

Helping student teachers to see into practice: The view from a teacher-education classroom

James Burch, MSc, BA (hons), PGCE

This thesis is submitted in partial fulfilment of the requirements for the
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Department of Educational Research, Lancaster University, UK.

Declaration

This thesis results entirely from my own work and has not been offered previously for any other degree or diploma.

Signature: J-V-Burch

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This thesis comprises 61,806 words.

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Abstract

The aim of this study was to unlock, over the course of one academic year, the pedagogical knowledge in action of an experienced teacher educator engaged in teaching a cohort of fourteen postgraduate student teachers on a one-year, university-led, modern foreign languages course. From the context of a teacher-education classroom, the study focused on how, and with what underpinning rationale, a teacher educator helped her student teachers to see into practice with theoretical understanding.

The study was based on a constructivist philosophy. To this end, there was a strong collaborative dimension to the research, which was particularly pronounced in the interactions between my 'self' as researcher and the teacher educator. The principal data-generation methods involved observing sixteen three-hour sessions taught by the teacher educator. Each session was followed by a debriefing interview to unpick the pedagogical processes just observed. Additionally, four semi-structured interviews were conducted with the teacher educator at different points in the year, and four focus groups were run with student teachers. The resulting empirical material was analysed using a framework for reflexive thematic analysis.

The study shows how an integrative, symbiotic, and non-dichotomous relationship between theory and practice can be achieved in ways that result in theory being regarded by the student teachers as a guide, confidante, and friend – especially in adverse circumstances. The study also suggests ways in which modelling can be rendered more effective. Recommendations for practice include how careful attention needs to be given as to how experiences can be *orchestrated* and *lived* in a teacher-education classroom so as to possess the high levels of personal meaning and felt significance that can increase the reflective traction for seeing into practice. The study advocates that the desire to cover material should not come at the cost of deep understanding. Continuity with one's students, and sufficient time away from the school classroom, are prerequisites for realising such an approach.

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1 Background to the Research

1.1 Introduction

I commence this chapter by situating the research in relation to two different perspectives. First, I outline the backdrop to the study in terms of the policy context of initial teacher education (ITE) in England. Second, I explain my personal motivation for undertaking this research. Having thus set the scene, I then proceed to delineate the focus of the study and its research questions. This is followed by a brief exploration of how I am interpreting the terms ‘pedagogy’ and ‘theory, since they formed, either implicitly or explicitly, a constant feature of the research journey that I undertook. I conclude by providing an overview of subsequent chapters, and suggest ways in which the findings generated might contribute to the knowledge base of the pedagogy of teacher education.

1.2 Situating the research

This small-scale but in-depth study is set amidst the substantial changes that have taken place in the landscape of ITE in England since 2010. Following the publication of the government’s White Paper *The Importance of Teaching* (Department for Education, 2010), and its associated implementation plans (Department for Education, 2011a and 2011b), a significant shift has taken place in the locus and control of ITE resulting in 53% of provision now being of the ‘school-led type’ (Roberts and Foster, 2018, p.6), as opposed to 15% in 2010 (House of Commons, 2010, p.14). This development is part of a global trend ‘towards models of school-led, university-supported pathways’ (Day, 2017, p.3), in which ‘universities are firmly placed at the periphery, becoming “service” agents’ (p.128). The increase in the role of schools, at the cost of university involvement in ITE, is part of what is often variously described as a ‘practicum turn in teacher education’ (Mattsson, Eilertsen and Rorrison, 2011), ‘the practical turn’ (Furlong, 2013, p.61), or a ‘turn towards practice’ (Cochran-Smith, 2016, p.xiii). For some observers, these ‘turns towards practice’ result in ‘reinforcing the idea that practice is inherently non-theoretical and theory is inherently non-practical’ (Cochran-Smith, 2016, p.xiv).

Whatever one’s stance, one issue is clear: it has been the School Direct scheme that has constituted the ‘chief policy instrument’ for bringing about this shift to school-based ITE in England (Murray and Mutton, 2016, p.59). School Direct is a school-led training route into teaching that was introduced in 2012 (see Department for Education 2011a and 2011b). It entails a lead school working in partnership with other schools and an accredited teacher

training provider (Department for Education, 2015); the latter is usually a university. Concerning the role of universities, it is often not education principles but local market conditions that can determine the design of the teacher-education courses they are able to offer within the School Direct scheme (Brown, 2018). The rapid expansion of School Direct has heralded ‘a step change’ (McNamara, Murray and Jones, 2014, p.183) in England’s ITE system, rendering it an ‘outlier’ in Europe by dint of the unusually rapid and extensive implementation of a school-led system (Hulme *et al.*, 2016, p.219). These developments have exercised a destabilising effect on the university-led ITE sector, leading to job losses and, in some cases, the closure of ITE departments (UCET, 2014; Universities UK, 2014). Overall, these policy interventions have led to the fragmentation of the ITE sector in the form of a proliferation of mostly small-scale school-led providers (Cronin, 2016, p.19) competing in an ‘ever-competitive market place’ (Brown, 2018, p.18).

The ‘pendulum swing of ITE in England’ (Murray and Mutton, 2016, p.72) towards more practical experiences has already described a far more extensive arc than is the case in other comparable countries. It is a policy rooted in the assumption that maximising practical experiences ‘inevitably – and unproblematically – leads to better and “more relevant” student [teacher] learning’ (McNamara and Murray, 2014, p.14). Thus the predominant conception of learning to teach is that of a craft-related approach akin to an apprenticeship (Gove, 2010). The implication here is that learning to teach is viewed as a straightforward process that relies merely on classroom experience, which is cast as the highly-prized element within ‘the value-systems of teacher education reform and often in distinction to (or even opposition to) theory, reflection or deliberative discourse of any kind’ (Ellis and Orchard, 2014, p.2). In summary, the backdrop to this study is an ITE policy environment that finds itself very much ‘in times of change’ (Teacher Education Group, 2016) or even, as others have suggested, in a ‘perfect storm’ (Noble-Rogers, 2012) that has been fomented by uncertainty, the proliferation of training routes, and a marked reduction in university-led provision (Gewirtz, 2014, p.10).

1.3 Personal rationale for the research

In the sections that follow I outline my rationale for the research. As I explain here, there exists the ever-present danger of a strong biographic undertow to the study’s focus, meaning that my values shape what I notice or, for that matter, fail to notice. This obtains especially in relation to the ‘theory-practice divide’ (see e.g., Jackson and Burch, 2019; Jackson and Burch, 2016; Burch and Jackson, 2013). It is also perhaps significant to note that, as a retired teacher educator (TE), my motivation in undertaking this research was purely intrinsic. Notably,

success at doctoral level did not constitute a career-enhancing stepping-stone or, for that matter, a job-related requirement. But intrinsic motivation is a multifaceted and complex concept (Reiss, 2004). In my case, it comprised a composite of curiosity and challenge set against the backdrop of Marshal and Green's (2010, p.100) mountaineering metaphor, in which they liken study at PhD level to being 'on some lonely plateau, where you have to conjure up your own summit before being able to scale it'. For me, curiosity and challenge represented key components of this 'conjuring' process, each replete with their own particular 'mystery'.

1.3.1 Curiosity: unravelling a mystery

The initial impetus for this research arose from a serendipitous moment near the start of my Doctoral Programme when I was undertaking the data analysis for a small-scale assignment involving researching an aspect of professional practice. Here I stumbled across a 'mystery' (Alvesson and Kärreman, 2011) relating to the role of educational theory in ITE. In the assignment, I explored how student teachers (STs) viewed different techniques for introducing new items of vocabulary in modern foreign languages (MFL). Within these very narrow parameters I wanted to gain insights not only into the STs' technical know-how, but also into their accompanying levels of theoretical understanding. I was particularly interested in how, if at all, they employed language-teaching theories when discussing their teaching. To this end, I used Argyris and Schön's (1974) framework of 'espoused theories' and 'theory-in-use'. What I found, to my surprise, was a deep appreciation amongst the STs ($n = 6$) of the role that theory could play in helping them to assess competing perspectives in their practice. Further, they exhibited a nuanced understanding of what was possible and desirable for them pedagogically, even if they were not yet in a position to implement their vision, either due to constraints in their placement schools and/or lack of technical skill. I concluded that the STs appeared to be using educational theory to construct a personal vision of teaching in the interstices between different communities of practice (Lave and Wenger, 1991; Wenger, 1998), comprising university, school, and the STs' cohort.

The 'mystery' element involved an intriguing counter-narrative to what have almost become truisms in ITE: that the theory taught is irrelevant (Sjølie, 2014, p.729); that theory is rejected because it is not 'practical' and 'accessible' (Gore and Gitlin, 2004, p.35); that it is of little interest on a day-to-day basis to teachers (Van Velzen, 2012); and that any vestiges of theory from an ITE course are 'washed out' on contact with school (Zeichner and Tabachnick, 1981). Further, as already noted, it is teaching practice that is often regarded as the most valued

element of an ITE course, often at the expense of theory (White and Forgasz, 2016). With my curiosity thus piqued, I thought it would be interesting to undertake a year-long study to ascertain what was happening on an ITE course, which appeared to foster, certainly on the basis of a small sample representing a third of a cohort, an appreciation of the role of theory. As a result of the above 'mystery', I approached the STs' tutor to ascertain whether it would be possible to study her course over the period of one year. She was very receptive to this idea and we discussed in depth how such a study could proceed. The ideas produced were then melded into the ethics application process, culminating in the approval by Lancaster University's ethics committee of a formal letter to the TE outlining the research proposal and inviting her to consider participation in the study. A similar letter was sent to the TE's Dean of Faculty requesting permission to conduct the research. Both parties consented to the participation. Having obtained the full support of the university and the TE who taught the course, I was able to explore this 'mystery'. And with that opportunity came a series of challenges – challenges that were also part of my motivation for undertaking this study.

1.3.2 The challenge of complexity

Researching educational practice, especially practice with which one is, or has been associated, presents the researcher with an unrelenting series of 'dilemmas' from the field (see e.g., Locke, Alcorn and O'Neill, 2013; Campbell and Groundwater-Smith, 2007; Mercer, 2007). In broad-brush terms, dilemmas can span areas such as the different perspectives on the types of knowledge that flow from practice (Joram, 2007; Lyons, 1990); the researcher-researched relationship (Wang, 2013; Floyd and Arthur, 2012); the challenges of choice in terms of methodology and methods in real-world research (Robson, 2011; Blaikie, 2009); fitting the methodology to the research in ways that are congruent (Hamilton, Smith and Worthington, 2008), whilst dealing with uncertainty (Mercieca and Mercieca, 2013); and the interface between ethics and practice (Mockler, 2014). As I now explain, it was the challenge of such complexities that provided many motivational impulses on my doctoral learning journey.

In their research on the experience of undertaking a PhD, Wisker *et al.* (2010, p.49) outline what a dynamic and multi-faceted process this can be, entailing 'cognitive, ontological, epistemological, emotional, instrumental and professional/technical developments'. Because I was interested in improving my craft as an educational researcher, with a view perhaps to conducting further research as a 'hobby' interest in my retirement, I was attracted to this project because of its potential complexities, the natural corollary of which presented not only

heightened risk, but also greater potential for personal and professional learning. Relating to the dilemmas of researching educational practice, I judged the following to be particularly significant challenges: the impact on the research design of the interplay between ethics and practice; one's positioning on the insider-outsider continuum; and the active embracing of subjectivity in the creation of meaning. My hope was that the professional gain would at least be commensurate with the cognitive strain. I explore these issues further in chapter three.

1.3.3 The challenge of the policy context

The policy context provided another set of challenges. Here I was curious to ascertain whether the policy environment exercised any washback effect on the TE's pedagogy. In particular, I was mindful that in 2014, with the advent of School Direct, the university's collaborative partnerships with schools changed drastically almost overnight. In their place there emerged 'a system of many small systems' (Bell, 2012, cited in Whitty, 2014a, p.22) in the form of alliances between a lead school and its partnership schools. The *modus operandi* of these alliances was – and invariably still is – to operate as self-contained units. It is almost as if there is a protective pedagogical phalanx positioned around the perimeter of each alliance preventing 'outsiders' from placing their STs in an alliance's schools. It would appear that the government's policy exhortation to 'grow your own teachers' had become firmly rooted in the walled garden of School Direct. Some observers even refer to this fragmentation and division as the 'balkanisation' of ITE (Cronin, 2016, p.19). Nevertheless, regardless of the metaphors employed, the reality of the impact of these changes on the MFL course at the centre of this study was both real and deep. Key MFL departments where STs had previously been placed, and with which the university had worked for many years, were now off limits – often to the disappointment and dismay of school and university staff who wanted to continue with the well-established partnership arrangements.

1.4 Research intent and research questions

The aim of this research was to attempt to unlock, over the course of one academic year, the pedagogical 'knowledge in action' (Ethel and McMeniman, 2000) of an experienced TE engaged in teaching a cohort of 14 STs on a one-year, university-led MFL course, the target award for which was Qualified Teacher Status (QTS) with a Postgraduate Certificate in Education (PGCE). From within the context of a teacher-education classroom, the study sought to explore how, and with what underpinning rationale, a TE helped her STs to see into practice. Of particular interest here was the role played by theory, both from the perspective of the TE and the STs. Consideration was also given to the supporting and constraining factors of these

processes as viewed through the eyes of all involved. Drawing on Wolcott (2009, p.41), who suggests outlining one's 'research intent' in a statement numbering as few as 25 words, my 24-word statement of intent would be:

How does an experienced university-based teacher educator construct learning in a teacher-education classroom so that student teachers can see into practice with theoretical understanding?

With more flesh on the bones of intent, the key research questions were:

1. How, and with what underpinning rationale, does an experienced university-based teacher educator construct learning in a teacher-education classroom so that student teachers can see into practice with theoretical understanding?
2. What role does theory play, both for the teacher educator and the student teachers?
3. What are the supporting and constraining factors impinging on these processes in the eyes of the teacher educator and the student teachers?
4. What insights can be gleaned from these processes that could potentially contribute to the knowledge base of the pedagogy of teacher education?

