Transformative professional learning: An ecological approach to agency through critical reflection

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Abstract

Within the global economy, education leverages social and economic improvement. Teachers are positioned as drivers and agents of compliance within change processes. Addressing this concern, we investigate intern teacher agency, as transformative professional learning, that occurs through a process of critical reflection. Critical reflection is conceived as an important element of teacher agency within the current political milieu. This article addresses the role of critical reflection in school-based intern teacher professional learning. It is argued that intern teacher agency as Transformative Professional Learning can be characterized through relationships that provide scope for decision-making and critical reflection.

Key Words: intern teacher, transformative professional learning, critical reflection, teacher agency

Introduction

As perceived leverage for schooling improvement, the debates around teacher quality are embedded in the agenda of global competition. The global economy frames education systems and shapes the work of teachers. This educational terrain presents teachers with an intense and complex work context where their responsibilities are highly regulated and expectations of performance are high (Vongalis-Macrow, 2007). The influence of policy is such that "teachers can be treated like a quality product,

updated, shaped and remodelled to fit the demands of delivering education" (Vongalis-Macrow, 2007, p. 326).

Issues of quality map backwards into initial teacher education and in this climate of performativity the sector can be seen as "under attack" (Le Cornu & Ewing, 2008, p. 1799). Performative issues of graduate teacher and teacher education quality have been central to international debates in recent years. Much teacher professional learning, within a climate of neoliberal performativity, can be seen as instrumentalist, purely focusing on the achievement of performance goals as outlined in professional standards. Mockler (2013), writing in an Australian context, observes that "the growth of teacher professional standards and associated registration and accreditation processes for teachers over the last two decades has come with an attendant focus on teacher professional learning and development as a key means through which professional standards are maintained" (p. 38).

As a response, this article proposes a conception of Transformative Professional Learning (Kennedy, 2005; author, 2015) where prospective teachers "critically shape their responses to challenging situations" (Biesta & Tedder, 2006, p. 11) through an ecological conception of agency (Boylan, 2010). Agency is both temporal and relational. It " occurs over time and is about the relations between actors and the environments in and through which they act" (Biesta, Priestley & Robinson, 2017, p. 40). We make a crucial link that teacher agency and critical reflection are inherently intertwined in Transformative Professional Learning. Agency is an embedded element in reflective professional learning where deeply held beliefs can be unravelled and reravelled. Transformative Professional Learning described in this article builds on the continuing professional development work of Kennedy (2005), who frames a generative and fluid conception of teacher learning. We forge links with Mezirow's (2009) conception of transformative learning in which critical reflection upon one's interpretative assumptions can lead to a reframed understanding (Mezirow, 1991). Critical reflection, as a central process in Transformative Professional Learning, can enable teachers to shape meaning perspectives that are "more inclusive, discriminating, self reflective, and integrative of experience" (Mezirow, 1997, p. 5). There are intra and inter-relational dynamics in schooling settings and although new to the profession, it is

argued in this paper that intern teachers as contributing member of a professional community can co-lead their own and others' professional learning.

As preservice teacher educators, we are particularly interested in the field of preservice teacher professional learning during the final professional experience (internship). This takes place as a final transition into the profession. The article draws data from the descriptive case of an Australian intern teacher's experience of Transformative Professional Learning during an internship. This preservice teacher professional experience (practicum) is understood as a powerful process that prepares prospective teachers for their work in schools. Mule (2006) observes it is "arguably the most powerful influence in preservice teacher education" (p. 201). A link can be made between critical reflection and the concept of preservice teacher inquiry. An inquiry oriented approach to intern professional learning highlights the notion of "preservice teachers as active participants in their own professional growth, knowledge constructors, and agents of change… Such a conceptualization is in direct contrast with more traditional views of learning to teach" (Mule, 2006, p. 209).

Professional experience in schools can provide an important opportunity for prospective teachers to transcend an instrumentalised and exclusive focus on standardized technical skills and competencies. It may be seen as a chance to consider moral and ethical issues involved in teaching and learning in situated contexts (Le Cornu & Ewing, 2008). Le Cornu and Ewing observe the importance of different sites of knowledge that preservice teachers can apply in professional contexts. "The process of learning to teach … has been reconceptualized to include an acknowledgement of 'personally owned professional knowledge', which is gradually built up by integrating learning in a range of university and school sites" (p. 1802).

