusive education within an initial teacher education programme in the Republic of Ireland. Analysis and synthesis of data from 24 student teachers and two teacher educators provide insights and understandings into the collaborative interactions and factors that enabled and hindered these interactions. This may support other teacher educators develop a collaborative pedagogical culture to enhance greater understanding of the SoTL. We argue for adopting self-study as a scholarly approach to engage with other theories, such as SoTL, thus contributing to the broader field of teacher education research.

### **Introduction**

An increasing emphasis on the scholarship of teaching and learning (SoTL) is arguably reflective of the widespread influence of performativity and accountability in teacher education. However, defining this elusive concept has been challenging since its inception by

Boyer in the 1990s. The SoTL generally refers to the process of generating meaningful knowledge, about an educational discipline, by validating claims through critical reflection (Boyer, 1990, 2015). It aims to enhance the “professional status of tertiary teaching” (Haigh, 2010, p.1) by making transparent the means by which student learning has been enabled (Trigwell, Martin, Benjamin & Prosser, 2000). Central to the SoTL is a focus on self, with educators operating “from the perspective of their intention in teaching while seeing it from the students’ position” (Trigwell, Martin, Benjamin, & Prosser, 2000, p. 164) as well as relevant educational theory (Kreber & Cranton, 2000). Acknowledging the focus on self, arguably evidence-based critical reflection must also include the impact on students’ learning (Shulman, 2002). Typically, teaching portfolios are employed in documenting and analysing any such reflections (Healey, 2000). An inherent element of the SoTL involves subjecting the work and reflections of teacher educators to peer review and critique, thus enabling effective practices to be built upon by others (Shulman, 1998).

This may be challenging in light of current research highlighting a knowledge practice gap (Kennedy, 2014) related to teacher educators’ collaboration, with independence being more common than interdependence (Heldens et al., 2015). The importance of collaboration has been widely accepted in terms of teacher effectiveness, enhanced professional development, and innovative practices (Heldens et al., 2015). Interestingly, existing research seems to focus on the impact of such collaboration rather than gain any insight or understanding into the experience or patterns of teacher collaboration (Martin & Dismuke, 2015; Vangrieken, Dochy, Raes & Kyndt, 2015). Such data could potentially support teacher educators in how to collaboratively engage in the process of reflection to support a SoTL.

Engagement in the SoTL has been relatively neglected in the teacher education profession with a focus on the technical-instrumentalist approach historically dominating (Vanassche & Kelchtermans, 2015). Indeed such trends have been noted and criticised both in

the American (Darling-Hammond, 2010) and UK (Murray, 2010) contexts. Arguably this is reflective of the “prevailing culture of isolation” (Nevin, Thousand & Villa, 2009, p. 573) as teacher educators struggle with competing demands in higher education. Some teacher educators only engage with SoTL because of institutional policies or expectations while others may engage for personal reasons (Haigh, 2010) such as professionalism, pragmatism and policy (Shulman, 2000). Alternatively a lack of engagement with the SoTL may be indicative of teacher educators not acknowledging the complexity of teaching and learning (Hoban, 2004) focusing more on content or discipline knowledge and less on teacher education pedagogies (Goodwin, Smith, Souto-Manning, Cheruvu, Tan, Reed, & Taveras 2014). This lies in contradistinction to Kreber (2006) who calls for colleagues to support each other in focusing on curricular, pedagogical and instructional knowledge for the SoTL, which arguably would support faculty professional development (Fanghanel, 2013).

One approach which may support teacher educators to work collaboratively on the SoTL is self-study research. Arguably self-study research allows for a rejection of the reductionist view of teaching and learning (Zeichner, 2007; Loughran, 2010) in favour of a focus on the SoTL characterized by evidence-based critical reflection on a specific learning context with a view to improving student learning (Vanassche & Kelchtermans, 2015). Accepting this, there is an overlap between self-study and the SoTL (Haigh, 2010). Self-study is collaborative by nature (Loughran, 2010) and therefore may help to somewhat address the dearth of knowledge about teacher educator collaboration (Heldens et al., 2015).

Self-study has also been acknowledged as beneficial for focusing on planning and implementation for professional development (Martin & Dismuke, 2015). This is relevant in this paper where we report on our collaborative self-study journey as two teacher educators within initial teacher education in the Republic of Ireland as we designed, implemented and evaluated new modules on special and inclusive education in a new and extended Bachelor of

Education (BEd) programme. Notably, one was a new teacher educator (Fiona) and the second a developing teacher educator (Anna). This, we argue, paved the way for linking with and understanding a public theory of a SoTL in developing a knowledge in practice and a knowledge of practice with a view to impacting on students' learning (Goodwin et al. 2014). It also helped to elucidate the nature of the collaborative practice as Fiona, the new teacher educator (NTE) developed her personal pedagogy of teacher education (Bullock, 2009; Dinkelman, Margolis & Sikkenga, 2006) while the developing teacher educator (DTE) Anna, found in self-study a tool to articulate a theory of practice as related to her personal values, biography and experiences (Gitlin, Peck, Aposhian, Hadley & Porter, 2002). In this way the collaborative self-study paved a way for us to develop a critical, pedagogical and epistemological understanding of the complexities of teacher education within the theoretical model of a SoTL.

## **Literature Review**

The increasing emphasis on the SoTL within teacher education may be evidence of the hegemony of the neoliberal agenda, with increased accountability and performativity in higher education (HE) (Nevin et al., 2009), or equally evidence of a rise in the status of HE teaching (Haigh, 2010). Within academia, teacher educator research where teachers critically reflect on their teaching and students' learning and open their reflections to peer review may have increased status, but is often at odds with teaching. The SoTL may facilitate a "move beyond the teaching vs research debate" (Haigh, 2010, p. 8) and instead support interdependence between research and teaching within teaching degrees. Arguably the development of a collaborative pedagogical culture within HE can support the blending of the research and

teaching agenda where teacher educators who are learning in their practice are also learning of their practice (Goodwin et al., 2014). However it is important to consider what is meant by a SoTL, to understand how these two areas of research and practice can be blended effectively.