1.5 Defining pedagogy and theory within this study

From the above, it will have become apparent that central to this study was the emphasis placed on the *what*, *how* and *why* of a TE's pedagogy. Loughran (2008, p.1180) proposes that a pedagogy for teacher education should encompass 'a knowledge of teaching about teaching and a knowledge of learning about teaching and how the two influence one another'. However, 'pedagogy' is a contested term, 'populated with many meanings' (Edwards, 2001a, p.162). It is not unusual, for example, for the term 'pedagogy' to be used as a proxy for teaching, concentrating solely on instructional strategies (Grossman, 2005, pp.425-426). By viewing pedagogy simply as 'teaching techniques', the scope of pedagogy is thus often limited to instrumental interpretations which have become 'reified ... both in the vernacular of education and in research of teaching and teacher education' (Cuenca, 2010, p.15). By contrast, more expansive interpretations of pedagogy embrace 'the act of teaching together with the ideas, values and beliefs by which that act is informed, sustained and justified' (Alexander, 2008, p.4). In such cases, the act of teaching:

...involves those who are teaching in informed interpretations of learners, knowledge and environments in order to manipulate environments in ways that help learners make

sense of the knowledge available to them. It is an intense, complex and discursive act, which demands considerable expertise. (Edwards, 2001a, p.163)

The 'manipulation of environments' suggests that pedagogy is a 'contrivance' (Widdowson, 1990, p.162); that is, 'a way of short-circuiting the slow process of natural discovery' by making 'arrangements for learning to happen more easily and more effectively than it does in "natural surroundings"' (ibid). If we draw on Edwards' conception of pedagogy above, then the role of pedagogy is certainly one of 'contrivance' through deepening and intensifying the learning process by encouraging nuanced contextual understandings. To foster such insights, Leach and Moon (2008, p.21) suggest that pedagogy should 'get under our skin' by 'exciting, inspiring, disturbing and challenging our "thinking as usual" and day-to-day routines'. In such instances, pedagogy can be considered to consist of much more than mere teaching techniques which are observable; it is also about the behind-the-scenes activity, driven by invisible values and beliefs, which informs and directs what we see on stage. It is these hidden acts of teaching that this study attempts to reveal as part of the process of helping STs to see into practice.

As Eraut (2003, p.61) notes, 'theory' can have many meanings; indeed, failure to clarify the term 'creates a cloud of obfuscation' over much professional work. Concerning this study, my point of departure for clarifying and defining the term theory was the etymology of the Greek from which it is derived, namely *theōria* meaning 'contemplation', 'speculation', or a 'view' (Online etymological dictionary). Thus I am interpreting 'theory' as a way of viewing something through the use of different lenses. Orchard and Winch (2015, p.30) suggest three key lenses for considering and contesting issues in ITE: conceptual understanding, empirical research and ethical deliberation. 'Conceptual understanding' concerns having at one's fingertips a command of the educational concepts and principles underpinning practice, and being able to articulate and contest them where applicable. A knowledge of different learning theories and their limitations would be an example of such understanding. The 'empirical research' dimension involves being able to understand, interpret, and possibly apply to practice, findings from high-quality research; 'ethical deliberation' entails being aware of, and reflecting on, the values that underpin the curriculum and one's related practices. Orchard and Winch (2015, p.30) advocate that ITE should integrate these three theoretical strands with practical observation, experience and reflection as a means of deciding how to act across a range of educational contexts.

This conception of theory and the relationship with practical experiences is similar to Boyd's (2014b, p.278) metaphor of professional learning as involving 'an interaction between the

horizontal domain of teachers' situated practical wisdom and the vertical domain of public (published) knowledge'. 'Horizontal' is employed to indicate variability across professional contexts, whilst 'vertical' signifies a hierarchical structure on the basis of the more stable published status of public knowledge in the form of 'theory texts, research papers, professional guidance books or other resources and also policy documents' (ibid and see also Boyd, Hymer and Lockney, 2015). Therefore, drawing on Orchard and Winch (2015), Boyd (2014b), and the original meaning of *theōria*, within this study I define 'theory' as systematically organised public knowledge of a conceptual, empirical or normative nature which can be utilised as a lens to view, interrogate, and interpret practice.

1.6 The potential for a contribution to knowledge

Although this is a small-scale study, it is my hope that its depth will provide insights that will 'speak' in some way 'to particular audiences in particular contexts' (Winter, Griffiths and Green, 2000, p.36). The potential audiences comprise not only university-based TEs, but also the burgeoning 'new breed' of school-based TEs who have the dual role of teaching pupils and also teaching others to teach (White, Dickerson and Weston, 2015; White, 2014 and 2013). Drawing on the Department for Education's figures for the number of school-led schemes (Department for Education, 2018), it would not be unreasonable to assume that this new category of TEs outnumbers university-based TEs by a ratio of over 10:1. Notably, in terms of this study's potential for contributing to knowledge, the academic role played by TEs is an under-researched area (Griffiths, Thompson and Hryniewicz, 2014; White, 2014; McNicholl, Ellis and Blake, 2013). The research concerning TEs heretofore has tended to concentrate on the difficulties inherent in becoming a university-based TE, often employing issues of identity as a focus (see, *inter alia*, Field, 2012; Boyd and Harris, 2010; McKeon and Harrison, 2010). The majority of studies in this area have come from self-study approaches (Williams, Ritter and Bullock, 2012), in which university TEs have plotted their personal 'trials of transition' (Field, 2012) from the 'first-order teaching skills' of teaching pupils to the 'second-order skills' of teaching others to teach (Murray and Male, 2005).

The cynosure of this study lies with these second-order skills and the attendant challenges of articulating a knowledge of practice, a process fraught with difficulties since it is a 'complex task that demands considerable awareness of oneself, pedagogy and students' (Loughran and Berry, 2005, p.193). Yet even more demanding is 'the task of effectively connecting experience, theory, and practical wisdom' (Lunenberg and Korthagen, 2009, p.238). This study aims to cast some new light on how these connections can be made, both from a TE and a ST

perspective. The inclusion of STs carries a particular relevance because their presence brings into play an oft-missing dimension to research of this type, since ‘we know very little about the nature of instructional interactions between teacher educators and their students in teacher education classrooms’ (Zeichner, 2005a, p.748), a view also supported by Sjølie (2017) and Rogers (2011). In summary, the hope is to provide some new insights into aspects of the pedagogy of teacher education by focusing on the ‘black box’ (Darling-Hammond, 2006a, p.19) of the teacher-education classroom.

1.7 Chapter outlines

Chapter two introduces and problematises perspectives from the literature that provide the theoretical lenses for the study.

Chapter three outlines the study’s conceptual framework, some components from which have already been encountered above in relation to the *personal rationale* for the research and its *wider purpose*. Overall, the key components are:

- **Purpose:** personal rationale for the research and wider purpose
- **Perspectives from the literature:** developing the study’s theoretical lenses
- **Philosophical assumptions:** philosophical parameters and research design
- **Positionality:** working the hyphen on the insider-outsider continuum
- **Procedural ethics and ethics in practice:** the impact on research design
- **Practicalities:** data generation, analysis and interpretation

Chapter four provides a brief outline and elucidation of the links between the themes generated in the research before proceeding to examine each theme in greater depth.

Chapters five discusses the generated findings in relation to the literature.

Chapter six considers ways in which this study contributes to the knowledge base of the pedagogy of teacher education; suggests implications for practice; examines possible limitations of the study; provides a personal reflection on the research process; and outlines the potential for future research projects.

2 Perspectives from the Literature

2.1 Introduction

In the first section, I outline the dilemmas and decisions I faced in structuring this chapter. These concerned capturing in a linear format what was an iterative process as perspectives from the literature were refined, refracted, or even rejected. I then discuss the theoretical perspectives employed in the study. These are derived from the elements of the pedagogy of teacher education that are relevant for helping STs to see into practice with theoretical understanding. And since the role of theory constituted a key element that permeated, either explicitly or implicitly, each research question (1.4), I start with the long-standing theory-practice divide in ITE. To this end, I employ a framework devised by Clandinin and Connelly in the form of the metaphor of the ‘sacred theory-practice story’ (Clandinin and Connelly, 1996; Clandinin, 1995; Connelly and Clandinin 1995). This story arises from the claimed ‘universality and taken-for-grantedness’ (Connelly and Clandinin 1995, p.8) of a theory-into-practice conception of ITE. However, I extend this framework by exploring the possibility of a second ‘sacred story’, which is arguably even more powerful and ubiquitous, especially in the light of England’s current policy environment (1.2). Drawing inspiration from Britzman (2003), I frame this second sacred story as a practice-makes-practice conception of ITE. In concluding this section, I suggest that both sacred stories are fundamentally flawed, since their binary nature is, at worst, a product of epistemological prejudice and, at best, an epistemological convenience for analysis purposes.

The remaining sections present an ongoing synthesis of the two sacred stories, starting with an analysis of the interplay between the abstract, propositional knowledge that can be generalised across a range of contexts (*episteme*), and perceptual knowledge that is context-specific (*phronesis*). This *episteme/phronesis* discussion acts as a backdrop for the problematisation of experience in ITE. I ask whether experience alone constitutes the ‘royal road to learning’ (Britzman, 2007, p.9). Here I examine the nature of beliefs and their role in what is/is not noticed, giving particular attention to the ‘apprenticeship-of-observation’ (Lortie, 2002); that is, STs’ preconceptions about teaching developed by dint of their having spent thousands of hours as pupils observing teachers. Through a focus on different approaches to the ‘modelling imperative’ (Martinez, 2008, p.42), I then proceed to probe the challenges faced by TEs in articulating a knowledge of practice in ways that not only help STs to see into practice, but to do so with theoretical understanding. I provisionally conclude that such an endeavour is a high-level task that is beyond the capability of many TEs. It is against

this pedagogical background, and in particular the pedagogies required to bridge theory and practice, that this research plays out over the course of one academic year.

2.2 Some dilemmas and decisions

Throughout the year-long duration of the study, I faced a series of strategic decisions connected to the focus, framing and direction of the research. The choices made arose from the 'defensible vectors of ideas that serve[d] to frame an area rather than to identify each and every instance' (Leinhardt, 2009, pp.1087-1088). Consequently, I was at pains to avoid compiling a 'laundry-list' of foundational studies (Rudestam and Newton, 2014, p.70). Instead, my intention in what follows was to build 'an argument and not a library' (ibid, p.74) by bringing key ideas related to the research questions into dialogue with one another – a process likened by Kamler and Thomson (2014) to organising and hosting a dinner party. Here, in the role of organiser, I had to make decisions concerning whom initially to invite. In this instance 'guests' were equated with key ideas from the literature that could act in a foundational and prospective way 'as a source of inspiration for the discovery of patterns that bring understanding' (Alvesson and Sköldberg, 2000, p.4). As a host, I had the ongoing task of creating 'space for the guests to talk about their work, but *in relation* to [my] own work' (Kamler and Thomson, 2014, p.40, italics in original). This required the exercise of agency on my part that meant being not merely 'a bystander or "reviewer" of the conversation, but a participant' (ibid). But the 'dinner party' was just the starting point. Some guests were invited back for ongoing discussions as I considered how best to continue making connections between my work and theirs in a process of 'repeated interaction between existing ideas, former findings and observations, new observations, and new ideas' (Coffey and Atkinson, 1996, p.156). Employing the metaphor of layering, Wisker (2015, p.68) portrays this iterative process thus:

As each element of the research is layered in, there is a return to new, deeper, more selective understanding of previous reading and newly discovered essential literature to both theorise and situate the work.

The above indicates that working with the literature can be conceptualised as 'an iterative process masquerading as a foundational process' (Wisker, 2015, p.73). Certainly, literature played a dynamic and dialogic role in the unfolding research process, as I found myself reading while writing and writing while reading (Wellington, 2015, p.65). The linear story that follows is the result of much iterative layering, as well as the deselection of material due to issues of space – at times it felt as if I was trying to persuade an octopus into a jar (Kamler and Thomson,

2014). Further, shifts in the research focus arising from ethical considerations (3.7.2), and a last-minute change to the course by the university involving the cancellation of five subject-specific micro-teaching sessions, meant it was no longer possible to explore 'pedagogies of enactment' (Grossman, Hammerness and McDonald, 2009) and their role in helping STs to see into practice. For those prospective and foundational elements that were retained, an iterative layering process took place. This obtained particularly intensively for aspects of modelling and the role of experience in the fostering of understanding.

2.3 Theory and practice: attempting to mind the gap

In academic publications on ITE, having one's attention drawn to 'a theory-practice gap', or 'divide', is a common occurrence (Douglas, 2016); indeed, the research literature is replete with references to the theory-practice divide, which entails 'the dialectical positioning of university-based learning about teaching as abstracted theory in opposition to situated, school-based learning about teaching through practice' (Forgasz *et al.*, 2018, p.34). Indeed, for some observers the theory-practice divide appears to be a 'stable' and 'intractable' issue (Sjølie, 2017), one of the 'inconvenient truths of professional learning' (Korthagen, 2017a), and a 'perennial problem' (Korthagen, 2010b). This stance is underscored by Vick (2006) in his study of the role of the practicum over the last hundred years, in which he concludes that the theory-practice divide is an 'enduring problem' and a 'difficult matter'. The most extreme characterisation of this divide I encountered was by Stenhouse (1975, p.3), who likened it to the disconnect 'between Haig's headquarters and the mud of Flanders'. But what is it about the structure of this divide that renders it such a problematic issue?

The theory-practice divide can have a physical dimension in the form of crossing the cultural boundaries between university and school (Clift and Brady, 2005). The gap between these two worlds thus often occasions STs to view their professional education as comprising two unrelated parts, with each featuring very different discourses (Rosaen and Florio-Ruane, 2008, p.712). Such crossings can also be hazardous, involving a 'two-worlds pitfall' arising from 'the fact that teacher education goes on in two distinct settings and from the fallacious assumption that making connections between these two worlds is straightforward' (Feiman-Nemser and Buchmann, 1983, p.16). This assessment would seem to indicate that the STs run the risk of struggling to extract the maximum benefit from both contexts. It would also appear to be the case that there are no 'silver bullets' in terms of pedagogical strategies to bridge theory and practice. Yet there is arguably much more to this divide, or disconnect, than a mere structural gap. Significantly, there is also a socially-constructed dimension that has become a 'sacred

story' (Clandinin and Connelly, 1996; Clandinin, 1995; Connelly and Clandinin 1995) by virtue of its 'universality and taken-for-grantedness' (Connelly and Clandinin 1995, p.8). It is the sacred story of 'a theory-into-practice conception of teacher education' (Hagger and McIntyre, 2006, p.11).

2.4 A theory-into-practice conception of ITE: the original sacred story

2.4.1 Practice as applied theory

At the core of this sacred story is the narrative of the pre-eminence of theory over practice. For example, Clandinin (1995, p.28), when reflecting on her own experiences as a ST, recalls how she was part of the

... sacred story of theory-practice, a story in which theory is above practice; university teachers, policymakers and researchers hold knowledge to be given to teachers and student teachers; practice is applied theory.

On the basis of Clandinin's observations, the sacred theory-practice story is framed within a narrative of power and the epistemological supremacy of the knowledge that resides in theory, rather than in practice. It is a story where STs are 'taught knowledge based in theory' (Pinnegar, 2017, p.214) and then are expected to apply this knowledge to practice, 'like paint can be applied to a wall' (Edwards, 2001b, p.14). In similar fashion, Wideen, Mayer-Smith and Moon's (1998) meta-analysis of the research on learning to teach concludes that conventional ITE programmes are not effective when 'the university provides the theory, methods and skills; the schools provide the setting in which that knowledge is practiced; and the beginning teacher provides the intellectual effort to apply such knowledge' (p.167). In a model of this type, the STs fall victim to the 'two-worlds pitfall' mentioned above and are left having to play 'pedagogical piggy-in-the-middle' (Jackson and Burch, 2016, p.516), catching what they can for practice and attempting to apply it. Darling-Hammond (2006b, p.307) provides us with an extreme caricature of this approach:

Traditional versions of teacher education have often had students taking batches of front-loaded course work in isolation from practice and then adding a short dollop of student teaching to the end of the program — often in classrooms that did not model the practices that had previously been described in abstraction.