Professional development can be defined as "activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher" (Organisation for Economic Cooperation & Development (OECD), 2009, p. 49). Rather than taking this more technicist stance, however, we are interested in how intern teachers enact their own professional learning and development when positioned as co-producers of power (Boylan, 2013; author, 2014), and also, how agency manifests through the particular ecological conditions they encounter (Biesta & Tedder, 2006; Biesta, Priestley & Robinson, 2015). Rather than "residing in individuals, agency can be understood as an

emergent phenomenon of actor-situation transaction" (p. 626), being an ecological (author, 2015) and an emergent aspect of the supervising teacher/intern relationship. Within this ecological conception of teacher learning, Boylan (2010) emphasises that, "the extent and nature of participation emerges as part of the interplay of the meaning of the practice in the lifeworld, the on-going identity work of the participant, and the constraints and possibilities of the situation." (p. 68).

The article commences with an exploration of trends in teacher professional learning. It proceeds with an account of the emergent and ecological nature of agency and an explanation of critical reflection as an integral aspect of intern teacher agency. A framework is introduced that synthesises Biesta et al.'s (2015) model of agency as a chordal triad with the a framework for reflective practice (author, 2012). Finally, we illustrate Transformative Professional Learning through an intern teacher case to frame agency as an enactment of critical reflection that affords Transformative Professional Learning.

Literature Review

Transformative professional learning

Transformative professional learning is an appealing construct that is under theorized. The goal of this paper is to make overt the practices that are inherent in such profound professional learning. These may otherwise be taken for granted or even underestimated. Transformative Professional Learning in schooling settings is framed in the work of Kennedy (2005). She describes a framework of nine models and explores the mechanism of knowledge production within each (Table 1). Of these models, Transformative Professional Learning is the model of continuing professional development that is most likely to promote autonomous teacher learning.

Table 1. Spectrum of professional development models (Kennedy, 2005, p. 248)

Although it is beyond the scope of this paper to detail each of Kennedy' (2009) models, we are mindful that this is a useful taxonomy with which to gauge degrees of individual professional autonomy and contextually embedded agency. The transformative model

of professional learning is identified as a generative approach that combines a range of practices and conditions to promote a transformative agenda (Kennedy, 2005). Transformative Professional Learning is tailored for specific professional learning contexts, drawing eclectically from a range of the professional learning models (Kennedy, 2005). It targets reflexivity, enabling teachers to apply a range of knowledges to practical situations, undertake enactments of inquiry, and pursue questions around quality learning. A " more proactive and conscious approach" (p. 246) than more didactic forms of professional learning, there is an inherent consideration of how power can be exerted and coproduced. Kennedy (2005) asserts that Transformative Professional Learning "could arguably be categorised as a poststructuralist approach to [continuing professional development]" models (p. 247). It marks a departure from a focus on standards, accountability and performance management (Dweck, 2006; Watkins, 2010) to an agentic learning orientation. (See Table 1.)

Agentic learning through reflection in initial teacher education

There have been international calls in teacher education for enhanced quantity and quality of field experiences for pre-service teachers (Gelfuso & Dennis, 2014). A mechanism to support continuous learning, reflection has become integral to initial teacher education in university contexts, as a theoretical framework to understanding teaching and as a practical approach to support classroom learning (Beauchamp, 2015). Engaging in reflection can enable pre-service teachers to critically examine dilemmas and learn how dilemmas mediate decision making and enable tacit pedagogy and professional practice to be made explicit (McDonough, 2015, p. 143). However, reflection is not automatic for many pre-service teachers and requires both teacher educator competence and strategically targeted programs in higher education (Gelfuso & Dennis, 2014). Beauchamp (2015) highlights the need for pre-service teachers to have control over their reflective professional learning process.

> In attempting to lead students toward a career in which reflection is necessary to ongoing development both professionally and personally, it may be important to begin early in learning to be a teacher how to target competencies for reflection and to select an appropriate reflective process for monitoring them. This handing over of some of the control over reflection may also aid student teachers in

developing the confidence in their own judgements… (Beauchamp, 2015, p. 136)

Having both control and a sense of confidence in the professional learning process are element that can be linked with teacher agency. As a school based construct, teacher agency (and in particular intern agency) has been subject to little explicit research or theory development (Vongalis-Macrow, 2007; Biesta et al., 2015).

Teacher Agency

Teacher agency has been defined in a range of ways: as the influence of practitioners on their work and professional identity (Eteläpelto, Vähäsantanen & Hökkä, 2015); a capability that teachers can recognise and teachers can self-regulate (Soini, Pietarinen, Toom & Pyhältö, 2015); a core aspect intertwined with identity (Buchanan, 2015; Stillman & Anderson, 2015) and, a phenomenon embedded in an education change agenda (van der Heijden, Geldens, Beijaard & Popeijus, 2015; Quinn & Mittenfelner, 2015). Rather than an innate capacity, we consider that agency is produced temporally (in relation to past personal experiences and projected futures) within situated contexts (author, 2015; Emirbayer & Mische, 1998; Biesta et al., 2015).