### ***Defining SoTL***

Tracing the roots of the SoTL goes back to the work of Boyer in the 1990s who describes the SoTL as a process of garnering meaningful knowledge about an educational discipline and validating same through critical reflection (Boyer, 1990, 2015). Criticising a hierarchical typology of academic scholarship in which research is viewed as the preeminent function from which emerge other activities related to teaching and service, Boyer (1990) proposed a broader and more dynamic model which recognises the breadth of academic work across the domains of research, teaching and service. This model encompasses four distinct but overlapping dimensions namely; the scholarship of *discovery*, *integration*, *application* and *teaching*. For Boyer, the scholarship of *discovery* is most closely equated with the research remit and concerned with the question of what is to be known. Linked to this is the scholarship of *integration*, concerned with interrogating the meaning of research findings to synthesise and establish connections and develop a greater understanding. Importantly, rather than presenting the scholarship of *application* as a top-down, one directional process, Boyer's model recognises this as a dynamic engagement leading to new theoretical and practical understandings. For Boyer, this dimension of scholarship also relates closely to the service remit, although to be considered scholarly, such service must relate directly to the scholar's field of expertise and must be conducted with the same rigour and accountability traditionally associated with research activities.

Related to this is the question of what constitutes academic 'service'. Contending that

the term is fuzzy, and lacks professional status, Karlsson (2007) has argued instead for the use of 'collaboration' since such work encompasses interaction with communities and practitioners and is therefore in keeping with a more holistic and integrated view of scholarship. In this regard, the collaborative nature of the current study involving reflective dialogue between two teacher educators and with students seems an appropriate context for investigating a SoTL. Finally, the scholarship of *teaching* is equally a dynamic process of knowledge transformation and extension in which "faculty, as scholars are also learners...through reading, through classroom discussion, and surely through comments and questions posed by students, professors themselves will be pushed in creative new directions" (Boyer, 1990, p. 24). Arguably, with an explicit focus on developing an understanding of a SoTL in the context of research relating to teacher education, the current study recognises the dynamic, collaborative and inclusive nature of this scholarship.

### ***Scholarship of Teaching and Learning and the Purpose of University Teaching***

While multiple models of the SoTL have been proposed subsequently, a model by Kreber and Cranton (2000) is gaining prominence in H.E. (Kreber, 2006). This purports that faculty progress in the SoTL is made by teachers generating and validating their knowledge in three discrete domains; (1) knowledge relating to the purposes of university teaching (curricular knowledge), (2) knowledge about student learning (pedagogical/psychological knowledge) and (3) knowledge about how to enhance the learning process (instructional knowledge). Such knowledge is garnered through a combination of one's own teaching experiences, as well as information derived from engagement with theoretical literature in one's field of practice, once again creating interdependence between research and teaching. It emphasizes learning about teaching and demonstrating that knowledge through various documentation including reflective essays, teaching portfolios and/or research (Kreber & Cranton, 2000).

Reflection on this knowledge is deemed to occur at three qualitatively discrete levels as posited by Mezirow (1991); *content*, *process* and *premise*. *Content* level reflection focuses on the description of a problem and involves teachers using their present instructional knowledge and assumptions to discern a particular problem, and the means by which it is habitually solved. Conversely, *process* reflection focuses on the effectiveness or meaningfulness of the problem solving strategy itself, for example, how instructional knowledge or pedagogical knowledge is created. Finally, *premise* reflection questions the assumptions on which knowledge is based and whether alternative issues might be considered, for example, why do we teach the way we teach, why have we these particular goals for a course?

This links directly to Kreber's (2006) alternative view of the SoTL which questions the purpose of university teaching, the goal. Arguably this relates to the professionalization of university teaching which must include a moral or civic purpose thus aligning a SoTL with citizenship, and reflective of Boyer's (1990) concern with the service remit of scholarly activity. The question to be asked centres on what kind of student learning is being valued, is it a reductionist approach focused on students' technical proficiency in terms of pedagogical skills or is it conceptualised more broadly to encompass a moral purpose and the idea of citizenship (Kreber, 2006)? This is especially pertinent for this paper which explores a SoTL in the context of teacher educators for special and inclusive education, and its inherent moral component accentuating the right to inclusion for all learners. For the purposes of this paper we are adopting this broader view of a SoTL where our focus is on the moral purpose of including and meeting the needs of all learners. Knowledge about student learning in relation to this moral purpose and indeed how this learning can be promoted and developed (Kreber & Cranton, 2000) is emphasized along with the need to identify effective means of facilitating student learning and skills acquisition. In this regard, reflections on content, process and

premise facilitate this broader conceptualisation of a SoTL or goal of preparing students to participate in society in a democratic manner, and to engage in the process of life-long learning (Hutchings & Shulman, 1999). Notably, in examining teacher educator beliefs and practices, Vanassche and Kelchtermans (2015) assert that for many faculty, there is a strong moral purpose to the role of teacher educators, in preparing teachers who are not just technically proficient but who also hold the values of students' personal development as central to their professional responsibilities. They report that effective teacher educators should be seen to "practise what they preach" (p.121) in modelling positive relationships in their own interactions and caring values in respect of student teachers. This sentiment is noteworthy considering the questions raised about the ultimate purpose of university teaching by Kreber (2006), who argue that the SoTL should be concerned with the notion of citizenship rather than merely focusing on effectiveness and efficiency. What is less clear is how teacher educators can model positive relationships and interaction even though collaboration characterised by high levels of interdependence might arguably confer additional advantages for example, more innovations, peer review, critique and thus enhanced professional learning. This question is of particular merit in the context of the current study, where the recent introduction of a revised and more collaborative model of teaching support in the Irish context (Department of Education and Skills, 2017) calls for collaborative skills and values to be fostered both in discipline-specific and global respects.