Darling-Hammond is signalling a theory-into-practice conception of ITE, based on the technical-rational notion that 'real knowledge lies in the theories and techniques of basic and applied science' (Schön, 1983, p.27). The implication here is that one 'cannot learn skills application until [one] has learned applicable knowledge' (ibid, pp.27-28). To this end, much

front-loading can be the order of the day, whereby STs are provided with as many theoretical ideas as possible prior to practice. Connelly and Clandinin (1995) depict this approach to professional learning through the metaphor of a 'conduit' or 'funnel', through which STs are fed gobbets of 'stripped down theoretical knowledge' (ibid, p.9) that are to be consumed and then converted into pedagogical practices. And those ideas, no matter how replete with theory, are likely to fail because 'much of what is heaped on will inevitably fall off' when contact is made with the reality of classroom (Doyle and Carter, 2003, p.135). The reason for this, I would suggest, is connected with the issue of 'transfer' and its role in a theory-into-practice conception of ITE.

2.4.2 Transfer: a misleading metaphor?

Akin to the conduit metaphor is the potentially misleading metaphor of 'transfer'. For Eraut (2004, p.212), transfer is a process whereby 'a person learns to use previously acquired knowledge ... in a new situation'. But as Eraut reminds us, this is a far-from-straightforward process in which the ease/difficulty of 'transfer' hinges on the similarity/dissimilarity between a previous and a new situation. Further, the 'disposition of the transferee' and the 'time and effort devoted to facilitating the transfer process' (ibid, p.212) play a significant role. His analysis is analogous to that of Salomon and Perkins with their metaphor of low- and high-road transfer (Perkins and Salomon, 2001; Salomon and Perkins, 1989), which is similar to Dewey's concept of 'the far and the near' (Dewey, 1933, pp.288-289). In both cases, the ease of application of the proposed activity stands in direct proportion to its proximity to previous experiences. Where the relationship of the suggested activity is remote from previous experiences, then the road to transfer becomes 'rocky' (Salomon and Perkins, 1989), the terrain it traverses 'mainly obscure' (Eraut, 2004, p.220), and the complexities of practice hidden from view. Eraut proposes that we underestimate 'by an order of magnitude' (ibid), the time and effort that is required for the proceduralisation of declarative knowledge. The latter, he suggests, in the form of explicit academic knowledge, is relatively easy to acquire and represents the part of an iceberg that is visible above the surface. But as we know, the bulk of an iceberg is below the surface. Consequently, it is perhaps unsurprising that the impact of codified academic knowledge acquired in a university setting may have little effect in practical terms. It is at the waterline of Eraut's iceberg that we encounter the theory-practice divide.

2.5 A practice-makes-practice conception of ITE: a second sacred story?

2.5.1 Theory becomes a pedagogical pariah

Up to this point, consideration has only been given to situations in which theory takes precedence over practice. It is a positioning in which theory is regarded as being the 'more ethereal and authoritative and practice the more protean and pragmatic' (Smagorinsky, Cook and Johnson, 2003, p.1400). However, in the 'pragmatic' also lies the power of practice. In some eyes, this positions practice as taking precedence over theory to the extent that theory becomes a pedagogical pariah in the process of learning to teach. In such instances, the experience of practice – and practice alone – provides the 'royal road to learning' (Britzman, 2007, p.9). It is this practice-makes-practice conception of ITE (Britzman, 2003) that I am proposing constitutes a second sacred story by virtue of its widespread taken-for-grantedness. In order to understand fully the provenance and allure of this second sacred story, especially from the perspective of policymakers, I propose to examine briefly the 'policy career' (Trowler, 2003, p.129) of ITE in England over the course of the last 30 years, a period during which the main impulses for the current policy environment can be found.

2.5.2 Theory as a shibboleth for reformers

Within the context of England, Furlong (2013, p.32) makes the observation that educational theory in ITE 'serves as a useful shibboleth for those intent on reform'. In the late 80s and early 90s, this strategy was deployed relentlessly as an 'economy of power' or a 'policy technology' (Ball, 1994, p.10) by the New Right, which was 'an amalgam' of different political groupings (Trowler, 2003, p.104) in the form of 'a broad coalition' of neo-liberals and neo-conservatives (Chitty, 2014, p.47). Within these sometimes contradictory, and yet often self-reinforcing ideologies, there was nevertheless a shared understanding that more, if not all, 'teacher training' should be in schools; further, educational theory was regarded as being 'at best of secondary importance; at worst it [was] positively harmful' (Furlong *et al.*, 2000, p.10).

Characterised by Hill (1989) as 'The Charge of the Right Brigade', the 'discourses of derision of the New Right' (Ball 2006, p.26) went as far to suggest that the Postgraduate Certificate in Education should be abolished, along with university departments of education, because 'the training courses demeans (*sic*) the subject to being little more than a peg on which to hang modish educational theory' (Lawlor, 1990, p.42) and acted as an 'impediment to good teaching' (p.40). From the New Right's perspective, educational theory just promoted 'dogmatic orthodoxies' (Tomlinson 2005, p.66) that had little to do with the real world of

teaching. None of these arguments was particularly new because, according to Carr (2006), debates on 'education without theory' had been taking place for over 100 years. Nevertheless, in all instances, learning to teach was being conceptualised as an atheoretical endeavour that arguably finds its apotheosis in Britzman's (2003) 'practice-makes-practice' narrative of learning to teach.

2.5.3 The anti-theory die is cast and perpetually re-cast

In an act of 'knowledge ventriloquism' (Zeichner and Conklin, 2016), the pronouncements of the New Right's think tanks were assembled by Kenneth Clarke as evidence for his new policy platform. Clarke, on his appointment in 1991 as Secretary of State for Education, adopted quite a confrontational stance vis-à-vis the university aspect of ITE (Furlong *et al.*, 2000, p.68). He was of the conviction that the universities promoted the aforementioned 'dogmatic orthodoxies' in the form of theory that had little to do with day-to-day teaching. The most notable policy of his tenure was *Circular 9/92* that required two thirds of the training to be spent in school, a process for which schools would now be paid by the universities. In particular, paragraph 14 of *Circular 9/92* (Department for Education, 1992) proposed reducing the role of universities to that of an awarding body with all other aspects of the training being undertaken by schools. Ultimately, there was an implementation gap as this policy was 'refracted' (Trowler, 2014c, p.15) in the school/university partnership negotiations, meaning that this more extreme proposal did not become enacted as Clarke had possibly envisaged. Nevertheless, it could be argued that the anti-theory die had been cast in what would prove to be, as we shall now see, a Pyrrhic victory for the universities.

The election of the Conservative-Liberal Democrat Coalition Government in 2010 saw a resuscitation (Maguire, 2014, p.774) of the New Right's policy arguments from the 1980s and 90s, now championed by Michael Gove, the Secretary of State for Education. The catalyst for this new wave of reform was the Coalition Government's White Paper, *The Importance of Teaching* (Department for Education, 2010). Further, Gove proved to be an even more effective 'ventriloquist' than Clarke, possibly because he had some forceful support from certain elements of the press (see e.g., Daily Mail, 2012; Daily Telegraph, 2012), which were acting as an anti-theory 'echo chamber'. Once more, the overall thrust of policy was to regard teaching as a craft that 'is best learnt as an apprentice observing a master craftsman or woman' (Gove, 2010) and to promulgate the view that university departments of education encouraged dissent and undermined traditional values (Chitty, 2014, p.258). The policy solution for these perceived shortcomings was to increase school-led variants of training (see

in particular, Department for Education, 2011a and 2011b) so that reform ‘focuses on what is really important’ (Department for Education 2010, pp.22-23).

2.5.4 Policy silences and theory

But what is regarded as ‘really important’? As Rizvi and Lingard (2010, p.61) remind us, we can learn a great deal about the nature of policy from ‘policy silences’. And on the role of theory in teacher education, there was a distinct silence. Neither in *The Importance of Teaching*, nor its follow-up policy documents (Department for Education, 2011a and 2011b), was any mention made of the importance of the role of theory in learning to teach. Further, the *Carter Review of Initial Teacher Training* (Carter, 2015) recommended that applicants ‘understand that QTS is the essential component of ITT and that a PGCE is an optional academic qualification’ (Carter, 2015, p.14). Such a stance presented a stark contrast to *Teaching Scotland’s Future: A Report of the Review of Teacher Education in Scotland* (Donaldson, 2011), in which the role of theory in helping to understand the complexities of teaching was presented as a *sine qua non* of ITE. Similar arguments were made by Ofsted (2012, p.77) and House of Commons Education Committee (House of Commons 2012, p.78).

However, there was a curious theory-related *non sequitur* in government policy. That is, the very countries that it had held up as examples in *The Importance of Teaching* valued strong university/school partnerships built around powerful theory/practice links underpinned by systematic, inquiry-orientated approaches and high cognitive challenge (see e.g., Hammerness and Klette, 2015; Sahlberg 2014 and 2011). It is not unsurprising, therefore, that Gilroy (2014, p.630) was prompted to note that such policy changes were ‘ideologically heavy and evidence light’. And therein lies the rub in the form of an epistemological clash concerning the nature of learning, teaching, and, by extension, what learning to teach entails. In England the complexity of learning to teach is simply not recognised, and consequently ‘is dismissed by government as just academic, bereft of what works, bereft of common sense’(Edwards, Gilroy and Hartley, 2002, p.4).

2.5.5 Theory: an innocent bystander in an ideological battle

The above account would seem to suggest that educational theory has been caught in the crossfire between two dichotomous views of learning, the first of which is that learning – and as a natural concomitant of this, learning to teach – is a simple, straightforward and linear process. As already discussed, policy-makers, aided and abetted by their favourite think tanks, constantly call theory to account ‘before the court of common sense’ (Pring, 2015, p.95); indeed, the role of theory in the preparation of teachers is regarded ‘as a disease, which has

to be eradicated and replaced by professional judgement. This is gained from practical experience' (ibid) and the overriding assumption that teaching is just a matter of common sense.

The opposing view positions learning as a complex and messy business (Boyd, Hymer and Lockney, 2015; Davis, Sumara and Luce-Kapler, 2008; Mason, 2008; Brown, Cocking and Bransford, 2000), as 'a "liminal" or "threshold" process at the boundary between control and chaos' (Wiliam, 2007, np). For Jackson (1968, p.167), learning 'more closely resembles the flight of a butterfly than the flight of a bullet'. The corollary of viewing learning in this way is to conceive of teaching as: 'complex work' that is full of uncertainty and unpredictability (Day, 2017; Darling-Hammond and Bransford, 2005); an activity that looks 'deceptively simple' (Grossman, Hammerness and McDonald, 2009, p.273), but which is beset with 'endemic uncertainties' (Lortie, 2002, p.134); and a 'difficult practice that looks easy' (Labaree, 2000 and 2005), certainly 'easy' to the untutored eye of the general public, amongst whom I would include beginning teachers. By contrast, Schön (1987) describes professional practice as being 'messy', 'confusing' (p.3) and characterised by 'uncertainty, uniqueness, and value conflict' (p.6), all of which are impervious to the 'canons of technical rationality' (ibid).

I would propose that framing teaching in this way, as a highly complex activity, helps us to transcend some of the myths of teaching. For example, teachers are self-made (Britzman 2003 and 1986); teaching is 'simply a question of enthusing pupils with a love of the subject' (Edwards, 2001b, p. 12); and teaching is just about common sense that can be picked up 'through participation in cultural patterns containing trustworthy recipes' (Buchmann, 1987, p.157). These 'folkways' notions of teaching (Buchmann, 1987), and by implication therefore of learning to teach, all appeal to 'common sense, which claims palpable obviousness and sagacity' (p.157). Such conceptions also arguably harbour within them a tacit antipathy towards theory and an understandable desire to 'trade in certainty and order, not in uncertainty and crisis' (Florio-Ruane and Smith, 2004, p.628) by 'soberly affirming the obvious' and avoiding 'complicat[ing] the complex' (Buchmann, 1987, p.156).

2.5.6 Theory and the curse of complexity

It is within this juxtaposition of common sense and complexity that we encounter the so-called 'curse of complexity' (Cochran-Smith, 2005), which is arguably at the heart of the second sacred story. In making this claim, I refer to the rhetoric of reform, which, as already noted, is buttressed by the 'simple, linear and causal' constantly trumping the 'complex, nuanced and contingent' (Cochran-Smith, 2005, p.184). In short, the 'contestability of knowledge' (Furlong,

2013) is not countenanced, and 'simple, "commonsense" solutions are applied to problems and contexts which are highly complex and ambiguous' (Groundwater-Smith and Mockler, 2009, p.4). Thus, the sophisticated work that I would suggest is required for the teaching of teaching often tends to be viewed in simplistic terms (Loughran and Menter, 2019). This situation is arguably compounded still further by the dominant skills-based nature of the English Teachers' Standards (Department for Education, 2011c) which signal 'a decisive shift away from the idea of teaching as a research-based profession and intellectual activity towards teaching as a craft-based occupation' based on 'performative professionalism' (Beauchamp *et al.*, 2015, p.160). For Maguire (2011, p.32), emphasising a narrow range of technical teaching skills represents 'teacher-proofing' that renders almost obsolete the role of professional judgement. By ignoring the complexities of teaching, the academic component of teaching can become side-lined in favour of 'a paradigm of technical rationality' (Menter, 2016, p.19) and teachers are cast as 'technicians and not intellectuals' (Ball, 1995) as part of a 'deliverology' system (Ball *et al.*, 2012).

2.5.7 The theory-practice divide: an ontological falsehood?

But lurking beneath the surface of such seemingly simple and commonsensical conceptions of everyday practices lie many hidden complexities, because what is often overlooked is that practice is replete with theory (Schön, 1983). To be sure, many of the theories are perhaps long forgotten, but nevertheless practice is constructed on 'the mediated bones of public knowledge' (Boyd, Hymer and Lockney, 2015, p.14). And just as we need to be able to manipulate tacitly the grammar of a language, making it explicit when occasion demands, so we also need to be able to understand and manipulate the underlying 'grammar of practice' (Grossman and McDonald, 2008, p.186), or even 'parse' it (Kennedy, 2016), if we are in search of explicit knowledge that could bring greater understanding to a particular context. The challenge consists in being able to call to mind the original function and underpinning rationale of those 'mediated bones of public knowledge', and to do so in ways that bring deeper understanding to our professional practice. So perhaps both sacred stories are fundamentally flawed? Their binary nature is, at worst, arguably a product of epistemological prejudice and, at best, an epistemological convenience for analysis purposes.