Agency can be understood as an unstable and emergent entity, and as a product of individual and collective critical reflection. Rather than something that can be possessed or owned or "as a property, capacity or competence… [, it] is something that people do" (Biesta, et al., 2015, p. 626). Pantić (2015) notes the temporal nature of agency, stating that sometimes people "act as transformative agents and sometimes as role-implementers" (p. 765). Therefore agency is not an internalised capacity, which can be executed irrespective of circumstance, but rather is a situative and relational construct. As an "emergent phenomenon" it is produced through "actor-situation transaction" (Biesta et al., 2015, p. 626), and can be a methodological challenge for researchers to capture (Edwards, 2015) and to explain. Agency is enacted through Transformative Professional Learning.

There is a relationship between critical reflection and transformative learning that can impact upon individual self-efficacy beliefs and agency. Agency occurs across social structures and cultures and can be linked with social cognitive theory (Pantić, 2015). A

situated conception of agency is evident when intern teachers believe they can efficaciously shape the cultural environment of classrooms and potentially influence the learning of their students. Intern teachers both co-produce social systems and are constructed through them (Bandura, 2008) as they "critically shape their responses to problematic situations" (Biesta & Tedder, 2006, p. 11). Agency is important for intern teachers if they are to determine a pathway forward for themselves where they critically reflect upon the pedagogies and practices they enact or encounter, and subjectively or objectively reframe them. In so doing the intern teacher takes charge of their own Transformative Professional Learning. It would seem, however, that although a critically reflective approach is considered highly valued by teacher educators, reflection of this kind appears "difficult for prospective teachers to attain" (Risko, Vukelich, Roskos, & Carpenter, 2002, p. 136). A non-critically reflective stance is more common. The pedagocial approaches to support

Critical reflection within transformative professional learning

In linking Transformative Professional Learning, with critical reflection, we draw on the transformative learning theory of Mezirow (1975, 1978). As novice educators, intern teachers are influenced by the culture of their internship school. When they encounter values, beliefs and/or practices that do not sit comfortably within their frame of reference, discordance arises. As authors (2015, p. 115) recognise, "tensions, promoting engagement with real world paradoxes and inconsistencies" are fundamental to the transformative model. Through identifying and critically reflecting upon conflicting agendas and philosophies, transformative practice is possible (Kennedy, 2005, p. 247). For the intern teacher this involves questioning what they do or see being done, how well it works, why they believe it is important, and whose interests are being served (Brookfield, 1995; Cranton, 1996). Without critique, beliefs and opinions are not necessarily made "justified to guide future actions" (Mezirow, 2003, p. 58). A transformative model of professional learning fosters a generative teacher-centered approach (author, 2015) and supports professional autonomy (Kennedy, 2005, p. 247).

The capacity to critically reflect and reframe is neither a linear nor sequential process but involves multifaceted, multidirectional iterative cycles. Critical reflection sits at the heart of transformative learning, and provides the impetus for continuing, self-directed

professional learning. Within this paper we argue that the integrity and depth of professional learning undertaken by intern teachers, positions the developing professional as an agent of change

Although agency, as framed by Biesta et al. (2015), can be applied to numerous contexts and situations, in this article we focus exclusively on how intern teacher agency can be co-produced through a process of critical reflection. Thus we contribute to the current understandings of agency by locating it within a framework of critical reflection.

Development of the 'Agency through LEARnT' model

The *Agency through LEARnT'* model (Figure 1) is a synthesis of LEARnT (author, 2012) and Biesta et al.' s (2015) chordal triadic model that affords a means for understanding intern teacher Transformative Professional Learning. Drawing from the work of Emirbayer and Mische (1998), Biesta et al. (2015) frame a chordal triad model that encapsulates how agency is "informed by past experience, including personal and professional biographies" (p. 627). It is also orientated towards the future, encompassing both short-term and long-term perspectives, and influenced by "cultural, material and structural resources" as it is enacted in the present. (Biesta et al., 2015, p. 627). Of particular note is the inter-relationship between past experiences (prior learning both personal and professional) and future short, and long, term perspectives, for example, as intern teachers juggle the cultural, material and structural resources of the internship school context. The Agency through LEARnT model (Figure1) highlights the pivotal place of teachers' beliefs. "Beliefs play a role in the way in which past experience impacts on the achievement of agency" (Biesta et al. 2015, p. 628). Inherent to Transformative Professional Learning is the teacher-initiated process of critical reflection.