### ***Teacher Educator Collaboration***

Indeed, the focus on effective teacher collaboration is a growing one internationally and one which is seen as central to instilling this key disposition in students (Coke, 2005). Significantly, while teacher collaboration at primary and second level is relatively well addressed in the extant literature, collaboration at third level has been relatively neglected in empirical research



with recent calls for future studies to focus on the nature of collaboration in this context (Vangrieken et al., 2015). This paper aims to fill this gap by unpacking the complex nature of an initial collaboration between Fiona as a new teacher educator and Anna, a developing teacher educator as they design, implement and evaluate new modules on a new undergraduate degree programme for teacher education.

Kreber (2006) asserts that ideally this process should commence within the practitioner's own departmental contexts where faculty could be encouraged to support each other "in the process of content, process and premise reflection on educational goals and purposes, learning and student development and instruction design" (p.104). Much empirical literature attests to the importance of reflection and collaboration in enhancing the practice of teachers. Indeed, both Goodwin and Kosnik (2013) and Wood (2014) assert that teacher educators must be supported to broaden their own pedagogical frameworks and increase their collaborative practice in working towards this goal. The development of collaborative structures within education departments is likely to be a key consideration in this respect.

However, this process is often an inherently challenging one for new teacher educators (NTEs), like Fiona. NTEs must navigate the complex social and institutional contexts of their professional settings, and many experience difficulty in fostering those supportive collegial relationships which would facilitate them to reflect on their own cognitions and practices (Williams, Ritter & Bullock, 2012). Arguably education faculties should foster collaborative learning experiences between experienced teacher educators and NTEs as a central tenet of their role. Co-teaching could support teacher educators in this regard where the emphasis is on co-planning, co-presenting, co-problem-solving and co-processing (Bauwens & Hourcade, 1995). Central to co-teaching is communication which is arguably developmental over time (Gately & Gately, 2001). Collaborative practices can be effectively achieved (Hollins, Luna & Lopez, 2014) by reflecting on traditional practices, for example, peer dialogue based on shared

engagement with the research literature. This has been shown to enhance participants' understanding of their own practice as well as their role as teacher educators, leading to the co-construction of a new understanding of the teacher learning process. This process of collaborative reflection on the theoretical literature is therefore a key element of the SoTL.

Perhaps collaborative teaching and research within higher education is limited due to a competitive discourse context with individuals being protective over their subject matter (Hokka & Etelapelto, 2014). This echoes calls in the literature by Nevin et al. (2009) to document the impact of the “development of a collaborative pedagogical culture that counteracts the prevailing culture of isolation” (p. 573). Collaborative self-study research is one such approach which allows for this, while at the same time having the potential to develop and substantiate a critical-pedagogical understanding of the complexities of teacher education (Vanassche & Kelchtermans, 2015) which arguably allows for a focus on curricular, pedagogical and instructional knowledge as espoused by Kreber (2006). Collaborative self-study research represents one such approach with the potential to address this demand. Pertinently, it also permits the development and substantiation of a critical-pedagogical understanding of the complexities of teacher education (Vanassche & Kelchtermans, 2015) through the lens of curricular, pedagogical and instructional knowledge as espoused by Kreber (2006).

### ***Collaborative Self-Study***

A form of practitioner research developed primarily for use by teacher educators, self-study is collaborative by nature (Loughran, 2010) and therefore may help to somewhat address the paucity of knowledge about teacher educator collaboration (Heldens et al., 2015). Self-study may also be of benefit to a wide range of practitioners interested in developing a knowledge in

practice and a knowledge of practice with a view to impacting on students' learning (Goodwin et al. 2014) thus aligning the teaching and research agendas. It allows for an exploration of the complexity of teacher education and is highly endorsed by Zeichner (1999, p. 8) who argued that "the birth of the self-study in the teacher education movement around 1990 has been probably the single most significant development ever in the field of teacher education research". Perhaps the rationale for this is based on Korthagen, Loughran & Russells' (2006) argument that "Learning about teaching requires an emphasis on those learning to teach working closely with their peers" (p. 1032).

Self-study begins with identifying a problem as does Kreber's (2006) reflection on content thus ensuring alignment of processes. Having identified a problem of practice, research questions are developed along with data gathering and analysis approaches. Thus self-study which is self-initiated, self-focused and interactive has the potential to help those undertaking it to understand self and practice in a way that contributes to their own professional learning (Loughran, 2014; Russell & Berry, 2014) and a new awareness of selves as teachers and researchers (Coleman & Lieder, 2014). Thus, self-study can promote the use of research to improve education and serve the public good, linking once again to a moral purpose of university teaching and Boyer's (1990, 2015) concept of service.

Despite a focus on studying self, the motivation is focused on student learning and a civic or moral purpose, with teacher educators feeling an onus to model collaborative practice characteristic of inclusive pedagogy to support student teachers in responding to increasing diversity in schools (Nevin et al., 2009). Collaborative self-study is arguably one way of modelling such collaborative practices. Moreover, findings could lend valuable empirical data to the existing limited literature on the conditions for collaboration in H.E. and the subsequent impact on student learning (Nevin et al., 2009). In this way, teacher education research

potentially can be conceptualised as social practice which facilitates problematizing and challenging existing power relations and structures thus helping to reflect on Kreber's (2006) premise.