2.6 Theory-practice divide: synthesising the sacred stories

2.6.1 A tale of two sacred and mutually denigrating stories

On the basis of the above, it could be suggested that the theory-practice divide is characterised not by one sacred story, as suggested in the literature, but by two. Further, as was seen in sections 2.4 and 2.5, there is much evidence to suggest that each of these competing stories derives its power and authority from the denigration of the other. And because both stories appear to be blind to what could bind them together in productive and mutually-enhancing ways, we are left with unhelpful binaries contaminated by different forms of imagery. Sacred story one promotes the image of 'a visionary, rational and logical, clean and flawless theory – an ideal state or condition' (Taguchi, 2007, p.278), the purpose of which is to harness the 'rationales and visions of theory' (ibid) to organise and clean up 'messy, dirty, unordered practice' (ibid). Sacred story two's imagery, by contrast, prizes practice over theory; valorises experience as the 'royal road to learning' (Britzman, 2007, p.9); and is deaf to any explanatory or practical uses that theory may have as a tool for framing and exploring issues.

2.6.2 Theorising the practical and practicalising the theoretical

Drawing on Allen (2011, p.742), it could be said that both these stories contain the same category error because 'separating theory from practice creates a false dichotomy and that teaching is a profession in which theory is embedded in and inseparable from practice'. Thus 'practice is already theoretical' (Taguchi, 2007, p.278), drawing on a range of embodied theories, some of which will be built on Boyd, Hymer and Lockney's (2015) 'mediated bones of public knowledge'. But 'practice [also] requires second thoughts', namely 'theory' (Britzman, 2003, p.4). Britzman's observation reminds us of Lewin's (1952, p.169) 'there is nothing so practical as a good theory', suggesting that public bodies of theory can be utilised as useful tools for experimentation and practical problem-solving. In such scenarios, theory can become 'the servant of practice and practice the servant of theory' (Jackson and Burch, 2016, p.517). However, how can such an integrative, symbiotic, and non-dichotomous relationship between theory and practice be achieved? How can the distinct 'realms' of the 'ivory tower' and the 'teeming world of the classroom' (Smagorinsky, Cook and Johnson, 2003, p.1400) be brought into dialogue with one another, and thereby synthesise the two sacred stories in mutually-enhancing ways?

2.6.3 Creating dialogue across the divide: a matter of relevance

Underpinning the above narrative is a perception that university ITE programmes are too theoretical – or even irrelevant. This interpretation arises from the perceived emphasis on the abstract and general, at the cost of the immediately implementable (Darling-Hammond, 2010, p.40). Such a stance is sustained through STs' 'seemingly insatiable desire for the practical at the expense of the theoretical' (Bullock and Christou, 2009, p.75), often in the form of 'a manual for survival in the classroom' (Foster, 1999, p.139). When STs identify strongly in this way with the power of practical experience embedded in the second sacred story, then creating a productive dialogue across the theory-practice divide becomes a challenging task – a situation that is arguably not helped in England by the 'rush to practice' (Ellis *et al.*, 2011, p.22).

It is perhaps understandable that STs often reject research-related ideas because they do not find them 'practical, contextual, credible, or accessible' (Gore and Gitlin, 2004, p.35). A few studies do exist that contest the truism that much of the theory taught in ITE is irrelevant; however, the participants in these studies were already well advanced in their training (see e.g., Knight, 2015; Sjølie, 2014; Boyd and Tibke, 2012; Hodson, Smith and Brown, 2012; Smith and Hodson, 2010; Brouwer and Korthagen, 2005; Counsell *et al.*, 2000). In such circumstance, STs are more likely to be open to adopting ideas they are learning in their university coursework (Darling-Hammond, 2008, p.1321) since these concepts often ostensibly cleave to their immediate classroom concerns. It would appear, therefore, that a precondition for a productive dialogue between theory and practice rests on the perceived relevance of said theory/theories. Further, in the studies by Boyd and Tibke (2012) and Hodson, Smith and Brown (2012), the STs from a school-based scheme welcomed their time in a university setting because they felt this represented a safe place away from the professional pressures and judgements of school, a 'place of respite and reassurance' where they could gain confidence from 'mutual certainty and uncertainty' (Hodson, Smith and Brown, p.188). This view concurs with Groundwater-Smith's (2016, p.xviii) observation that universities are 'safe places for unsafe ideas'.

But there is possibly another dimension to the irrelevance issue. Smagorinsky, Cook and Johnson (2003, p.1401) assert that 'the problem with teacher education is not too much theory, but too little concept'. By this they mean a lack of deep understanding arising from a failure to weave together abstract principles and worldly experiences (*ibid*, p.1399). In similar vein, Zierer (2015, p.794) proposes that neither more theory nor more practice lead to a better

university teacher education: ‘the core issue is the interplay between theory and practice’. Part of the ‘failure’ to engender an optimal theory-practice interplay could potentially arise from the pressures to cover material and consequently not have the time to dig more deeply into underlying principles for, as Gardner reminds us, coverage can be ‘the greatest enemy of understanding’ (Gardner in conversation with Brandt, 1993, p.7). Kosnik *et al.* (2009, p.174) refer to this as ‘trying to cover the waterfront’. In the light of such concerns, I propose to explore Korthagen *et al.*’s (2001) ‘realistic teacher education’, the basic premise of which is that perceptual understanding precedes conceptual understanding. Their work is particularly apposite for exploring ways in which TEs can help STs to see into practice. Central to their approach is the creation of a dialogue across the theory-practice divide through the carefully-sequenced promotion of the interplay between *phronesis* and *episteme*.

2.6.4 *Episteme* and *phronesis*: a study into how to act wisely

Kessels and Korthagen (2001) distinguish between two types of knowledge, *episteme* and *phronesis*, which they refer to as theory-with-a-capital-T and theory-with-a-small-t. *Episteme* is ‘abstract, objective, and propositional knowledge, the result of a generalization over many situations’ (p.30). By contrast, *phronesis* is ‘perceptual knowledge, the practical wisdom based on the perception of the situation’ (p.31). In essence, a key difference between *episteme* and *phronesis* lies in the ‘locus of certitude’. With *episteme*, certitude is to be found ‘in a grasp of theoretical notions or principles’; whereas for *phronesis*, ‘certitude arises from knowledge of particulars’ (Kessels and Korthagen, 1996, p.19). On first consideration, ‘knowledge of particulars’ creates the impression of a much more limited form of knowledge. However, *phronesis* is predicated on a nuanced and sophisticated understanding of context that ultimately draws, at the point of need, on elements of the more abstract and theoretical. Nevertheless, the perceptual always precedes the conceptual:

Phronesis requires understanding of both kinds: knowledge of particular facts and a grasp of generalities, but contrary to the *episteme*-conception of knowledge, the first is more important than the second. (ibid, p.19, italics in original)

Phronesis is therefore the ability ‘to make holistic judgments of high quality, i.e., to deal “wisely” with particular situations’ (Kessels and Korthagen, 2001, p.24, italics in original). From the perspective of a TE, such wise practical reasoning rests on being able to pick a pedagogical path through ‘situations of practice’ with their accompanying ‘complexity, uncertainty, instability, uniqueness, and value conflicts’ (Schön, 1983, p.14). This is not achievable without an ‘enlightened eye’ (Eisner, 1991) that can unpick the different layers of reality in the complexities of practice. Thus, *phronesis* involves an iterative process that is ‘riddled with the

deliberative' (Eisner, 2002, p.384) by dint of continually exercising discernment, reflection, and judgement. This is reminiscent of Schön's (1983) idea of 'a reflective conversation with the situation'. But how is this *phronesis/episteme* distinction relevant to the pedagogy of ITE, especially in relation to the theory-practice divide?

At root, we are considering here a *modus operandi* that promotes the development of perceptual understanding as a precursor to conceptual understanding. It is not a theory-into-practice, but rather a practice-into-theory conception of ITE. It is an approach that has been developed by Korthagen *et al.* (2001) under the banner of 'a pedagogy of realistic teacher education', for which the starting point is, perhaps unsurprisingly, the cultivation of 'realistic experiences'. By this they mean 'practical experiences that [both] feel authentic to the student teachers' (Korthagen, 2017b, p.537) and are powerful enough to challenge existing beliefs in ways that can lead to 'fruitful knowledge about teaching' (Korthagen, 2010b, p.407). Kessels and Korthagen (1996, p.21) propose that what is needed in order to help STs explore and refine their perceptions of practice is:

... not so much theories, articles, books, and other conceptual matters, but, first and foremost, concrete situations to be perceived, experiences to be had, persons to be met, plans to be exerted, and their consequences to be reflected upon. They are the *sine qua non* of *phronesis*. Without such perceptions, no knowledge is formed at all, no matter how beautiful the essays are that a student teacher may write.

If such experiences are the *sine qua non* of *phronesis*, which itself ultimately acts as point of departure for more generalised understandings, then how are these situations created and reflected upon? To this end, a three-level process is invoked comprising *gestalt*, *schema* and *theory* (Korthagen and Lagerwerf, 2001). Drawing on Korthagen (2017b), *gestalt* and *schema* can be defined as follows:

A *gestalt* encompasses the whole of a teacher's perception of the here-and-now situation, i.e. both the sensory perception of the environment as well as images, thoughts, feelings, needs, values, and behavioral tendencies evoked by the situation. (p.533)

A *schema* differs from a *gestalt* in a fundamental way. Whereas a *gestalt* is an unconscious whole of cognitive, emotional, and motivational factors triggering a certain type of routine behavior, a *schema* is a conscious mental map, easily accessible for introspection. (p.534)

In practical terms, therefore, suitable situations of a practical nature are created for the purpose of triggering *gestalts*. For example, in Korthagen (2001b) this involves arranging for STs to teach pupils on a one-to-one basis once a week for about eight weeks. STs teach these

sessions on their own, audio record them, and then undertake a debriefing session that is led by a TE and features structured reflective activities. Here the purpose is, through a so-called schematisation process, to develop a previously-unconscious *gestalt* 'into a conscious cognitive *schema*, i.e. a conscious network of concepts, characteristics, principles' (Korthagen, 2010b, p.412). Schematisation therefore entails orchestrating a transition from the level of an instinctive and implicit *gestalt* to that of a conscious and explicit *schema* by '*desituating* the knowledge derived from specific situations' (Korthagen, 2010c, p.102, italics in original), enabling the creation of a conscious mental map that can then be explored.

Notably, schematisation does not involve, in the first instance, making connections between concrete experiences and theoretical generalisations; instead, the purpose is initially to discover what STs have perceived on the basis of particular experiences. The role of a TE is 'to help the student refine his or her perception, not to provide the student with a set of general rules'; consequently, the role of theory is that of 'a guide, or a heuristic in exploring the student's perception'; in short 'there is nothing or little to transmit, only a great deal to explore' (Kessels and Korthagen, 1996, p.21). However, this exploration does require the TE to exercise a 'command of a lot of conceptual, external, and more or less objective knowledge' (ibid, p.21) that can act as a tool for thinking and for locating appropriate readings according to the STs' emerging interests. Nevertheless, the scope is very situation-specific, and conceptual understanding is very context-bound. In summary, the *phronesis* of the TE, through dealing wisely with situations, begets the *phronesis* of the ST by helping him/her to unravel, and thereby hopefully see into, the intricacies of practice.

With multiple encounters of this type, and the gradual building up of conscious networks of concepts, the final step – if the motivation to do so exists on the part of the ST – entails linking what could be termed the 'practical theories' associated with particular contexts to more meso-level theories that are 'aimed at deep and generalized understanding of a variety of similar situations' (Korthagen, 2010c, p.102). To facilitate this final transition, TEs need to help STs to make the appropriate links; and this includes sourcing suitable research papers and reading material relevant to the incipient theory/theories in question. For example, a ST, having explored the role of behaviourism in key language-repetition activities that are very context-bound, may have become interested in the wider role of behaviourism in MFL teaching, and perhaps learning generally. If such an opportunity presents itself, based on the interests of the ST, to explore more generalised understandings of behaviourism, then relevant reading will need to be provided at the point of need. As will have been noted, this is a very emergent model based on conceptual curiosity. Korthagen (2010b, p.412) cites

evidence suggesting that STs, and indeed practitioners in general, do not reach this level of deeper and more generalised understanding because they 'are often focusing on directions for taking action in a particular situation'. In light of this, it will be particularly interesting to ascertain whether a similar situation obtains for the STs within the study that I am conducting.

Despite the empirical evidence supporting the effectiveness of the realistic approach (Korthagen, 2017b and 2010b), many ITE courses, because of their underpinning technical-rationalist assumptions, are still not well suited to preparing STs to learn from experience; in fact, they 'tend to be designed in ways that reinforces (*sic*) the sacred story of theory-into-practice' (Bullock, 2011, p.35). The realistic approach offers a pathway that circumvents this particular 'pitfall' by ensuring that, on a personalised basis, theory for STs is 'more than a body of (someone else's) knowledge they are asked to acquire —an approach Giroux (1994) terms a "pedagogy of theory"' (Segall, 2001, p.232). Instead, theory grows out of, and plays an active role in, practical experiences. Giroux (1996, p.50, cited in Segall, 2001, p.232) refers to this approach as being a 'pedagogy of theorizing', namely 'an activity to be practiced in the lived world of the educational experience'. In conclusion, therefore, it is perhaps appropriate to note that it is the crafting of the dialectical relationship between theory and practice that is crucial, especially since 'to practise without a theory is to sail an uncharted sea; theory without practice is not to set sail at all (Susser, 1968, p.v, cited in Trevithick, 2005, p.22).

Arguably, the realistic approach achieves such a balance; however, the context is almost exclusively grounded in school-related experiences. This study explores whether it is possible to achieve a similar relationship between theory and practice from within a teacher-education classroom. The implication is that a teacher-education classroom would need to be a practice environment in-and-of-itself; that is, a place 'where practice gets theorized and theory is not only considered for practice but is indeed practiced as it interrogates practice' (Segall, 2001, p.225). In short, is it possible to orchestrate and exploit powerful learning experiences that enable STs not only to see into practice, but also to develop an appreciation of theory as a tool for thinking about and enacting practice? To this end, more detailed consideration needs to be given to the dominance of experience within sacred story two and the accompanying assumption that experience is the 'royal road to learning'.

2.7 Is experience alone the best teacher?

2.7.1 Mis-educative experiences that restrict future growth

Dewey (1963) viewed preparation to be a 'treacherous term' because of the ubiquitous assumption that 'all genuine education comes about through experience' (ibid, p.25). His argument rests on the claim that education and experience are not one and the same thing because some experiences can be 'mis-educative'; that is, they have 'the effect of arresting or distorting the growth of further experiences', thus restricting 'the possibilities of having richer experience in the future'(ibid). For example, he suggests that a particular experience 'may increase a person's automatic skill in a particular direction', but carries with it the danger that the person finds themselves in a 'groove or rut' (ibid), thereby prohibiting the potential for further productive experiences. Further, Dewey suggests that for an experience to be 'educative', it is important to adopt a long-term perspective in terms of 'continuity and interaction', which respectively form the 'longitudinal and lateral aspects' (ibid, p.44) of experience. The longitudinal dimension, or continuity, is formed through an 'experiential continuum' (ibid) involving carrying over something from a previous experience into a new one. The lateral dimension, or interaction, refers to the dialogue surrounding an experience and how this is also carried forward and refined. In many ways this reminded me of Bruner's (2014) spiral curriculum and Nuthall's (2007, p.155) notion that 'learning is rarely a one-shot affair'. All three authors here are signalling the threats to understanding of one-off, unconnected events.