By way of introduction, LEARnT provides a way of understanding the dynamic of intern teacher agency. *LEARnT* synthesises the understanding that prior *L*earning and experiences inform context and task specific *E*fficacy beliefs. Teacher beliefs impact decision-making and *A*ctions within the classroom and school context (Wallace and Priestly, 2011). As intern teachers move from the insulated micro-world (Mathieson, 2011) of academic teacher education programmes into the sociocultural context of

schools, beliefs may be destabilised creating discordance. By engaging in *R*eflection in terms of content, process and premise (Cranton, 2006) with associated degrees of criticality *T*heory making in the form of shifts in beliefs and professional learning is understood to take place. The achievement of agency results from the interplay of 'individual efforts, available resources and contextual and structural factors as they come together in particular … situations' (Biesta & Tedder, 2007, p. 137).

In Figure1, the Agency through LEARnT model described was synthesised to integrate the work of (author) and the ecological 'Model for understanding the achievement of agency' proposed by Biesta, Priestley and Robinson (2015, p. 627). Within Biesta et al. (2015) model agency is, 'always informed by past experience, including personal and professional biographies [iterational]; … orientated towards the future, both with regard to more short-term and more long-term perspectives [projective]; and … enacted in the here-and-now [practical-evaluative]' (p. 627). Such enactments involve a dynamic interplay of human, cultural, material and structural factors.

Figure 1. Agency through LEARnT model (after Biesta Priestley and Robinson, 2015).

Arrows within the Agency through LEARnT model demonstrate the recursive cycles of critically reflective processes inherent in agentic and transformative professional learning. It is clear the process is by no means lineal but rather involves a dynamic interplay. Within the Iterative dimension (Biesta et al., 2015) pre-service teachers' awareness of their personal and professional histories, including life and schooling experiences (Latta, Buck, Leslie-Pelecky & Carpenter, 2007), and the theory of their teacher education shape the projective, short, and long term, goals the intern teacher holds. The manner in which self-efficacy informs actions, can be understood in terms of agency. Through reflection, knowledge, understanding and beliefs may be made explicit. The surfacing of tacit assumptions, although not easy, can be recognized as vital to deep teacher professional learning (Beijaard, Korthagen & Verloop, 2007). The Agency through LEARnT model provides an a priori template of codes, used in this

paper to explore the flow of critical reflection that enables the intern to engage agentically in Transformative Professional Learning.

Method

The research now being discussed, aimed to closely explore the relationship between critical reflection and agency in the context of Transformative Professional Learning. To investigate the question in fine grained detail a two phased study was undertaken. In the first phase, 100 final year BEd pre-service teachers completed the Tschannen-Moran and Woolfolk Hoy' Teacher Sense of Efficacy (TSE) Scale and the researcher-developed Learner Self-Efficacy Beliefs (LSEB) Survey (Author, 2008) prior to commencing their internships. Rasch analysis of the survey data enabled ranking of the participants from highest to lowest overall efficacy. During the second phase of the study, 26 interns from the extremes and the mid-point of this ranking (n=8 high, n=10 medium, and n=8 low), were invited to participate in semi-structured telephone interviews to ascertain their first hand storied experiences (White & Moss, 2003). The intent of taking a cross section in this manner was to more fully understand the nature of their reflection in the context of the interview, and to ascertain if there was a relationship between efficacy, critical reflection and transformative professional learning. Challenge was considered important since it was thought to destabilize beliefs, contribute to states of discordance, and provide keener insights into intern's reflection and depth of learning. The interview data was initially analysed using NVivo, and later coded by applying the LEARnT (Author, 2012) theoretical framework as an a priori template of codes.

Internal validity was supported by the inclusion of a sufficient number of cases (26), within the case study approach, to ensure qualitative comparative analysis (Ragin, 2000, 2009). Initial within-case patterns or configurations (Byrne, 2013, p. 224) of reflective thinking and learning were followed by cross-case analysis enabling systematic comparison of the within-case findings. In addition, a considerable body of extant literature, synthesized in the form of the Agency after LEARnT model, informed the analysis.

The following section presents findings from one of the 26 interview cases. It was chose as the focus in this paper since it provided an illustrative case in which connections

between the interns move from non-critical to critical reflection and associated transformative professional learning and agency are synthesized. ==In addition the case provided a rich illustration of the dimensions of the Agency after LEARnT model with specific rather than generalised dialogue providing insights into shifts in the intern teacher's thinking and learning.== Although as a medium, the voice in this paper could be considered unstable, nuanced and contextual, for us it offers a conceptualization of critical reflection, and illustrates teacher agency and Transformative Professional Learning. In taking such an approach, we recognize the crisis of representation in qualitative research (Marcus & Fischer, 1986), and acknowledge that this interview data is "partial, incomplete, and always in a process of re-telling and re-membering" (Jackson & Mazzei, 2012, p. ix).