However such collaborative practices can be easier to develop at departmental level where there may already be a culture of trust and mutual goals. Thus proximity and having a history of collaboration within a department can support collaborative practices (Heldens et al., 2015), such as joint work, peer review, critical conversations and critique of each other's thinking, beliefs and practices. However, in this paper, a collaborative self-study was undertaken by Fiona, a new teacher educator concerned with student learning on the one hand, and making a difference on the other, thus embodying Kreber and Cranton's (2000) concept of the SoTL focusing on both students' learning and a moral or civic purpose. Noteworthy is that self-study of teacher education practices is reported to support teachers as they transition to teacher educators (Loughran, 2014, Vanassche & Kelchtermans, 2015) as it gives voice to the self in practice (Owens & Fletcher, 2014) and allows for scholarly recognition (Kitchen, 2015).

Aligned with self-study research this study was "embedded in teacher educators' real concerns and dilemmas with their practice" (Nilsson & Loughran, 2012, p. 122) resulting in the following research question: *To what extent can collaborative self-study contribute to teacher educators' understanding of the scholarship of teaching and learning within special and inclusive education?*

## **Methodology**

A self-study approach was adopted as an "important vehicle for explicitly building understandings of teaching as a discipline" (Loughran & Russell, 2007). This scholarly

approach allows for researching practice with a focus on self in practice (Loughran, Hamilton, LaBoskey & Russell, 2004) where participants learn from experience especially through the support of a critical friend (Crowe & Berry, 2007). It was socially and contextually situated within a special education department of a higher education institute for teacher education in the Republic of Ireland. Taking place over two academic years between 2014 and 2016, it involved a new teacher educator (NTE) (Fiona) and a developing teacher educator (DTE) (Anna), who were jointly designing, implementing and evaluating three new modules for 3<sup>rd</sup> and 4<sup>th</sup> year students (n =24) undertaking a major specialism in special and inclusive education. The major specialism component comprised a total of six five-credit modules delivered in years 2 (BEd2), 3 (BEd3) and 4 (BEd4) of a new four-year BEd degree programme which had commenced in the 2012/13 academic year.

When the study began during the academic year 2014/15 Fiona (NTE) had been working in the department for eight months while Anna, (DTE), had been working as a teacher educator in the same department for over a decade and had taught on the original three year BEd programme. Anna had been involved in the initial development of all six new modules, was teaching and coordinating two of the three 2nd year modules and in 2013/14, had taken on responsibility for coordinating the overall delivery of the major specialism. Fiona was taking on a very significant new role as coordinator of one new BEd 3 module and of the final BEd 4 module. While not a self-study participant, the third author Adrian, a teacher, former postgraduate student and part-time tutor was involved in literature review and analysis and offered a critical perspective. The three BEd 2 modules were foundational in nature and related to *principles and concepts in special and inclusive education* and to *teaching and learning* with a particular focus on *assessment and planning*. The two BEd 3 modules *collaborative practice* and *curriculum and pedagogy in special and inclusive education* were integrative in nature and

focused respectively on developing students' knowledge, understanding, attitudes and skills in relation to working collaboratively with others and to designing curriculum and pedagogy for all learners. The BEd 4 module *leadership for inclusion* was designed to support students in developing leadership skills in special and inclusive education.

Reflecting criteria for quality in self-study Fiona self-initiated this study (LaBoskey, 2004) during the first semester of the academic year 2014/15 when we were jointly planning for the delivery of two modules in semester 2. Drawing on her experience of the design and delivery of the BEd 2 modules in the previous year, Anna suggested that the modules be integrated and delivered collaboratively. The interactive nature of the collaborative design and delivery of modules led to self-study methodology being deemed most suitable to examine our teacher education practices such as modelling pedagogy, co-teaching and designing the assessment holistically so that the learning outcomes of both modules would be assessed in an integrated manner (Loughran, 2007).

Further alignment with self-study methodology is evidenced in the focus on self in practice (Owens & Fletcher, 2014) as embarking on such an ambitious project involving the integration of new modules results in potential uncertainties, both pedagogical and philosophical. The data gathered were informed by these uncertainties and both researchers engaged in extensive reflection as to how this experience impacted on their own personal and professional learning as teachers and researchers (Coleman & Lieder, 2014). Fiona had only recently joined the department, we had not worked together previously and had little sense of each other's underlying epistemological beliefs in relation to special or inclusive education. In hindsight posting on our private blog during the planning phase, afforded a supportive space for sharing and exchange of ideas. The research design involved self-study as outlined by

Loughran (2007a) in which the focus centred on the review of one's own practice in a qualitative manner, and in which collaborative interactions played a central role (Korthagen et al., 2006). Self-study also supported the planning and implementation of new modules (Martin & Dismuke, 2015) where new knowledge, ideas and innovations emerged “between rather than within people” (Paavola, Lipponen, & Hakkarainen, 2004, p.564). The study focused on exploring aspects of teaching and learning (collaboration, curriculum & pedagogy and leadership for inclusion) with an intentional and reflective focus on self and practice throughout (Vanassche & Kelchtermans, 2015). The notion of trustworthiness was a key construct in validating the methodology (LaBoskey, 2004). Multiple data sources were therefore employed as outlined in Table 1.