The 'mis-educative' dimension as a metaphor is also echoed in Ellis' (2010) 'impoverishing experience' that can result when the ITE system does not encourage a critical examination of the meaning of experience and its relationship to the development of professional knowledge, a view underscored by Berry (2007, p.40) when she notes that 'experience itself is insufficient a teacher about teaching'. A similar theme is explored by Biesta (2012, p.15, italics in original) when he proposes that promoting the concept of a competent teacher, namely a teacher able to do things, 'is in itself *never enough*'. In short, the learning environment needs to be less restrictive and more expansive.

2.7.2 Theory and practice: what matters is the 'controlling purpose'

I would propose that restrictive experiences – especially those lacking any form of reflection, critical reflection, or reflexivity – can lead to a reinforcement and reification of current practices. Such replication without reflection, or failure to extract maximum meaning from

present experiences, can have long-term repercussions. Dewey (1904) alerts us to such potential pedagogical perils by examining the nature of experience through the lens of what we would now term the theory-practice divide. He argues that the difference between theory and practice lies in 'the controlling purpose'. For Dewey, in those cases where the emphasis is placed exclusively on gaining teaching-related skills, this is akin to an apprenticeship. He contrasts this with the 'laboratory point of view', in which practice-related work is harnessed 'as an instrument in making *real* and *vital* theoretical instruction (ibid, p.9, emphasis added).

Dewey is at pains to point out that the laboratory and apprenticeship models are not mutually exclusive, but that rather one will be subordinated to the other according to the 'controlling purpose'. For Dewey, a mastery of teaching techniques that is not accompanied by the study of wider educational principles could certainly be effective in the short term by giving a person the appearance of being a competent teacher; however, such teachers are not 'students of teaching' (ibid, p.15) and as such are limited to 'perfecting and refining skills already possessed' (ibid). Consequently, there is the ever-present concern that 'immediate skill may be got at the cost of the power to go on growing' (ibid). An added dimension to his argument is that the potential for educational growth would be severely curtailed if training schools concentrated on 'current types of educational practice, with simply incidental improvement in details', thereby producing teachers who are only able to teach in ways 'that are now necessary to do' (ibid, p.30). Dewey's arguments also call to mind Stenhouse's comments on mastery, that 'teachers must be educated to develop their art, not to master it, for the claim to mastery merely signals the abandoning of aspiration' (cited in Rudduck and Hopkins, 1985, p 124). Both Dewey and Stenhouse are alerting us to the perils of the practice-makes-practice approach already discussed.

2.7.3 Experiences that prescribe and proscribe

Dewey's observations have currency in today's debates concerning the nature of ITE. With school-led and school-based programmes now forming 53% of provision in England and comprising over 900 separate schemes (Department for Education, 2018), the conception of becoming a teacher is increasingly confined to inward-looking interpretations of teaching derived from 'a series of "local" professionalisms and the "branded" professionalisms of Teach First and Academy chains' (Whitty, 2014b, p.466). Concentrating on doing better the things that are required by these 'local professionalisms', and thereby potentially ignoring deeper conceptions of education, suggests that becoming a teacher in such circumstances can run the risk of being subjugated to a solipsistic form of professionalism that prescribes and

proscribes elements of what it means to be a teacher. Even if such school-wide imperatives do not exist, then there can still be the expectation to conform to the norms of a particular department. Douglas' (2014) in-depth study of the learning opportunities afforded to fifteen STs across four departments in one school, foregrounded this particular danger. Consequently, the STs' experience can be a restrictive one in which 'debate and contestation as a way of working' (Douglas, 2017a, p.167) are not valued, and where the Teachers' Standards can also act as 'a symbolic artefact of authority' (ibid, p.165), thus again restricting debate and problematisation. Lortie (2002, p.59) is unequivocal when he terms such a mediated entry into the profession as 'primitive'. Edwards (2014, p.58) expresses similar concerns, questioning whether a profession can actually 'delegate its preparation to the values and purposes of local communities such as schools' and run the risk of no longer being a profession, but a 'craft with interesting local dialects'. Within such arrangements, there is certainly a heightened risk of 'mis-educative' experiences that could distort or arrest future growth (Dewey, 1963, p.25). It will be interesting to note if the view from the teacher-education classroom in this study is similarly one-dimensional and narrow.

2.7.4 The filter of beliefs and the mediation of meanings

However, whatever the context of practice, and irrespective of how replete with expansive possibilities, it is always possible to have the experience but miss the meaning (Ellis, 2010), for undergoing an experience is simply never enough (Bullock, 2011, p.38). Britzman's (2003) critical ethnographic study of how two STs struggled to create meaning from their experiences underscores this point further. These, and other examples, prompt one to question whether experience alone is the best teacher (Goodwin, Roegman and Reagan, 2016). Experience may well provide a gateway to greater understanding; nonetheless, it is just a gateway. If one is to pass through such a gateway, and in so doing gain access to new and richer understandings, then experience needs to be mediated. But what is the nature of that mediation? Britzman *et al.* (1997, p.22) suggest that such mediation is not only a cognitive process involving the articulation of ideas; it is also an affective one involving 'making sense of the myriad feelings one has about ideas and one's work'. Boaler (2003, p.12) argues that the development of knowledge about teaching is a complex activity 'involving action, analysis and affect'. In similar fashion, Hébert (2015, p. 369) cautions against 'a bifurcation of the rational and intuitive realms', a view supported by Edwards and Thomas (2010, p.404) who also critique context-free models of reflective practice for perpetuating the assumption that 'knowledge is a set of portable linguistic propositions to be acquired (by the mind) and used (by the body in action)'. Merely striking a cognitive chord is not enough –

there needs to be something far more provocative to ensure that ideas are not dismissed as being merely of passing interest (Dewhurst and Lamb, 2005, p.913). Shulman (2005b, p.22) is even more explicit in this regard:

I would say that without a certain amount of anxiety and risk, there's a limit to how much learning occurs. One must have something at stake. No emotional investment, no intellectual or formational yield.

If cognition is invested with emotion and feelings in the ways just proposed, then what are the implications of this cathected cognition for a TE's pedagogy? Harnessing effectively the interplay between the cognitive and the affective would seem to require, on the part of a TE, a certain way of being in the teacher-education classroom – a way of being that rests on a high degree of 'relational expertise' and the exercising of 'relational pedagogy'. Relational expertise 'includes being alert to the standpoints of others and being willing to work with them towards shared ethical goals' (Edwards, 2011, p.38); and there is arguably no higher shared 'ethical goal' than that of becoming a teacher. Cheng *et al.* (2009, p.326) frame this way of working in similar terms with their concept of 'relational pedagogy', which involves 'valuing a student as a knower' and thereby endeavouring to work with the grain of a ST's beliefs, rather than against it, in a process that is both holistic and active.

However, both relational expertise and relational pedagogy would appear to encompass complex skills, since they hinge on a TE being constantly on 'the lookout for signs of students' incipient interests, strengths and capacities' and then actively exploiting these 'to help guide students to new terrain' (Hansen, 1999, p.177). Hansen refers to this process as 'intellectual attentiveness', which is underpinned by the strong moral imperative of taking very seriously each ST's 'distinctive and evolving set of capacities, inclinations, dispositions, and attitudes' (ibid, p.180). Jaber, Southerland and Dake (2018) advocate a similar approach, which they capture through the use of the term 'epistemic empathy', namely 'the act of understanding and appreciating someone's cognitive and emotional experience' and therefore placing oneself in a position to understand 'learners' perspectives and identify with their sense-making experiences' (p.14). For Palmer (2017, p.11), a good teacher possesses 'a capacity for connectedness'; that is, an ability to 'weave a complex web of connections among themselves, their subjects, and their students so that students can learn to weave a world for themselves'. But although these relational aspects of pedagogy can undoubtedly play a significant role in helping STs to see into practice through the schematisation process outlined in 2.6.4, the difficulties in guiding them to glimpse alternative vistas and negotiate new terrain should not

be underestimated. This obtains in particular when one considers the underlying power of beliefs.

Borg (2011, p.370) provides a very useful definition of beliefs as ‘propositions individuals consider to be true and which are often tacit, have a strong evaluative and affective component, provide a basis for action, and are resistant to change’. For Feiman-Nemser (2001, p.1016) the images and beliefs that accompany STs in their pre-service education ‘serve as filters for making sense of the knowledge and experiences they encounter’ and may act as ‘barriers to change by limiting the ideas that teacher education students are able and willing to entertain’. At root this is because we tend to see only that which we value (Mason, 2002, p.7) and, as a result, ‘fail to be sufficiently sensitive to possibilities’ (p.xi), often reacting on the basis of ingrained habits rather than responding in more nuanced ways (p.8). Thus, with reference to seeing into practice, there exists an ever-present danger that a particular belief is confounded with knowledge, forming a basis for decisions without our realising it (Lakoff, 2014). But how can we change something of which we are not even aware? And there is another dimension to beliefs, which amongst the professions is unique to teaching. This ‘uniqueness’ is derived from having spent thousands of hours as pupils observing that profession in action. This is not something that could be applied to medicine or law. Lortie (2002) refers to this experience as the ‘apprenticeship-of-observation’, which Darling-Hammond (2006a) and Bullock (2011) describe as an overarching issue in ITE.

2.8 The apprenticeship-of-observation: an overarching problem

The apprenticeship-of-observation leads to many preconceptions about teaching on the part of STs. Lortie (2002, p.62) sums up this situation thus:

The student [pupil] is the “target” of teacher efforts and sees the teacher front stage and center like an audience viewing a play. Students do not receive invitations to watch the teacher’s performance from the wings; they are not privy to the teacher’s private intentions and personal reflections on classroom events.

Such a perspective, therefore, is unlikely to have provided the STs with insights into their former teachers’ thinking and the dilemmas they faced. Because STs do not know what they do not know, they could well jump to the conclusion that the act of teaching just flows naturally because ‘they haven’t seen teachers’ thinking, their anxieties, or their decisions’ (Kennedy, 2016, p.14). By the same token, it is not a passive observation because the relationship with their teacher was one that was ‘invested with affect’ (Lortie, 2002, p.61), suggesting that ‘distinguishing knowledge from belief is a daunting undertaking’ (Pajares,

1992, p.309). Further, unless the assumptions underpinning the apprenticeship-of-observation are opened up to scrutiny, then the apprenticeship-of-observation is likely to act 'as an ally of continuity rather than of change' (Lortie, 2002, p.67). Lortie is not alone in making such claims.

Through the metaphor of 'an avalanche of experience', Britzman (2007, p.2) captures the potential power of the unmediated images of teaching that the STs have experienced over the course of many years, and which have implicitly shaped their expectations concerning education. Such 'personal history-based beliefs' (Holt-Reynolds, 1992, p.326) are replete with myths, stereotypes, and unexamined preconceptions about teaching and learning. Very appropriately, McLean (1999) refers to these enduring assumptions as one's 'long-haul baggage'. Employing a different set of metaphors for the same issue, Feiman-Nemser and Buchmann (1983, p.3) alert us to the 'pitfalls' of such personal experiences and the ever-present peril of becoming ensnared in a series of 'conceptual and behavioral traps'. This pedagogical entrapment is a product of '*unquestioned* familiarity' concerning teaching, which 'arrests thought and may mislead it' (ibid p.6, emphasis in original) by virtue of the 'seductive power' (Finlay 2008, p.17) of one's pre-understandings. In a similar vein, Munby and Russell (1994) discuss how the 'authority of experience', in the form of knowledge derived through personal experience, can hold sway over the traditional 'authority of position' or the 'authority of scholarly argument'. Their analysis suggests that the apprenticeship-of-observation is constantly acting as a powerful and yet invisible hand on the tiller of professional learning. Further, it underscores very succinctly that STs do not represent a '*tabula rasa* with empty disk space ready and passively awaiting the received wisdom and orthodoxies of current educational thinking' (Sugrue, 1997, p.222).

Through such '*unquestioned* familiarity' we find ourselves again in the 'court of common sense' (Pring, 2015), or are even subjected to the 'tyranny of common sense' (Cordingley, 2015, p.249), which contains 'well-worn and commonsensical images of the teacher's work and serves as the frame of reference for prospective teachers' self-images' (Britzman, 1986, p.443). It would appear, therefore, that the apprenticeship-of-observation constitutes an 'overarching problem' (Bullock, 2011, p.2), and consequently perhaps represents 'one of the most powerful challenges in learning to teach' (Darling-Hammond, 2006a, p.36). So how can a TE encourage STs to 'stand outside the ritualised routines and myths' (Nuthall, 2005, p.895) of teaching and gain an appreciation of how these may affect beliefs, and consequently what is perceived? Yet, encouraging STs not only to rethink their assumptions about teaching and learning, but also to act on them, is 'neither linear nor simple' (Clift and Brady, 2005, p.330).

2.8.1 Disrupting the apprenticeship-of-observation

The problem of the impact of the apprenticeship-of-observation is well documented, but effective pedagogical interventions for ‘disrupting’ it are not (Westrick and Morris, 2016, p.159). If the apprenticeship-of-observation does possess such overarching powers as is claimed, then it behoves us to develop a teacher-education pedagogy that de-familiarises the familiar and familiarises the unfamiliar so that new ways of seeing can be encouraged. But how does one disturb and disrupt the apprenticeship-of-observation in ways which oppugn potentially simplistic and naïve notions about the nature of teaching and learning? Arguably, this question possesses a particular relevance in the light of what is often considered to be the default setting of many ITE courses, namely the ‘front-loading’ of STs in a theory-into-practice approach (2.4.1). Bullock (2011, p.38) suggests that framing ITE in this way means that ‘most teacher education programs do not prepare candidates to learn from experience’; indeed, as already noted, ‘the provision of propositional knowledge by itself will have little impact on the complex and difficult process of learning how to teach’ (Wideen, Mayer-Smith and Moon, 1998, p.167) because such a diet of propositional knowledge ‘can never challenge the perceptual knowledge gained, uncritically and unintentionally, over years in schools’ (Russell, 2008, p.4).