The Descriptive Case- Eva

The intern teacher, Eva, enrolled in an undergraduate Bachelor of Education (BEd) in an Australian regional university, was undertaking an unpaid internship with a supervising teacher in a primary school. It was the final ten weeks of her four-year degree. Prior to the internship, Eva was required to have completed three and a half years of course work and four professional experience placements (practicums) in schools to a total of 70 days. The BEd internship marked the final phase of her degree from which Eva would transition into the profession. In the following section, Eva's case illustrates the relationship between intern professional experience, discordance, critical reflection and transformative professional learning.

Context

Eva is a 32 year-old intern, who gained ''mature age" entry into the Bachelor of Education (Primary). She had undertaken the Australian National Accelerated Literacy Program professional development before her internship. She identified that the most challenging experience for her was programming and implementing literacy to meet the diverse needs of her students in a mainstream classroom. Eva's internship was undertaken in a socio-economically disadvantaged state funded Department of Education school. It was targeted for extra funding through the New South Wales funding model, the Priority Schools Program. Eva describes her specific internship context:

My Internship was at a small public school ... on the Priority Schools Program. About 80% of students were from low socio-economic backgrounds. I had 21 students in my Year 1 class ... five were from Aboriginal or Torres Strait Islander background ... I was told to program for Stage 1 outcomes but there were a significant number of students struggling to achieve these outcomes, particularly in English, with reading.

For the purpose of exploring how Eva's critical reflection can engender Transformative Professional Learning, we refer to the *Agency through LEARnT* model. The following samples of data illustrate the emergence of agency through critical reflection. Although we discuss each element of reflection separately, we acknowledge that they are deeply and recursively interwoven.

Learning

Interns bring tacit, experiential, theoretical and pedagogical knowledges to their professional experience. Eva made explicit connections between the Vygotskian theory that she encountered in her coursework, her beliefs about teaching and learning and her classroom praxis. In articulating her literacy discipline knowledge, Eva articulates her priorities in the internship classroom.

Um well basically I've got a lot of beliefs about teaching and learning...probably my strongest belief is that I really think that developing students' literacy is the most important part of their education just because it basically underpins everything they do with any other subject and it's just essential knowledge to know, to be able to function effectively in society and be a successful student and a successful adult as well.

Eva's enacted agency is produced temporally in relation to her past personal experiences and her projected futures within the situated context of the interview. Her prior learning and beliefs inform what she attends to and the goal that she sets for her practice. She alludes to her existing theories on the importance of literacy to children now and in the future. Here we see the dynamic flow between iterational and projective dimension of Biesta et al's (2015) model that occur in the practical evaluative moment.

Eva's prior professional literacy learning aligns with the school priorities. This new learning provides a lens for her to theorize.

[T]he principal at the school has just been providing professional development to the national Accelerated Literacy program, so I went to a few of those professional development days before my internship started and also during my internship…The professional development consolidated my beliefs and what I've learnt at university. They were both along the same lines! … The Program is based on Vygotsky's notion of the Zone of Proximal Development - that what students are learning should be a little bit beyond what they are able to do by themselves, but can do with assistance.

Eva makes links between constructivist theories to frame pedagogy that she understands can enable students to construct meanings for themselves.

I'm a firm believer of the constructivist theory, -Piaget's personal constructivist theory and Vygotsky's social constructivist theory. So I firmly believe that students learn best when they're actively engaged in discovering knowledge for themselves and also discovering knowledge through social interactions. So I sort of see the role of the teacher to be more of a facilitator rather than a dictator of what they should learn.

Engaging with relational resources from the practical evaluative dimension she surfaces theories from her prior learning to project her ideal teacher self. Her comments are produced through the 'lecturer as interviewer' and 'intern as novice' relationship, therefore, the reference to theories is likely to be a shared knowledge. The projection of 'the role of the teacher' is a response to what she has observed in her internship classroom and a by-product of the lecturer/intern relationship. This particular constructivist role is likely to be a valued one in the academy.

I observed my supervising teacher in … the first two weeks … I noticed nothing was developmental or sequential in her English sessions … spelling, story writing and handwriting were all just short, sharp, one-off lessons.

Eva's understanding of the Literacy Program provides a reference against which she engages in a critically appraisal of her mentor teacher's pedagogical approach and objectively reframes it. The discordance between her theoretical understandings and the classroom practice she observes provides a catalyst for her to reflect on her beliefs.

The lens of her prior learning informs how she acts efficaciously in the classroom. Efficacy is produced as a generative and fluid construct in the temporal reflective moment.