Teacher educator data included our documented collaborative interactions (Korthagen et al., 2006) on a private blog, critical incident templates recording our reflections on and dialogue regarding each lecture session, audio-recordings of our meetings and e mails. These ongoing communications facilitated co-planning, co-presenting and co-processing related to teaching and learning (Bouwens & Hourcade, 1995). Data from student teachers included module evaluations and transcripts of focus group interviews. In the spirit of inclusion and modelling inclusive practices, students could choose to evaluate their experience in anonymous online evaluations or in a focus group interview. Student data also included contributions on a school placement blog conducted over ten weeks, plus a CPD reflection portfolio on same at the end, as well as a video-recorded sharing experiences session which took place at the conclusion of the final module. Module planning was shaped by our wish not only to model collaborative interaction for our students but to plan for students to have multiple opportunities to engage in authentic collaborative interaction with each other and with us, evincing the interactive nature of self-study (LaBoskey, 2004). The range of contexts in which this

collaboration took place is also outlined in Table 1. These included opportunities for students to collaborate with peers of their choosing as well as in groups established by us, therefore replicating the diverse social contexts for collaboration which the student teachers would subsequently experience in their professional lives. Also of note is that we planned for increasingly public collaboration moving over time from private blogs to Twitter.

All of the above data helped us the teacher educators “to articulate, reconstruct and represent our [their] personal theories of practice” (Vanassche & Kelchtermans, 2015, p. 10). Overall the study met LaBoskey’s (2004) quality criteria for self-study by having multiple sources of data and being self-oriented/-initiated, improvement-aimed, interactive, and validation based.

### ***Data Analysis***

This study employed inductive thematic analysis methods in which emergent patterns and themes were identified, for example, collaboration (Braun & Clarke, 2006). The data were analysed and coded in line with a grounded theory approach (Robson, 2011) over two separate rounds of analysis. In the first round 19 codes were generated and in the second round of analysis, a further 65 codes were identified. These codes and subcodes were subsequently collapsed leading to the identification of eight emerging themes: systematic reflection, teacher educator beliefs and values, theoretical frameworks, module planning and design, collaboration, critical friendship, student learning and inclusive practice.

Additionally, adopting Kreber and Cranton’s (2000) model in terms of content, process and premise as a theoretical lens, we employed backward mapping (Elmore, 1979-1980) to explore the extent to which self-study contributed to our understanding of the SoTL within the discipline of teaching and teacher education. Given that these were new modules, backward mapping was deemed suitable to allow for an exploration of decisions made, at various points



of the design and implementation of the modules, on our understanding of the SoTL (Dyer, 1999). In some cases these decisions arguably stemmed from ‘turning points’ arrived at by one or other or both of the participants (Bullock & Ritter, 2011). We both had total discretion to make decisions or the “informal authority that derives from expertise, skill and proximity to the essential tasks” (Elmore, 1979, p. 606). Backward mapping also allowed for exploration of factors that facilitated and hindered the development of our understanding of a SoTL (Dyer, 1999).

This paper will focus on findings relating to the experience or patterns of teacher collaboration, for a SoTL, in an attempt to address this identified gap in the literature (Karlsson, 2007; Vangrieken et al., 2015) and to represent Boyer’s notion of ‘service’ for a SoTL (1990).

## **Findings and Discussion**

The aim of this study was to explore to what extent a collaborative self-study could pave the way forward for teacher educators to develop a critical, pedagogical and epistemological understanding of the complexities of teacher education, by engaging with the theory of SoTL.

The findings related to teacher collaboration were explored using Kreber’s (2006) lens of a SoTL under content, process and premise. Key curricular, pedagogical and instructional learning outcomes emerged at content, process and premise level which resulted in findings related to the theoretical framework itself, along with informed understandings related to the nature of the collaborative process and factors that supported or hindered it.

### ***Content***

At the content level, reflection focuses on describing the problem, in this case the teaching

processes, at each of the three levels: instructional knowledge, pedagogical knowledge and curricular knowledge.

*Instructional knowledge* was reflected in teacher educators facilitating several opportunities for student teachers to have ‘lived experiences’ of collaboration through group work on student presentations, engagement in the blog, and Twitter to enhance the learning process for the students. “ *One of the reasons I set up the blog with the B Ed3 students was that I wanted to model for them what I wanted them to do as teachers for their own professional learning*” (Fiona, blog, 17/10/14). The impact of this on student learning is evidenced in the observation by a student that “*Collaboration can be seen through all aspects of the course from the lecturers modelling it for us, to many of our assignments. Being engaged in this collaborative practice will enhance my teaching in the future*” (Student, sharing session, 5/11/15).

As teacher educators, engaging in critical dialogic reflection in the self-study context facilitated our developing *pedagogical/psychological knowledge* as we modelled collaborative practices for our students (Vanassche & Kelchtermans, 2015).

*The second session focused on models of collaborative practice and working in groups/teams... having Anna there to come in and out with other challenging aspects was also good. The students get to see us being ‘critical’ and this is good. They seem to be picking up on this and beginning to do the same* (Fiona, blog, 20/02/15).

The impact of this on student learning is reflected in a developing understanding of the practice and intent of collaboration.

*Collaboration has been modelled to us by Anna...Fiona... We have been given both freedom and opportunity within our assignments to collaborate with peers, for example through our group presentations on various articles, through the blog we engaged with on SP3, through using Google docs and Twitter. We have learned the main focus of collaboration is always the children and their learning...I now feel much more prepared for going out to schools in the near future, and I feel my peers would agree, where I will be working alongside other teachers and collaborating with others to enhance teaching and learning (Student, sharing session, 5/11/15).*

Notably however, as students were challenged towards a more public collaboration, the need for even more explicit modelling became clear. *“I asked the students about Twitter and why no one tweeted before Saturday. The reply was not a surprise... they don’t want to be the first in case they get it wrong! So when Anna and I modelled responses they were happier to engage”* (Fiona, critical incident, 30/09/15).