So how does one ‘exorcise’ the ‘ghost in the machine’, namely the apprenticeship-of-observation, in ways which help STs to experience, see, and possibly come to value, different visions of education? How can STs be presented with ‘images of the possible’ (Hammerness, 2006, p.82) and a ‘language of possibility’ (Rosaen and Schram, 1998) in ways that are impactful? Such questions lie at the very heart of this study and, thus far, there is every indication that there are no patent, off-the-shelf solutions when it comes to transforming old beliefs. Further, as discussed above, the educational process needs to promote the capacity to see through new eyes. And as noted in 2.7.1, failing to foster such developmental impulses can lead to Ellis’ (2010) ‘impoverishing experience[s]’ and severely curtail the ‘power to go on growing’ (Dewey, 1904) or, as Buchmann (1987, p.162) so vividly notes, the STs ‘will live and die as tadpoles, nothing more’. In such circumstances, it is pedagogical atrophy rather than pedagogical growth that is the order of the day.

2.8.2 The troublesome work of altering old beliefs.

From the discussion thus far there is every indication that experience alone is not the best teacher; nor does it provide an automatic gateway to understanding. In particular, beliefs can close the mind to the new ideas that experience could incite, often because ‘the path of least

resistance and least trouble is a mental rut already made. It requires troublesome work to undertake the alteration of old beliefs' (Dewey, 1933, p.30). It falls to the lot of the TE to perform this 'troublesome work' with its associated complexities, involving providing STs with qualitatively different experiences from those which they encountered in their own schooling. At root this is a question about how STs learn – and first and foremost, it is about *process* rather than *content*. According to Korthagen (2017b, p.528, emphasis in original), many studies outline the '*outcomes* of teacher learning' – often highlighting how disappointing such learning is – whilst there are few studies that examine in depth 'the *process* of teacher learning'. Further, as discussed in 1.6, there exist even fewer studies that examine STs' meaning-making processes within a teacher-education classroom. As will be seen in what follows, studies that do exist tend to focus on modelling. So how effective is modelling as a vehicle for disrupting the apprenticeship-of-observation by encouraging an examination of underlying beliefs and helping STs to see into practice? I now go on to discuss this particular question.

2.9 Modelling

2.9.1 The many meanings of modelling

The *prima facie* simplicity of the term 'modelling' is deceptive. On the surface, the notion of pedagogical modelling shares similarities with its catwalk equivalent in that it denotes demonstrating something – in this case by a TE – which is then intended to be adopted for use in the classroom as part of one's teaching apparel. Simplistic modelling in this pure sense stems from the 'immaculate assumption' (Kane, 2007, p.67) that telling and demonstrating lead directly to enactment in practice. However, such a transmission model of training is generally judged to be ineffective (Lunenburg, Korthagen and Swennen, 2007; Korthagen *et al.*, 2001; Wideen, Mayer-Smith and Moon, 1998). Further, Loughran (2006, p.95) is at pains to divest us of the 'misconception that modelling is a mock teaching demonstration or a tacit call for students of teaching to "teach like me"' by copying uncritically the activities, ideas, and techniques presented by a TE. Such mindless mimicry based on 'show-and-tell teaching' is, however, ill-suited for the task of helping STs to see into the complexities of practice (Crowe and Berry, 2007, p.31).

Interpretations concerning the nature of modelling vary. For example, the teachers in Boyd and Harris' (2010) study reported an understanding of modelling that extended from role-playing in which the tutor acted as the class teacher and the STs as pupils, through to 'a form

of explicit reflective learning in which the tutor explains their own questioning and planning into the effectiveness of their practice in adult teacher education' (ibid, p.17). Boyd and Harris' findings suggest that different forms of modelling occupy different positions on what could be characterised as a *weak-strong modelling continuum* spanning role-play and the atheoretical demonstration of teaching techniques at the one end (*weak end*), with modelling accompanied by a theoretical meta-commentary on practice at the other (*strong end*). I explore this observation more fully in chapter five when I adopt the idea of a *weak-strong modelling continuum* as a heuristic for seeing into practice. *Pro tem*, I propose to note that, following Loughran (2006, p.6), I am interpreting the *strong* version of modelling as encapsulating the very essence of teaching about teaching:

Teaching about teaching goes beyond the traditional notion of modelling, for it involves not just teaching in ways congruent with the expectations one has of the manner in which pre-service teachers might teach, it involves unpacking teaching in ways that gives (*sic*) students access to the pedagogical reasoning, uncertainties and dilemmas of practice that are inherent in understanding teaching as being problematic.

Loughran's more complex conception of modelling transcends the 'teach-like-me' transmission approach and the 'tyranny of teaching as telling' (ibid, p.94); instead, the focus is placed on rendering explicit the 'entanglements' (Palmer, 2017, p.3) of teaching. Here the challenge for a TE is to create windows into his/her mind so that STs can see the inner pedagogical workings with their underpinning rationales. However, 'the articulation of knowledge of practice is a difficult and complex task that demands considerable awareness of oneself, pedagogy and students' (Loughran and Berry, 2005, p.193), not to mention the mastery of a rich understanding of the complexities of learning about teaching. It is this ability of a TE to articulate a knowledge of practice in ways that are accessible to others that forms a key focus of this study.

Above, Loughran also refers to 'congruent teaching'. At one level, this implies that how one teaches 'IS the message' (Russell, 1997, capitals in original), a 'teach-as-you preach' approach that employs 'teaching methods considered to be desirable for application by student teachers during teaching practice' (Struyven, Dochy and Janssens, 2010, p.43). Modelling in this sense involves a TE demonstrating the principles of practice through his/her own practice and making links to wider bodies of public knowledge:

That the relationship between theory and practice should be apparent *within* the teaching and learning episodes we create is central to learning about teaching. There seems little point in telling student teachers about the benefits of group work if those

benefits are not demonstrated through our teaching practice. (Loughran, 1997a, p.5, italics in original)

Here Loughran is proposing what could be considered to be the defining elements of effective modelling. First, there is an explicit dialectical interplay between theory and practice. Second, there is congruence between medium and message or, as McLuhan (1964) once famously remarked, ‘the medium is the message’, thereby avoiding the ultimate pedagogical parody of ‘Don’t do as I do. Do as I say’—or even ‘Do as I did’. However, there is much evidence to suggest that if the congruent modelling stays at the implicit level, then the pedagogical significance of the key ideas tends to pass unnoticed on the part of the STs (Lunenberg, Korthagen and Swennen, 2007, p.590) and STs are unable to access the complex process involved in fostering learning – what Perkins (2009) terms the ‘underlying game’. Implicit modelling is thus poorly placed to create clear messages against the ‘noisy background’ (Bullock, 2011) of the myriad competing challenges of learning to teach, which include the ever-present influence of the apprenticeship-of-observation.

But there are other levels to congruent teaching. These involve the TE not only ‘walking the talk’, but also explaining the pedagogical choices that have been made by providing a meta-commentary (Swennen, Lunenberg and Korthagen, 2008, p.531) on the practices employed. Boyd (2014a, p.60) characterises these more explicit and multi-layered dimensions of modelling as a ‘lesson within a session’, whilst Loughran and Berry (2005, p.200) describe such an approach as being at the ‘the heart of what modelling really means’ because it entails ‘laying bare one’s own pedagogical thoughts and actions for critique and doing so to help student-teachers “see into practice”— all practice, not just the “good things we do”’. But as has been noted in section 2.7.4, undergoing an experience does not automatically equate with new insights. In such cases, the question arises as to which strategies can be employed, against a ‘noisy background’, to make salient and explicit the underpinning rationale of activities. To explore these questions, I have adopted and adapted elements of two taxonomies (Boyd, 2014a; Lunenberg, Korthagen and Swennen, 2007) that depict different forms of explicit modelling. The modified elements are:

- Congruent higher-education teaching: thinking aloud and stepping out
- Explicit modelling and facilitating the translation to the STs’ own practices
- Modelling and making links to public knowledge

2.9.2 Congruent higher-education teaching: thinking aloud and stepping out

The strategies of ‘thinking aloud’ in, or ‘stepping out’ of, a higher-education teaching session (see e.g., Bullock, 2011; Kosminsky *et al.*, 2008; Crowe and Berry, 2007; Senese, 2007; Loughran and Berry, 2005; Loughran, 1996) entail explaining one’s pedagogical rationale to STs either before, during, or at the end of a teaching session. These musings before, during – hence ‘stepping out’ – or after modelling, are designed to make explicit not only the complexities of practice, but also the professional wisdom and values enshrined in the facilitation of a particular teaching episode. The reasoning here is that that STs need to access how teachers think about teaching, therefore TEs ‘should provide insights into their *pedagogical reasoning*’ (McKeon and Harrison, 2010, p.27, italics in original) as a means of facilitating this process. Sometimes, the unpicking of the pedagogical reasoning can involve a reflective discussion between two TEs who are co-teaching a session. In the case of Berry and Loughran (2002), such a discussion can be framed through employing a ‘confrontational pedagogy’, in which one of TEs has just played the role of a recalcitrant pupil in a micro-teaching session.

Modelling of this type, accompanied by a meta-commentary, arguably raises the likelihood of more messages being noticed by STs than would be the case with just implicit modelling. Yet, these thinking-aloud/stepping-out protocols are not without their limitations. Although these strategies may open a window on the complexities of practice, the view is nevertheless higher-education centric, which raises questions of relevance – in the STs’ eyes – for the school classroom. Further, should a ST spot pertinent links, there remains the somewhat tall order of ‘transfer’ (2.4.2). Additionally, the ST experience is likely to be vicarious and therefore lacking in ‘felt facticity’ (Ellis, 2010, p.117), thus devoid of the affective dimension discussed in 2.6.4, suggesting a weak intervention in terms of ‘personal meaning and felt significance’ (Feiman-Nemser and Buchmann, 1983, p.11). Such an activity, no matter how well conceptualised and carefully crafted, will perhaps possess more ‘personal meaning and felt significance’ for a TE than for the STs because ‘what seems obvious to the teacher educator [for practice] is not so to the student teacher’ and is ‘too abstract, too theoretical, too far off’ (Kessels and Korthagen, 1996, p.17), underscoring the problem of transfer encountered in 2.4.2.

Instead of attempting to open up windows on practice by tapping into higher-education teaching techniques that are congruent with key principles of school-related practices, modelling can be much more direct through the simple expedient of demonstrating activities for the school classroom. However, if the related thinking-aloud process – assuming that it

exists – proceeds solely from a TE’s personal experience, then the perspective offered to the STs, although practical, will be person- and situation-specific. Such prescriptions for practice that fail to foster any form of interplay between personal and public knowledge are, at best, encouraging a more restrictive view of practice and, at worse, may merely be engendering an impoverished form of mimicry. Indeed, what would be happening possesses distinct parallels with school-based mentoring practices characterised by over-critical feedback based on an apparent belief on the part of some mentors that their approach is the only approach (Hobson and Malderez, 2013, p.96). Such ‘judgementoring’, as Hobson and Malderez describe it, promotes ‘adaptive’ rather than ‘developmental’ learning (Ellström, 2001, p.423). Consequently, there is no opportunity for a meaningful interplay between situated knowledge and wider aspects of professional knowledge (Edwards, 1995).

Admittedly, if one is a ‘reproduction-orientated’ ST searching for “‘cut-and-dried” practical [teaching] suggestions’ (Oosterheert and Vermunt, 2001, p.149), then a TE’s practical teaching tips will undoubtedly be appreciated. Subconsciously, such an approach is also likely to foster a sense of safety and security, because the STs are not required to ‘question the limitations of their existing interpretative frame of reference and (therefore) do not experience non-understanding’ (ibid, p.149). However, such soothing familiarity, or ‘cognitive ease’, is arguably not as effective in terms of long-term learning as experiencing some form of ‘cognitive strain’ (Didau, 2015, p.218). The same could also obtain for a TE, since an unquestioning teach-like-me approach can act as a sort of vulnerability-shield that provides protection against feeling undermined by the creeping uncertainty that might accompany a more critical and problematising stance. In such instances, neither the TE nor the STs need to run the ‘risk of reconceptualisation’, where even a small change in one’s perception of classroom reality ‘may generate many more changes, if not profound alterations in the perception of oneself and one’s “being in the world”’ (Oosterheert and Vermunt, 2001, p.152).

If thinking-aloud protocols remain at the level of personal experience and amount to no more than an anecdotal and atheoretical recitation of recipes for ‘best practice’ and ‘what works’, then STs are being short-changed. STs who implement best-practice prescriptions may appear to be acting as a teacher would, but without more nuanced understandings they run the risk of employing teaching activities that amount to no more than ‘empty procedural tricks’ (Furlong and Maynard, 1995, p.156). For as Biesta (2010, pp.496-497) reminds us, the concepts of ‘best practice’ or ‘what works’ are problematic since education, in his view, is an ‘open, recursive and semiotic’ system; and is thus anything but predictable. Winch, Oancea and Orchard (2015, p.214) propose that in such circumstances theory plays an important role

as a catalyst for the critical reflection required to go beyond commonsense 'what works' approaches to those that constitute 'good sense', the latter being the equivalent of what Biesta (2009) terms being 'educational wise'. 'What works', therefore, 'is teachers who take risks and change theories, methods and programs when standard practices do not suffice' (Duffy, 2002, p.340). For Duffy, a central task of ITE involves developing theoretically-informed teachers who have the vision, courage, agency, and energy to bring about change when 'what works' does not work. The point of departure for exercising agency in this way is ensuring that STs have access to 'the pedagogical reasoning, uncertainties and dilemmas of practice' (Loughran, 2006, p.6) – and this includes explicit links to public knowledge. For as already discussed in 2.7.1, failure to do this could lead to 'mis-educative' experiences because the lack of pedagogical understanding would hamper the 'power to go on growing' (Dewey, 1963). The STs would be functioning at the level of pedagogical operatives rather than life-long 'students of teaching' (Dewey, 1904).

Modelling of this type potentially possesses an additional drawback in that when such activities are modelled, or even practised and unpicked in micro-teaching, STs are not experiencing the activities as 'real learners' since they already have the requisite levels of subject knowledge. This observation could have implications for seeing into practice from a teacher-education classroom. In particular, the scope for being challenged – both cognitively and affectively – would become diminished, with a concomitant loss in the potential for 'reflective traction' (Brandenburg and Jones, 2017); there would certainly be no opportunity for the 'productive failure' (Kapur 2014 and 2015) that can be so beneficial in terms of surfacing and challenging one's 'paradigmatic assumptions' (Brookfield, 2017), and thereby disrupt the hegemony of common sense (2.8). The implication here is that learning remains 'private and hidden', whereas to be at its most powerful, it needs to become 'public and communal' so that 'it can be tested, examined, challenged, and improved' (Shulman, 1999, p.12). Following Lunenberg, Korthagen and Swennen (2007), orchestrating such challenges requires explicit modelling to be complemented by strategies that both facilitate the translation of modelled behaviours to the STs' own practices, and also foster the connection of exemplary behaviour with theory.