Efficacy and action

Eva's bridges the divide between the theories taught in university, those experienced through professional learning and development, and her own professional practice.

[On] one of those professional development series of days…really helped to consolidate what my beliefs are and what I've learnt at university. Like it was sort of along the same lines, which gave me that confidence -as well to think, "Well my way of thinking", it sounds a bit arrogant, [but]"My way of thinking is going to help the students a little bit more than what had been done in the past".

I did have the opportunity to write the English program …and I was sort of given the task of taking that on, which was really good…so by following the national Accelerated Literacy program I was able to change a lot of the way that literacy had been taught in the past

The prior professional development and university course work produced an efficacious response as Eva's sense of "confidence". She is agentic in the way that she melds these discrete knowledges and her classroom experience to project future actions. Efficacy informs her willingness to take a risk and trial a new approach.

I wouldn't have had the confidence to do that if I hadn't attended the professional development sessions, and because … it was new to my supervising teacher and new to me um it was sort of a good situation to be in. Because my supervising teacher… hadn't started the program and got set into her way. It was sort of all fresh so she was willing to listen to some new ideas as well, which was good.

In the practical evaluative present, Eva had an opportunity to trial new practice. This reveals a reversal of the traditional power relationship between interns and supervising teachers where experienced practitioners are seen to have more advanced knowledge and expertise. This is relational affordance that is underpinned by a sense of trust that

the supervising teacher and the intern shared. The positive experience that Eva describes relates to the influence she perceives that she has had on her supervising teacher.

I've been doing a few casual days at the school now and my supervising teacher has been continuing on with what I've been doing. Like [she has been] changing what we've done a little bit but basically [the program is] patterned on the same sort of structure as what I had done -which was quite good. I think it sort of changed her thinking as well.

A projective dimension of agency is evidenced when Eva frames the opportunity to implement a program that her supervising teacher ensures is ongoing as a positive one. This initiative reflects a supportive collegial culture that values Eva's potential professional knowledge and skills, and enables agency. She infers that she has had a positive influence on her colleague. This relationship can be seen as efficacious.

Eva also spoke about her influence on the children. She described how motivated and engaged the students were to the point where they appeared to take ownership of their learning.

Overall I noticed that the low achieving students were motivated and writing amazing passages ... At the end of my internship, [their writing] was a much higher quality ... they improved from writing one sentence to about five sentences ... They were reading the same level text as their peers who are stronger readers ... that was really refreshing!

Eva efficaciously gives an account of how she achieved the goals (projective dimension) that she set. Having run the program effectively, she revisits her set goals to account for the influence of the program on her students;, articulating that they were motivated and produced more text. An aspect of efficacy is the capacity to frame new theories in light of old ones.

Theory making

Eva frames the teacher figure as a powerful one. The positive internship experience provides her with a desire to commence her teaching career.

I was really amazed [that] towards the end of the term we ran out of time to finish our stories… I was actually asked by a number of students if they could finish their stories (laugh of disbelief), in their [lunch] time... I couldn't believe it! ...When I think about that, I get a big smile on my face… It really gave me a taste of the power that teachers have over students' learning … It was really good and I was just dying to …get out there and do it!

Eva's comment "I couldn't believe it" is a product of her successful trialing of a constructivist literacy strategy. From this experience she frames a theory about teacher effectiveness –that she could have an impact on student engagement and learning through applying learning theory. The reflective judgments Eva made regarding her beliefs about literacy enabled her to engage in subjective and objective reframing.

A lot of my educational philosophies … were confirmed … Even though my supervising teacher challenged a few of my ideas … rather than bowing down to suggested ideas, I was happy with the way [I taught]. The principles … were in line with what I've learnt at university. I was comfortable with that way of teaching and that way of thinking.

Relational trust can be (practical evaluative dimension) seen in Eva's comment that the "teacher challenged a few of [her] ideas". The iterative dimension of Eva's prior learning and projective goal of enhancing student learning confirmed her resolve; she maintained her focus rather capitulating to her colleague's thinking. Through deep critical reflection as a process, she drew all three dimensions of the chordal triad of agency together. We can see agency as an enacted process of critical reflection that ebbs and flows between dimensions rather than being linear or cyclical. Reflective processes are intertwined with Eva's professional development goal to improve her classroom practice. Music imagery assists her to describe herself as a learner.

I really internalize things … 'What worked well?' 'What didn't work?' and 'What can we do different next time?' … I take it home and I'll dream about it (laugh)! I'm at the beginning of my career, there's a lot that I need to learn and … perfect.