Engaging in collaborative self-study also provided a fruitful context for content level reflection on our goals and purposes leading to developments in our *curricular knowledge* of our practice, of why we teach as we do. The following blog extracts illustrate developments in our pedagogic literacy and conceptual framework.

*Wood (2014) believes that values, attitudes and philosophies are central to the work of teaching and learning...Equally Florian and Spratt’s (2013) theme of becoming an active professional has some parallels with Wood’s (2014) collaborative growth where the emphasis is on teachers’ working together to develop creative new ways of working.*

*They both emphasize the importance of CPD as a means of enhancing the learning outcomes for all students (Fiona, blog, 11 /11/14).*

*The comparative analysis of the work of Wood and Florian and Spratt reinforces my commitment to addressing the moral purposes and values of our work. We cannot view and address professional concerns with pedagogy and curriculum in isolation from matters of human rights and social justice. We need to keep winning hearts as well as minds (Anna, blog, 9/1/15).*

Likewise, learning in terms of curricular knowledge based on the moral purpose of teaching (citizenship) for student teachers and their students, and informed by engagement with the literature is evidenced in the following extract.

*As a teacher, you have to respect each child equally and ensure that your classroom is welcoming and inclusive for all children. Every child is unique and has different strengths and needs. Therefore, it is important to see the child before the special educational need (SEN). The SEN should be seen as a challenge for the teacher to facilitate and not a problem within the child. I remember XXX saying at the ILSA conference that you need to get to know loads about the SEN but more about the child. This highlights that the child is most important and it is our responsibility to meet their needs... A statement that has stuck with me from the Ferguson [2008] article last year is that the children “can be in but not of the class in terms of social and learning membership,” which highlights the importance of inclusion to me (Student, sharing session, 5/11/15).*

## *Process*

Process reflection focuses on the effectiveness or meaningfulness of the problem solving strategy itself which in this study relates to how instructional knowledge, pedagogical knowledge and curricular knowledge was created by the teacher educators and students.

Process-level reflective insights point to the effectiveness of the collaborative self-study approach for understanding instructional knowledge and pedagogical knowledge as evidenced at two different levels; reflections on teaching experiences and on literature /theory (Kreber, 2006). Interestingly, these reflect evidence of a focus on a SoTL (Fanghanel, 2013) with an emphasis on student learning as distinct from Boyer's *Scholarship of Teaching*, thus making Kreber's (2006) model of SoTL more meaningful for this study.

Evidence of effective collaborative practice among the students on the blog leading to developments in *instructional knowledge* is reflected in the following: "*I was totally amazed at how much they [students] had read each other's postings, tried out ideas and shared them with their co-operating teacher. This has to be harnessed further!*" (Fiona, blog, 10/02/15).

In terms of application of knowledge in authentic learning tasks such as the student presentations it was clear that student teachers adopted a problem-solving approach as espoused by Bronfenbrenner (1979) and Florian and Spratt (2013). Collaborative self-study created the context for process reflection on student learning generating *pedagogical and curricular knowledge* of teacher education

*Watching them working together as a group and supporting each other within and across groups was inspiring. They seemed to have come together as a learning community and as Anna said they seem to trust and respect each other....Even more heartening was to hear this from themselves in their evaluations...Their enthusiasm for*

*learning, their focus on the moral purpose of teaching was palpable...Interesting to see how presenting them with the bigger picture ideas in this module seems to have worked well for them e.g. their interest in Bronfenbrenner's ecological systems theory, being a professional and the importance of collaboration (Fiona, blog, 7/3/15).*

Noteworthy also is that student teachers reported seeing themselves as having initiated their own professional development journeys.

At the same time the collaborative reflections on the blog and later on the templates provided the teacher educators with an opportunity for enhanced professional learning as reflected below:

*Our use of this blog for reflecting provides us with space to think. This type of collaboration is invaluable or as Anna said in her email today "it reduces the isolation". By collaborating like this we are enhancing our own learning, challenging each other's beliefs and practices. It forces us to speak the language of teaching and learning, something which we both want our student teachers to be able to do. (Fiona, blog, 16/01/15).*

These observations were affirmed not only by engagement with two discrete frameworks in the theoretical literature, namely Florian and Spratt (2013) and Wood (2014) but also by the researchers' own awareness of the emergent consensus on their developing conceptual frameworks.

### ***Premise***

Finally, premise reflection questions the assumptions on which knowledge is based and

whether alternative issues might be considered, for example, why do we teach the way we teach, why should teachers give consideration to how students learn, why have we these particular goals for a course?

Engaging in collaborative self-study provided a context conducive not only to reflecting on the instructional, pedagogical and curricular knowledge we brought to the design and implementation of the new modules, but ultimately led us to question the premise on which our decisions were founded.

Regarding instructional knowledge, Fiona noted the value of collaboration:

*Having Anna to bounce ideas off is critical for me. Anna has experience of designing and implementing modules to the same cohort of students last year. Therefore she is able to guide the assessment process from practical experience as well as from her own conceptual understanding of what matters most ...* (Fiona, blog, 08/01/15)

This arguably reflects Florian's (2014) concept of focusing on 'what' is to be taught and 'how' as distinct from 'who' is to be taught. Equally Anna articulated that

*Meta-learning can only happen in dialogue- and dialogue between teachers and students – it is constructivist and learner centred but we all have a dual role as teachers and learners. Fiona and I regularly discuss our practice – including the values, attitudes that underpin those and one of the things that she shared with me was an understanding that what is “special” about SEN is the learning that ensues for teachers... (Anna, sharing session, 5/11/15).*

Focusing on 'how' things are to be taught is particularly important in the context of special and inclusive education where teacher educators need to model this for their student teachers so that ultimately they can replicate this in their own school contexts. Enabling student teachers

to become teacher leaders in the pursuit of meeting the needs of all learners was articulated by Fiona in the video. Not only did the self-study allow us to interrogate our own instructional and pedagogical knowledge, it also allowed us to model what we want students to do going forward. Modelling what we wanted students to do became an integral part of the design and implementation of the modules (Hallett, 2010) as evinced in Fiona's blog entry.