2.9.3 Explicit modelling and facilitating the translation to the STs' own practices

For Loughran (1997b, p.62), modelling is a useful vehicle for creating insights into the 'why' of teaching – it is not about 'creating a template of teaching for unending duplication'. Modelling of principles is arguably just a first step on the road to enactment: 'knowing "why" must be

linked to knowing “how” if student-teachers’ pedagogical knowledge is to be more than a list of propositions’ (ibid, p.63). Britzman (2003, p.31) makes a similar point by reminding us that ‘learning to teach is not a mere matter of applying decontextualized skills or of mirroring predetermined images’. Thus, more attention should be given to creating time and space for the STs to consider how what they have experienced through modelling could apply to their own teaching (Boyd, 2014a, p.68). However, in Boyd’s study there was little evidence of TEs requiring STs to ‘to use critical reflection and reconstruct (or reject) the modelled strategy in relation to their own classroom practice’ (p.66). Lunenberg, Korthagen and Swennen (2007) came to similar conclusions, while Canrinus *et al.* (2019, p.110) propose that TEs provide too few opportunities for STs to consider how to ‘translate principles of good teaching presented into specific classroom practices’. This point is underscored by Dewey (2012, p.63) when he contends that experience should be employed to the fullest extent of its meaning that entails both experimenting, or trying things out, as well as experiencing in the sense of being subjected to a particular process.

Notably, perhaps, the idea of ‘considering’ is significant because it frames the STs’ learning as reconceptualisation rather than replication, suggesting meaningful adaption rather than mindless adoption. Further, ‘experiencing’ in Dewey’s active-passive sense provides a rich context for any potential reconceptualisation. But is it possible to promote meaningful translations to practice from within a teacher-education classroom? Should such endeavours not be centred in the ‘real’ practice of the school classroom? These questions form part of this study’s focus. They are particularly pertinent when projected against the backdrop of the policy environment’s ‘turn to practice’ (1.2), the natural corollary of which is an in-built antipathy towards theory (2.5.2).

2.9.4 Modelling and making links to public knowledge

Over 20 years ago, Bullough (1997, p.20) was drawing attention to the irony of TEs who, when talking about teaching, ‘ignore public theory and instead rely on personal experience and implicit theory, on common sense’. There is little evidence to suggest that, with a few exceptions, the situation has improved in any way in the intervening years (see e.g., Korthagen, 2017a; Russell and Martin, 2016; Field 2015; Boyd 2014a; Field, 2012). Perhaps the best summary of the ongoing situation concerning TEs’ ability to combine a meta-commentary on modelling with links to public theory can be found in Lunenberg, Korthagen and Swennen (2007). Their findings would appear to resonate with most TEs’ practices today in that TEs apparently do not possess the knowledge and skills needed ‘to use modelling in a

productive way, to make their own teaching explicit, and to rethink the connection between their teacher education practices and public theory' (ibid, p.597). Such an assertion has interesting implications for this study and any insights that can be gained into the articulation of a knowledge of practice that involves theoretical understanding.

Another finding from Lunenberg, Korthagen and Swennen (2007) was that the correlation between experience and being able to articulate a knowledge of practice – especially with reference to public theory – did not necessarily increase with experience. This finding chimes with Bullough's observation above, as well as with Field (2015). In a follow-up study to Lunenberg, Korthagen and Swennen (2007), Swennen, Lunenberg and Korthagen (2008) found some indications that coaching could help improve this situation. Jackson and Burch (2019) in their work with school-based TEs reached similar conclusions. Thus, it would appear that modelling that fosters an explicit interplay between public (published) knowledge and practical wisdom (Boyd, 2014b; Boyd, Hymer and Lockney, 2015) lies beyond the capability of many TEs. But there may be other factors at play here:

Holding theory and practice in mutually fortifying tensions has always been uncomfortable and demands a tolerance of ambiguity increasingly at odds with the current culture of performativity in schools and universities. (Baumfield, 2015, p.92)

The implication of the above is that the TEs' pedagogic souls are assailed by the 'terrors of performativity' (Ball, 2003) through the pressures associated with ST satisfaction surveys that do not consider critical engagement with course principles and pedagogy, but focus instead on what the STs rate best (Barnes and Jenkins, 2014). Navigating such pressures requires a large degree of professional discretion that is reminiscent of that exercised by Lipsky's (2010) street-level bureaucrats as they interact at the interface between policy and the public. Unsurprisingly, those TEs who challenge STs' conceptions about learning to teach as being 'the provision of "how to" or "what to" teach together with pedagogical tips, tricks and techniques', run the risk of being regarded by their STs as 'unrealistic and unhelpful' (Berry, 2004, p.150). Therefore, there arises a tension between providing off-the-shelf certainty in terms of the 'tricks of the trade' and trading in the uncertainties born of fostering critical awareness. Berry (2007) explores in great depth some of the tensions in teaching about teaching. Her basic thesis is that such tensions are not resolvable; instead they have to be lived and managed through a TE's *phronesis*, an important dimension of which is arguably a willingness to embrace 'epistemological provisionality' (Bottery, 2006, p.110) and value the 'dissenting voices and the jagged edges of contrasting opinions' (Davis and Sumara, 2010, p.859) as catalysts for analysis and potential change. Perhaps it is therefore fitting to conclude

that there is more to modelling than meets the eye, especially in relation to seeing into practice with theoretical understanding – both on the part of TEs and STs.

2.10 Some concluding thoughts

Throughout this chapter it has become evident that a key challenge in ITE resides in how best to exploit practical experiences in ways that hone technical skills whilst, at the same time, providing a powerful forum for inciting intellectual reactions that render theoretical instruction *real* and *vital*. However, as noted throughout, and especially within the sections on *episteme/phronesis* and modelling, engendering a dialectic between theory and practice is a complex, challenging and multifaceted task. It is for these reasons that Korthagen (2001a) describes ITE as a ‘problematic enterprise’. Further, it is an endeavour that is constantly haunted by the spectre of the apprenticeship-of-observation. If this were not enough, then the complexities of ITE find themselves further compounded through having to operate in a policy environment, which, either implicitly or explicitly, derogates the role of theory and consistently valorises practice as the ‘royal road to learning’. The ongoing saga of the two ‘sacred stories’, with their potentially destructive binaries, provides ample evidence for this assertion. But above all, it is perhaps important to acknowledge that ‘pedagogies that bridge theory and practice are never simple’ (Shulman, 2005a, p.56), especially since they involve the capability to ‘bounce back and forth between the concrete and conceptual’ (Mintzberg, 2011, p.163) – a skill that we have already noted would appear to be beyond the capacity of many TEs. These observations prompt the question as to the form that such pedagogies could take if they are to be effective at helping STs to see into practice with theoretical understanding. This conundrum lies at the heart of my study and the exploration of the mystery of the STs’ positive attitude to theory as outlined in 1.3.1.

3 The Study's Conceptual Framework

3.1 Introduction

By way of departure, I revisit from 1.3.2 some of the research-related dilemmas which helped to frame the construction of my research design. I then consider what constitutes a conceptual framework, subsequently narrowing the focus to the key components of the conceptual framework developed for this study. The remaining sections of the chapter examine each of these components in greater depth, noting that some elements have been covered in chapters one and two. To this end, I start with the philosophical assumptions underpinning the study. This is followed by a discussion of my ever-shifting positionality on the insider-outsider continuum, and how this impacted on the meaning-making process. The focus then shifts to exploring ethical issues within the framework of 'procedural ethics' and 'ethics in practice' (Guillemin and Gillam, 2004). Against this backdrop, I outline the practicalities of the data-generation activities and their accompanying underpinning rationale. These comprise: observations of teaching sessions followed by a debriefing interview with the TE; ST focus groups; and semi-structured interviews with the TE and STs. I also explore the issues relating to transcriptions. Following the data-generation discussions, I elucidate how the data analysis was conducted within the framework of reflexive thematic analysis. Before tracing the different steps in the analysis from data familiarisation through to the final theme development, I firstly explain how the study was positioned within the different schools of thematic analysis. In concluding the chapter, I draw the strands of the analysis process together by challenging and modifying a common metaphor in the development of themes in qualitative research, namely that of 'researcher as quilt maker'.

3.2 Researching educational practice and the role of dilemmas

Section 1.3.2 outlined some of the dilemmas that arise when researching educational practice. These dilemmas acted as catalysts for the construction of my conceptual framework in that they served to delineate key issues that I needed to consider. Further, they also reminded me that, in the face of such challenges, with all the attendant ambiguities and context-related meanings, I needed to strive for what Schwandt (2001, p.xxv) terms 'perceptive equilibrium'; that is, a dialogue between principles and the particulars of the research context. For example, there was a constant interplay between ethical considerations and the fluctuating course-related pressures bearing down on both STs and the TE, meaning that certain research activities needed to be limited to less stressful periods of time, or even cancelled. It was the

conceptual framework that provided the enabling structure for such a dialogue between principles and the practicalities of the research. However, as a precursor to exploring this particular point, some clarification is required concerning how I am interpreting the term 'conceptual framework' within the context of this study.

3.3 Conceptual frameworks: confusions and clarifications

The function of a conceptual framework is often explained in the literature through a rich range of map-related, journey and scaffolding metaphors (see e.g., Kumar and Antonenko, 2014; Miles, Huberman and Saldaña, 2014; Blaxter, Hughes and Tight, 2010; Gubrium and Holstein, 1997). Such a metaphorical nimiety would perhaps indicate that a conceptual framework is a contested term and that defining it can be characterised as a challenging undertaking. Within this study I draw on Wisker (2012), for whom the conceptual framework permeates and scaffolds every aspect of the research, acting as an 'informing backbone' (ibid, p.132). I was attracted to the notion of an 'informing backbone' because it suggested both flexibility and support in a research process that is inevitably replete with 'risk, challenges, changes, problems, surprises, regulations, considerations' (ibid, p.417). I found it useful, therefore, to think of the conceptual framework as a tight-loose system in which the underpinning principles – the 'informing backbone' – provided the parameters within which, for example, the 'living of research ethics' (Macfarlane, 2010) could be enacted and methods adapted or adopted according to the ongoing challenges of the unfolding research. As a result, there was a constant interplay between principles and everyday practicalities, but within well-defined philosophical parameters.

3.4 Components of the conceptual framework

I would contend that the effectiveness of my conceptual framework resides not in its components as static entities, but rather in how the different elements interacted. As such, I regard the conceptual framework, first and foremost, as a process rather than a product. In what follows, I attempt to capture the processes at play both within and between each of the components as they both enabled and constrained the research design and its enactment. The key components of the conceptual framework were inspired by Ravitch and Riggan (2017) and comprised:

- **Purpose:** personal rationale for the research and wider purpose
- **Perspectives from the literature:** developing the study's theoretical lenses

- **Philosophical assumptions:** philosophical parameters and research design
- **Positionality:** working the hyphen on the insider-outsider continuum
- **Procedural ethics and ethics in practice:** the impact on research design
- **Practicalities:** data generation, analysis and interpretation

In chapter one I outlined my personal rationale for the research and its wider purpose. In chapter two I focused exclusively on the study's theoretical lenses. I commence the discussion that follows with the third component, namely the underpinning philosophical assumptions.

3.5 Philosophical assumptions: philosophical parameters and research design

As Crotty (1998, p.66) notes, 'different ways of viewing the world shape different ways of researching the world', thus leading to 'different stories' (Mason, 2018, p.4). Crotty's and Mason's observations indicate a close relationship between philosophical parameters, research design and the ultimate outcomes of a study. As will be recalled from 1.4, the principal aim of the research was to ascertain how a university-based TE constructed learning in a teacher-education classroom so as to help STs to see into practice with theoretical understanding. Because the focus was on the individual meaning-making processes of both the TE and her STs, a decision was made, in collaboration with the TE, to frame the research within a constructivist philosophical perspective. This design decision was based on the premise that knowledge would be constructed, rather than discovered (Savin-Baden and Major, 2013, p.64), through employing research methods that fostered the mutual construction of data (Charmaz, 2008, p.469). In this context, therefore, data were generated from the 'construction of empirical material' (Alvesson and Kärreman, 2011, p.45). The implication was that all involved in the research, including myself as researcher, would be constructing the realities in which we were participating (Charmaz, 2006, p.187). This obtained in particular for the way in which interviews, debriefing interviews following teaching observations, and focus groups were orchestrated (see 3.8.3 and 3.8.5). However, since data were not givens to be 'collected', but were instead 'created' in multiple acts of interpretation, in which my 'self' was very much embedded, acting both as a research tool and a creator/co-creator of meaning, it is important to consider my positioning in relation to both the research and the context.

3.6 Positionality

Hellawell (2006, p.485) provides a useful definition of an insider as a person who is '*a priori* familiar with the setting and people s/he is researching'. In terms of context, I would describe my positionality in this research as that of a *quasi*-insider. I make this claim based on the fact that I had left the institution in the study one year previously, indicating perhaps that I possessed an extensive, but not totally up-to-date, *a priori* familiarity with the setting. However, I had not been involved in the MFL area of the institution for over ten years, therefore making me more of an outsider. These observations suggest that it is possible to occupy simultaneously different positions on what is often referred to as an 'insider-outsider continuum' (Trowler 2014a and 2014b; Hellawell, 2006). What appears to determine one's positioning on the continuum is the level of *a priori* familiarity with a particular feature of the research context, and this can vary according to which aspects of an institution one is investigating. As I discovered, such an assessment can be misleading since a perceived familiarity could cloud, or even obscure, the interpretive lens. Consequently, I schooled myself to be alive as to how my pre-understandings and expectations might influence my interpretations (Alvesson and Kärreman, 2007, p.1270). Here my mantra was to make the familiar strange by questioning my taken-for-granted assumptions (Mannay, 2010, p.95) through the simple expedient of constantly probing with the TE her rationale for undertaking certain activities, even though I thought I knew the answers. As I now explain, on the basis of two vignettes, this strategy often paid dividends by elucidating unexpected insights derived from a very different positioning on the insider-outsider continuum from the one that I thought I had been occupying.

In the first vignette, on the basis of my insider knowledge of ITE, I became puzzled that the TE avoided several opportunities to pursue theoretical points that had cropped up in a previous session. The assumption that I made, derived from the literature on modelling, was that the TE was struggling to weave coherent theoretical strands into her teaching – a not unusual phenomenon amongst TEs (2.9.4). In the post-lesson discussion, I was able to probe this lack of continuity. The TE's response revealed that on this issue I was very much an outsider. The TE explained that her pedagogy was being partly driven by the institutional policy of bringing in School Direct STs from outside to join, for some sessions, a well-established university-based group. Because the TE did not want the School Direct cohort to feel like outsiders, she avoided pursuing certain key theoretical points with which only her university STs would have been fully *au fait*. Deepening this discussion, I discovered that, much to the TE's frustration, her teacher-education pedagogy was often being driven by institutional structures and

policies, rather than what she would have deemed appropriate from an educational perspective (see pp.105-107). In the second vignette, the TE was teaching her group Serbian. Drawing on my insider knowledge of language-teaching techniques, I judged the TE to have made a series of quite alarming pedagogical *faux pas*. My initial assumption was that the TE was struggling with the modelling of basic practices. However, it transpired that the imposition of an excessive cognitive load on the learners – that was the nature of the ‘*faux pas*’ – was actually a carefully-crafted pedagogical strategy to model issues concerning the working memory and cognitive-load theory (see 4.3.1).