There have been times I've felt, 'I'm not going to be able to do it!' But, it's those times that really help you to learn, evolve and perfect your skills. It's like a musician: When

you first pick up a violin, you can't automatically play beautiful symphonies. You start with the basics and work your way up.

Eva revisits her perception of her students' learning and the effectiveness of her teaching (iterative). She theory-builds to devise what did work over the day and possibly will work for her in the future (projective). In subjectively considering her professional pathway from a fixed point in time (practical-evaluative), she frames a developmental theory about herself as a teacher. Eva is cautious about making claims about her own professional proficiency.

I've learnt I am hardworking, persistent, have confidence and a professional manner ... I can really make a difference. I don't think I'm a good teacher, but I will become one! ... I've got the theory, the underpinnings ... but haven't had a lot of practice. Teaching's an art, a craft perfected over time.

Eva does not make inflated claims about her own professional competence. She acknowledges that she understands theory (iterative) and theorizes that she possesses the characteristics of an effective teacher- hardworking, persistent, confident (practical-evaluative dimension). Eva further demonstrates agency through acknowledging her position as a novice who has potential as a teacher (projective) but needs further experience. This again is a transformative theory of teacher professional learning that we now proceed to discuss.

Discussion

While there is an enormous literature base on agency and reflection respectively, in this analysis using the Agency through LEARnT model (after Biesta et al., 2015) we offer an ecological conception of intern agency as a reflective, temporal and situated construct, which would be enriched by further exploration and iterational development. In addition, since there is little empirical research in existence that maps the link between teacher reflection and the manner in which their actions are channelled to benefit their students (Mälkki & Lindblom-Ylänne, 2012), this too is an important focus for future directions.

Ecological reflection and transformative professional learning.

As a framework, the Agency through LEARnT model conceptualizes the ecological nature of intern teacher critical reflection and Transformative Professional Learning. The understanding of agency, in this Model, originates from an action-theoretical approach in which actors 'critically shape their responses to problematic situations' (Biesta & Tedder, 2006, p. 11). Agency is evident in the case presented in the way that Eva transitions from non-critical to critical reflection (Cranton, 2006) as a response to her circumstance. Further empirical research into the development of this model would be beneficial to demonstrate how interns can shift the complexities of the transition process. As illustrated in the model (Figure 1.) and demonstrated in the data, agency and critical reflection are integral aspects of Transformative Professional Learning. Our use of the model illustrates that intern teacher agency can be enacted through Transformative Professional Learning when (intern) teachers respond to problematic situations (Biesta et al., 2015), and through critical reflection forge links between the theories they experience in their coursework and school professional learning initiatives. The affordance of space to risk-take and trial new initiatives when the supervising teacher steps back from his/her position as an expert, is fundamentally important. The extremely complex process of learning to teach requires teacher reflection and praxis as agentic action. We frame critical reflection as an ecological manifestation that arises when teachers act agentically to enhance student learning. Boylan (2010) writes that "[w]hen learning is understood as the flow and creation of meaning in the social ecology, the focus and frame of understanding will change depending on the situation and the analytical purpose" (p. 68). Therefore from this ecological perspective, cultural, structural and material resources (practical-evaluative) within contexts influence whether reflective processes that support Transformative Professional Learning are possible.

Intern teacher efficacy and agency

Intern teacher beliefs inform what they attend to, the goals they set, and their motivation to act agentically. Eva gave an account of the beliefs that informed her philosophy and underpinned both her theory, and decision making. Biesta et al. (2015) poses questions around "the role of beliefs in the achievement of agency", in particular how "beliefs 'motivate' action (the projective dimension) … [and] how beliefs influence what is actually done, that is, how… they function as resources for engagement in the concrete

situations in and through which teachers act?" (p. 628). We broker these questions in our discussion on efficacy and its relationship with agency. Efficacy as a phenomenon that is context and task specific, is evident in Eva's case. She took action on the basis of her reflection. We suggest this reflection enabled her to bring her emotions under control so that she could act, rather than react. Efficacy as a process, emerges through the integration of the chordal triad of iterational, practical - evaluative and projective dimensions.

The importance of discordance

Through moving between iterative, projective and practical - evaluative dimensions, teachers can agentically address specific contexts and tasks. In this case the intern's prior learning (delving into personal and professional histories) informed a sense of discordance in relation to her expectations and the supervising teacher-orchestrated learning that she saw in her internship classroom. Discordance arises when beliefs are challenged. This has the potential to act as a catalyst for critical reflection and by extension Transformative Professional Learning.. When critically reflected upon, discordance affords efficacious goal setting in that one believes one has the knowledge and skills to address a problematic issue (Biesta et al., 2015). Recognizing discordance, and not avoiding it, is very important. It can be possible to choose a less transformative pathway in a desire to escape complexity, discomfort and confusion.