*I find myself spending so much time on the pedagogy involved in each session and not only modelling this but making explicit links with the students about which pedagogies are being used and how these could be used in classrooms. To this end I am incorporating the idea of collective note-taking where a small number of students will have responsibility for taking notes on pedagogies being modelled (Fiona, blog, 17/10/14)*

Despite constraining factors, Anna secured time for the critical reflections which arguably reflects the values placed on this practice. This became an important part of Anna's individual learning allowing for a greater understanding of why we teach the way we do and if it is the best way. An example of this deepening curricular knowledge is evidenced in the following quote.

*One of the benefits of writing in the blog is that it helps me to focus explicitly on what I am gaining from our collaboration. It would be easy to lose sight of this given the multiple demands of our professional lives. This reflection helps me to focus on ring-fencing Wednesday mornings (and prioritising our face-to-face prep meetings and online collaboration on docs in Google) as learning spaces for myself and our students" (Anna, blog, 21/01/15).*

The impact of doing this was expressed by Anna at a later date: "*I feel I am a more enabling educator...I realise how much difference I can make*" (Anna, sharing session, 5/11/15).



Whether or not the collaborative self-study was the best way to approach the problem, in this context the designing and implementation of the new modules, can be elucidated from the quote below.

*The value of requiring students to present and share on their learning, not just in terms of the programme, but in terms of their future...invaluable...I think it is very important that they do stuff like this that is not linked to formal assessment / acquisition of marks. It demonstrates student motivation is not always about marks ... a commonly held perception ... 'not seen to be valuable unless we tie marks to it' (Critical friend, critical incident, 18/11/15)*

*This really resonates with me....I think partly this comes down to modelling by us as teachers and by their peers. They can see how much we have all invested in the specialism and in their individual learning and this motivates them to put the same effort in (Anna, critical incident, 25/11/15).*

From the above findings, it is evident that the collaborative self-study paved a way forward for the teacher educators to develop a SoTL by reflecting on the content, process and premise in each of the three areas of knowledge; curricular, pedagogical and instructional. Self-study “allows for my two passions to be united - teaching and research” (Fiona, sharing session, 5/11/15, thus reflecting a belief in and commitment to a SoTL.

However, this paper argues that the nature of the collaborative interactions was pivotal in facilitating this SoTL and given the dearth in the literature on same, this will now be explored.

### *Nature of the Collaborative Interactions*

Findings in relation to the nature of the collaborative interactions (Figure 1) and reflective insights are noteworthy in light of the need, as stated by Nevin et al. (2009) to develop a stronger culture of collaborative pedagogy which would serve to reduce the often isolating nature of tertiary teaching. Notably the transition to a four-year BEd degree was a national policy directive which could have resulted in contrived collegiality (Hargreaves, 1994) for implementation of a new policy, but instead reflected a more meaningful collaboration for policy enactment in terms of design, delivery and evaluation of the new modules.

The finding of a predominance of convergent reflections accentuates the shared views of the participants in terms of their respective conceptual frameworks and reflects the researchers' shared epistemological beliefs regarding special and inclusive education and methods of instruction around same. Nevertheless both participants were conscious of the need to refrain from consensus seeking and were comfortable in challenging each other's assertions in reflective engagements. This was noted by the third author when coding the data; '...conscious effort not to engage in consensus seeking by Anna', as evinced in the following instance '*I'm spurred on by Fiona's request by email for feedback on a blog post. However, I've consciously chosen not to look at that post yet and instead to post [do my own independent post] blind on this occasion. I will post again in response to reading Fiona's post.*' (Anna, blog entry 24/1/15)

The fact that some divergent reflections were noted appears to validate the potential of the self-study approach to substantiate a critical-pedagogical understanding of the complexities of teacher education and a broadening of pedagogical frameworks (Goodwin & Kosnik, 2013; Wood, 2014).

Impacting on collaborative practice is that both researchers collaboratively planned the

sessions in advance of co-presenting. They problem solved issues in front of the student teachers, for example, 'coverage' of content versus 'understanding' of same and the level of student teacher scaffolding provided with assessment criteria. This shared processing allowed for a discussion of what was working well and what needed to be changed. Drawing on the theoretical literature and lecturer reflections on action allowed for further communication and understanding of these issues echoing key elements of the SoTL. Following this, agreement was reached about asking the student teachers about these issues in their summative evaluations of the module and how these issues would apply to them as teachers in their own classrooms.

Arguably, this level of co-teaching is indicative of necessary ingredients for successful collaborative relationships (Bauwens & Hourcade, 1995). This was developmental over the course of the two years where communication was careful and arguably guarded at the outset, moving towards a compromising stage of 'give' and 'take' and finally resulting in open communication and interaction along with mutual admiration (Gately & Gately, 2001)). The fact that both participants had a strong professional and personal rapport, and a shared common goal in the teaching of the modules, rather than competing interests may have facilitated the extent to which the reflective process was open to critique and self-critique thus preventing conflict in terms of planning, teaching and learning. Co-planning and communication were highlighted to the students as essential components of co-teaching to avoid potential conflicts.