As the intern interview indicates, agency was produced during the internship placement and also in the dialogic space of the interview. As context and time specific, agency emerges "as an engagement of actors [within] temporal-relational contexts-for-action" (Biesta, 2015, p. 626). Through analysing critical reflection, we frame a conception of agency as a dynamic interplay between the three chordal dimensions (Biesta, 2015). Using learning from prior experiences and projected goals within the cultural, structural and material affordances of the present, intern teachers can imagine alternative possibilities for practice.

The socially negotiated chordal triad

Just as a cloth has warp and weft in the threads that interlace, professional learning is an elaborate interwoven process where meaning emerges ecologically through grappling

with a situated anomaly where an issue becomes redefined. This interplay varies within the contexts of schooling professional development structures. Relational affordances and power structures differ across schools and the opportunities afforded the intern in the account presented in this paper may not be available within other schools. Eva was provided with an opportunity for autonomy. Within any given context, all the aspects of the chordal triad are socially negotiated -fluid, relational and context specific. For example different aspects of personal and professional histories are heeded whilst others are dismissed, depending on context. We also offer the caveat that interns may not engage in critical reflection for reasons that could involve trust or the power embedded in an evaluative relationship with supervising teachers. These relational aspects can be seen in the practical-evaluative dimensions of the *Agency through LEARnT* model.

An interpretive framework underpinned the approach we used to study how critical reflection informs Transformative Professional Learning, self-efficacy and influences the broader construct of agency in an intern teacher. Nevertheless, it must be acknowledged that there are multiple realities in this case. Firstly, there is the inner dialogue of the intern that occurred in the face of significant challenge, secondly there is the interview dialogue when Eva spoke with the researcher , and lastly the analysis process where the story was revisited and restoried into a form for readship.

Scholarly significance

With the importance placed on quality professional learning in initial teacher education programs, it is timely to consider how reflective practice can be supported so that is ecological and transformative. If interns are to exercise a degree of control over the growth of their professional practice, it is valuable to strategically support them to understand dimensions of agency and the synergistic relationship between reflective practice and agency in schooling settings. To facilitate this critical awareness, we suggest that it may be useful for both teacher educators and interns to consider the dimensions of the *Agency through LEARnT* model.

Limitations

There are limitations to this study. There is the inherent power differential between the intern and the lecturer/ researcher although the data was collected after the intern had completed their academic course work. Likewise, rather than sitting with the lecturer in an office or meeting room, the interview was conducted within the intern's own context by telephone. We highlight the nature of the retrospective interview, as a reflection on past events in the school context, and acknowledge that the data was co-produced during this interview. We also acknowledge that with a sample of one interview this research cannot be generalized. The intern is not necessarily representative of the student population. Rather the descriptive case data reveals the process reflection that indicated that this intern teacher's professional learning may have been transformative for her.

Future directions

To point the way to possibilities for future directions for research, we see that there is scope for investigation into the nature of agency produced through the dynamic between researchers and interviewees, lecturers and teacher interns, and interns and supervising teacher. As we have only discussed the Agency through LEARnT model in respect to one intern, we suggest that there is scope for further research into how Biesta et al.'s (2015) three dimensions are interwoven in processes of intern critical reflection. This aligns with Talbot's (2016) emphasis on the importance of teachers having opportunities to "critically reflect on their learning through 'authentic'… evidence that they select in order to demonstrate the impact of such learning" (p. 88). Genuinely critical reflection may be difficult for prospective teachers who may not have the mentoring of critically inclined peers and mentors. It is recommended that a deliberate pedagogy of reflection that integrates theory and practice (Thompson & Pascal, 2012) We envisage further papers could explore intern teachers'reactions as they encounter dissonance that stimulates critical reflection.

Conclusion

Rather than being a linear set of steps that results in the output of agency as an inate and static attribute that someone can have, we posit that agency is produced ecologically

through the interplay between the three chordal dimensions of the model. Teacher agency is an important aspect of critical reflective practice and as such is an important feature of initial teacher education. This is particularly salient in the current neoliberal climate where there is a systematic attack on teacher professionalism that undermines teachers' capacity to exert judgment and control over their own work (Biesta et al., 2015). Rather than deferring to generic and potentially ill-fitting evidence of 'what works', as teacher educators we can support pre-service teachers to develop the knowledge, skills and efficacy to reflexively generate practices, which are bespoke for their context. Through critical reflection, intern teachers can take aspects of different dimensions of the chordal triad to reframe perceptions and to theory build. Transformative professional learning is therefore a potent process that can be linked with profound shifts in understandings and practice.

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