Central to successful collaborative practice is good communication and explicit articulation of values and ethics (Interprofessional Education Collaborative Expert Panel, 2011) as evidenced in the blog via the use of conceptual frameworks and shared dialogue. Collaboration does not just happen. It requires planning, clear communication and opportunities for developing a shared understanding of the process of content, process and

premise reflection on teaching and learning (Kreber, 2006). The use of the lecturer reflections facilitated deeper contemplation on actions thus providing an opportunity for critique and critical dialogue. One recurring tension was that between time and energy for risk-taking and innovative practices, and the sustainability of this going forward. This highlights potentially important considerations in determining the experience or patterns of teacher collaboration itself which may support other teachers who attempt to engage in this process (Vangrieken et al., 2015); use of structured reflections, co-planning, co-presenting, co-problem-solving and co-processing in relation to instruction, curriculum and pedagogy.

Significantly, the study was self-initiated by the new teacher educator (NTE) with learning insights most frequently occurring in a top-down manner from the developing teacher educator (DTE) to the NTE. However, learning was also experienced by the DTE pointing to the bi-directionality of mutual reciprocal learning that emerges from reflection on experience and theory. This learning process is what helps sustain such collaborative practices.

## **Conclusions / Implications**

At the outset, we hoped that by unpacking the complexities of our collaboration, we would address a recognised gap in the literature relating to collaborative processes in higher education and in so doing develop our own understanding of the theory of a SoTL. More importantly however, engaging in self-study created conditions supportive of premise reflection (Mezirow, 1991) leading us to question our assumptions about, and support the development of our critical-pedagogical understandings of the moral purpose of our work (Bullock, 2009; Kreber, 2006).

As such, we argue that this study may represent an example of the kind of “work...needed in the academy to help both experienced and novice teacher educators become conscious of their own biases and subjectivities, [and] develop skills and sensitivities that can support social justice teaching and researching...” (Goodwin et al., 2014, p. 298). Acknowledging that the validity of self-study research is founded on trustworthiness, we share this report on our practice for exemplar-based validation (Vanassche & Kelchtermans, 2015) by others.

This study has a number of implications for theory and practice. Firstly, the finding that engagement in self-study developed and substantiated the participants’ critical-pedagogical understanding of the complexities of teacher education in respect of collaboration lends firm empirical support to the validity of the self-study approach as espoused by Goodwin et al., (2014), for a SoTL as advocated by Vanassche and Kelchterman (2015). We also argue for other self-study researchers to engage with other public theories as a means of contributing to the broader field of teacher education research (Zeichner, 2007) and highlight the value of self-study as a scholarly approach for same.

Secondly, the clear and explicit description of the communicative and reflective stages undertaken by the two teacher educators affords a potentially valuable guide on collaborative practice for other practitioners as called for within the literature (Martin & Dismuke, 2015; Vangrieken et al., 2015). The importance of both teacher educators’ openness and willingness to collaborate along with a commitment to co-planning from the outset using an agreed method of engagement created a safe climate for open and clear communication between the researchers. This prevented conflict and encouraged critical and courageous conversations; something we argue needs to be modelled for student teachers. Discussions around

collaborative cultures and associated challenges are important for student teachers as all school contexts are different and student teachers need to be equipped with skills to deal with challenging situations. Thirdly, the delineation of the dynamic nature of collaborative engagements in respect of the f of reflections and learning insights in the current study suggests the need for a more conceptually nuanced framework to adequately capture the discrete nature of reflective interactions between faculty members. This study therefore proposes a novel addition to the model developed by Kreber and Cranton (2000) and outlines an initial framework which can be further refined in future research undertakings. The self-study approach was instrumental to this theory generation.

Adopting a self-study approach of teacher education practices in implementing new modules is thus advocated for teacher educators and student teachers alike. Learning from this has subsequently impacted on teaching, resulting in the conscious inclusion of content and process reflection on the requisite communicative knowledge, competencies, attitudes and behaviours which student teachers will require for effective collaboration in schools (Interprofessional Education Collaborative Expert Panel, 2011). While the literature is replete with assertions of the importance of collaboration for inclusion there is little evidence of how teacher educators might collaborate. This study has highlighted the need for an explicit focus on co-planning, communication skills, co-presenting and co-processing to enhance teaching and learning for teacher educators and student teachers alike. However some questions still remain. Would findings be similar where there is a difference in values and beliefs between the collaborating teacher educators from the outset? How would these be negotiated during the collaborative interactions? If collaboration was mandatory would the experience be similar?

In addition, as called for within the literature, this study provides evidence both of

effective means of fostering collaborative and inclusive practice among student teachers (O'Ruairc, 2013) and of transparency in the ways in which student learning has been enabled (Shulman, 2002; Trigwell et al., 2000). It reflects a scholarship of teaching where faculty as scholars learn through classroom discussion, comments and questions from students (Boyer, 1990). As such this study illustrates that adopting a scholarly stance in tandem with self-study methodologies has real value in advancing the understanding and practice of teacher education, challenging technical-rational assumptions and illustrating the value and importance of teaching as a discipline (Loughran, 2007b). Furthermore this accords with calls for teacher educators to "practise what they preach" (Vanassche & Kelchtermans, 2015 p.121) not just in terms of modelling effective pedagogical skills, but pertinently in terms of pursuing a moral purpose in the context of citizenship (Kreber, 2006); something which continues to be prioritised in the teaching on these new modules.

Finally, on a theoretical basis, it is noteworthy that the integration of multiple academic roles including those of 'teaching', 'research' and 'service' (Boyer, 1990) was a salient aspect of this study. However, the collegial nature of the investigation renders the contested notion of 'service' a reductive one. This study therefore affirms the assertion of Karlsson (2007) that the term 'service' be replaced with that of 'collaboration' in the context of the SoTL.

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