The above scenarios, and many similar ones, prompted me to ponder further my positionality on the insider-outsider continuum and its impact regarding research outcomes, especially in relation to data generation and analysis. Returning to Hellowell’s definition above of an insider being a person who is ‘*a priori* familiar with the setting and people s/he is researching’, it occurred to me that there was another dimension to the level of ‘insiderliness’ that is not context-dependent in an institutional sense, but instead is linked to knowledge of the topic being researched. In this study, such knowledge was related to the pedagogy of teacher education. At the time of the research, I had some 28 years’ experience in this area. This background did prove to be invaluable as an entry point to the research from an initial rapport-building perspective. However, I have always felt uncomfortable with descriptions of rapport-building because, to my mind, lurking below the surface are ethical dangers of an exploitative one-way street, in which only the researcher benefits in the form of the information ‘mined’ from the minds of the research subjects. And in this context I employ advisedly the term ‘subjects’, rather than ‘participants’, to indicate the potential done-to nature of such a relationship. From my perspective, rapport-building represented just a first step in the establishment of more extensive relationships of a mutually beneficial nature. As it transpired, it was my knowledge of ITE that became a key factor in the ‘dynamics of the *research relationship*’ (Josselson, 2013, p.8, italics in original) in a way that went beyond rapport-building to something potentially more profound, the impact of which I had not fully appreciated until my attention was drawn to it by the TE.

Essentially, her proposition was that, despite my having retired from the field, she regarded me as ‘*an insider still*’ (personal communication, 30 September, 2016). She also speculated that had this research been undertaken by a ‘true outsider’, then she would not have developed the new professional insights which she maintained arose from our many interactions. She also made the supplementary point that sharing the same professional language and background, but not necessarily the same perspectives, obviated the need on

her part to go into great detail about certain circumstances, thereby bringing to the research what she termed an invaluable 'elliptical element'. This, she claimed, gave her and the STs the freedom to be more expansive in their responses since they were not having to spend time explaining the more routine elements of ITE. Arguably, therefore, this elliptical element helped to reduce the cognitive strain of being interviewed and, as a natural corollary, increased the possibilities for thinking and the creation of meaning. This intriguing insight was certainly not one that I had considered when contemplating issues relating to the insider-outsider continuum.

Throughout the research it became clear that a dichotomous view of insider-outsider knowledge, as represented by the hyphen within the insider-outsider continuum, was an unproductive and somewhat simplistic bifurcation. As Dwyer and Buckle (2009) suggest, one can be both an insider and an outsider; indeed, these differing perspectives can feed each other dialectically, a process termed by Humphrey (2007) as 'activating the hyphen' and by Cunliffe and Karunanayake (2013) as 'working within hyphen spaces'. For the latter, working in this way emphasised 'not the boundaries, *but the spaces of possibility*' (ibid, p.365, italics in original). From my personal experience, I can attest that working within the hyphenated space of the insider-outsider continuum was like working within a 'third space' (Jackson and Burch, 2019), namely a space in which my personal assumptions often needed to be suspended (see above) by questioning the familiar and being open to the unfamiliar and, above all, by silencing the sometimes 'shrill critic within me' (Kozleski, 2011, p.257). Following Etherington (2004, p.36), this process required a self-awareness that extended beyond being self-aware into the creation of a dynamic process of interaction, both within myself and between me and the research participants. As the next example demonstrates, these interactions often took place in ways that shaped interpretations and research-related decisions.

The TE's realisation very early on in the research, regarding the potential usefulness of my presence for her own professional development, led to a key 'ethically important moment' (Guillemin and Gillam, 2004) in which the research design was changed. What proved to be a serendipitous event occurred as a result of a couple of pilot observations, after which the TE spontaneously analysed how she thought the sessions had gone. During this process, I asked a few questions concerning what I had observed. Because she found this interaction useful from a professional-development perspective, the TE suggested substituting the planned stimulated-video recall procedure (two sessions in total during the year) with an ongoing sequence of observations and immediate debriefings to be undertaken in free slots in the middle and at the end of the day. Underpinning this suggestion was the TE's concern that the

amount of time required by the original plan for the stimulated-video recall would be too high since it entailed watching together a recording of a teaching session and repeatedly pausing the video to unpick the TE's thinking behind different teaching activities. Following this format, a two-hour recording could have involved as much as six hours of viewing and discussion. On top of the time-consuming nature of this approach, the TE's teaching timetable meant that there would have been a delay of several weeks before any viewing and discussions could have taken place. It was the TE's view that such a time-gap would have resulted in a *post-hoc* rationalisation, rather than deep reflection. Her reasoning here resonated strongly with the limitations of stimulated-video recall as a data-generation method. For example, Gass and Mackey (2000, p.86) advise carrying out the recall interview as near as possible to the event so as to reduce issues such as memory loss and memory contamination; Lyle (2003, p.864) draws attention to the dangers of introducing 'sanitised' versions of events during the recall process, if there is a long delay between the original teaching and the recall session. Consequently, the proposed stimulated-video recall procedure was replaced with a debriefing interview immediately after a teaching session. This resulted in sixteen post-teaching interviews instead of two.

3.7 Ethics

The above vignette has demonstrated how an 'ethically important moment' led to a significant change in research methods. It is an example of what Guillemin and Gillam (2004) refer to as 'ethics in practice'. By this they mean the thinking-through of ethical issues as they crop up within the framework of 'procedural ethics'. Within this study, the ethical approval obtained through the university's ethics committee formed the procedural ethics dimension, namely an ethical architecture of guiding principles. From an ethical point of view, what was being witnessed above was an interplay between research purpose and ethics that was both dynamic and sensitive. It was dynamic because it demonstrates how research designs can change in response to on-the-ground issues, but do so within the context of well-defined parameters; it was sensitive because to have continued with the time-consuming planned procedure would have arguably placed the TE under unacceptable, and therefore unethical, pressure. In what follows, I outline the procedural ethics framework and then describe instances of ethics in practice. Following Groundwater-Smith and Mockler (2007, p.199), my intention is to elucidate how the conduct of ethical research can be a substantive endeavour, rather than sticking assiduously to a static set of principles (Macfarlane, 2010, p.24).

3.7.1 Procedural ethics

In the submission to the university's ethics committee, I drew on the British Educational Research Organisation's (2011) framework for the ethical conduct of educational research that includes an ethic of respect for:

- The person
- Knowledge
- Democratic values
- The quality of educational research
- Academic freedom

In my initial thinking, ethics frameworks by Stutchbury and Fox (2009), Shaw (2008) and Savin-Baden and Major (2013) served as initial guides. In particular, I used the British Educational Research Organisation's (2011) ethical guidelines as a 'framework for asking meaningful questions' (Gorman, 2007, p.8) about the research from initial design through to output(s). These questions acted as a useful heuristic when preparing to submit the ethics approval forms to the university's ethics committee. The submission received the requisite approval and thus provided the procedural ethics framework, the key points from which were:

The balance of benefits over risks was judged to be favourable. The key participant within the research, namely the TE, welcomed the opportunities that would be presented for professional dialogue. The ST-related activities were designed to be a natural component, or even enhancement of, their course, thereby possibly contributing to the fine-tuning of the STs' reflective capabilities at Master's level. Participation was on an opting-in basis (see below). The focus of field work was on the TE's teaching activities, with the TE choosing the sessions she deemed appropriate for the purposes of the research. The anonymity of the data was designed to ensure there would be no opportunities for damaging the standing or reputation of the participants or others; nor there be opportunity to infringe the privacy of participants or others. As researcher, I was aware of the need for sensitivity towards individuals, and in particular would not indulge in conjecture or discussion of other students or university staff. Anonymity would be maintained at all times, unless participants chose otherwise.

Participation was on the basis of voluntary informed consent in line with BERA's Ethical Guidelines for Educational Research; furthermore, care was taken to ensure that the participants were clear about what they were agreeing to, especially in relation to the nature and purpose of the study, including: its methods; the expected benefits of the study; information on the time commitment required of participants; information about confidentiality and anonymity; how data would be kept and for how long; and the ethics

procedures being followed. Participation would be on an opting-in basis after offering a written invitation to become involved, together with brief workshops to explain the research as it reaches different stages. There was an explanation of how it would be possible to withdraw consent during the research, together with details of the withdrawal of data from the formal research analysis.

The above procedural ethics furnished a framework for the dialectical interplay between emerging on-the-ground issues and the agreed overarching ethical principles (Hammersley, 2009, p.215). I would characterise this freedom to operate within clearly-delineated parameters as an ethically tight-loose system in which the ethics of research could be lived in practical ways (Macfarlane, 2010, p.24). Admittedly, such an approach proved possible because I was not faced with dramatic ethical dilemmas. Nevertheless, from the outset I proceeded from the premise that ethical research procedures were more than a straightforward, practical matter (Wiles *et al.*, 2005) with 'simplistic solutions' (Gorman, 2007, p.8). As I now outline on the basis of additional examples, there arose ethical concerns and complexities at almost every turn. However, I regarded this to be a positive state of affairs because, as I now propose to demonstrate, a dynamically-evolving approach to ethical considerations in the form of ethics in practice can provide a '*basis for a renewed sense of professionalism*' (Campbell, 2003, p.4, emphasis in original) for all concerned.

3.7.2 Ethics in practice

I proceeded from the premise that ethical decisions are not a once-only, done-and-dusted event, but rather a constant companion in the research process from design through to the plausibility of the product(s). For example, because I was in close contact with the STs during their blocks of university input, I needed to be careful that I did not drift into an assent-instead-of-consent model regarding participation. In particular, I felt I needed to ensure that 'informed consent' was more than just a 'tick in a box' on an ethics form. After all, this study was much more than a data-source form of research with predetermined and fixed research frameworks (Locke, Alcorn and O'Neill, 2013, p.109), meaning there was a need to explore ways of incorporating 'process consent' into the research design. Informed consent, therefore, needed to be mutually re-explored with the participants as the research progressed, providing an 'alternative to the traditional, static, one-shot approach to securing consent' (Smythe and Murray, 2000, p.320). Consequently, with the support of the TE, I was able to fix points in the year when I could talk to the STs about the research design and overall progress. Here my purpose was: to rekindle their awareness of the research; to stress that I was not taking their participation for granted, meaning they could exercise their choice to withdraw whenever

they wanted; to share with them emerging insights; and to outline activities they could opt into. Above all, I wanted to emphasise that continuation was a choice and hence that they should not feel 'cohort coercion' to carry on with the study just because they were a member of the group.

Pressure to participate, be it real or perceived, was an ever-present challenge (Parsell, Ambler and Jacenyik-Trawoger, 2014, p.174). Fundamentally I wanted to move beyond one-shot contracts to 'covenants of trust' (Zeni, 1998, p.15 citing Smith, 1990, p.150). Nowhere was the concept of a covenant of trust more crucial than in the ethics-in-practice relationship with the TE; indeed, she was the ethical epicentre of the entire research endeavour. For example, there were often contexts in which the planned and ethically-approved research methods required a sensitive 'barometric reading' from the TE, resulting in a recalibration of the research compass that affected the direction taken. This obtained in particular with the original plan to co-observe, with the TE, lessons in school taught by her STs and then observe the TE's feedback on those lessons. Acting on her insider knowledge and great sensitivity to the different contexts, it was decided that it would be inappropriate to pursue this particular research activity because, in the view of both of us, the balance of benefits over risks was not judged to be favourable. In the event, this proved to be a serendipitous decision because there would have been simply too much empirical material for a thesis of this length.

In these and similar scenarios, the ethical framework approved by the university's ethics committee played a pivotal role in terms of the procedural ethics, which, in turn, guided the on-the-ground ethics in practice. Here I would propose that procedural ethics exercised an epigenetic effect on the ethics in practice and, through this process, ethical considerations became a melding agent for methods. In the fine-tuning of methods in the ways just outlined, I was aware that new relationships were being created in the research. Everyone and everything became subject to a slight realignment, thus underscoring Mercieca and Mercieca's (2013, p.228) claim that methods position 'everyone and everything in the research process'. But what should not be lost from view is that it was the guiding hand of ethical considerations, as manifested through ethics in practice, which was discreetly and sagaciously shaping the research design. These new relationships were arguably exercising a wash-back effect on the on the nature of 'reality' itself and the practicalities of data generation and subsequent analysis.

3.8 Practicalities: data generation

As noted in 3.5, this study was based on a constructivist philosophy in which data were not givens to be ‘collected’, but were instead were to be ‘created’ in multiple acts of interpretation. To this end, there was a strong collaborative dimension to the research, which was particularly pronounced in the interactions between my ‘self’ as the researcher and the TE as the practitioner in the field. Elements of this interaction have already been discussed in relation to the insider-outsider continuum (3.6), as have the increased possibilities for the co-creation of meaning through the expedient of switching from the planned stimulated-video recall (two sessions in total) to sixteen teaching observations immediately followed by a debriefing interview (3.6). Engagement with the TE was deepened further through an extensive memoing process in which ideas were exchanged and meanings clarified (3.8.4). These interactions with the TE often involved leveraging our different perspectives to coproduce knowledge about the key research questions, especially in relation to helping the STs to see into practice. Van de Ven and Johnson (2006, p.803) characterise such an approach as one of ‘engaged scholarship’, namely one in which ‘researchers and practitioners coproduce knowledge that can advance theory and practice in a given domain’. It is against this backdrop that the practicalities of data generation are now considered.

3.8.1 Data-generation activities: an overview

Here is a summary of the data-generation activities, together with their timings and frequency:

Activity	Audio recorded and transcribed	Timings for the academic year 2015/16	Number of sessions
Observation of the TE’s teaching followed by a post-session interview.	Yes	September	6
		October	2
		January	6
		June	2
Semi-structured interviews with the TE positioned throughout the year with the purpose of exploring in greater depth issues arising from the observed teaching.	Yes	October	1
		December	1
		February	1
		June	1
Focus groups run with self-selecting groups of STs.	Yes	January	2
		June	2
Semi-structured interviews run at the request two STs who wanted to be part of the project, but were unable to attend the focus groups.	Recorded but not transcribed	June	2

I also had the option of access to the STs' written work. However, I only read one set of assignments, prompted by an observation made by all STs (see p.101). In the sections that now follow, I examine in turn each of the data-generation activities.

3.8.2 Classroom observations as a springboard for discussions

In undertaking observations of sessions, I considered several field-related issues. First and foremost, as an observer, I was mindful that I would always be operating as part of the setting being observed, with the implication that, both implicitly and explicitly, my presence could both modify and be influenced by this context. Consequently, I gave careful thought to my positioning as researcher in relation to the field and the participants within it, as well as to how my personal interests and pedagogical orientations could affect what was noticed. Concerning my positioning within the context, Gold (1958) proposes a range of positions from complete observer (no participation), through participant-as-observer (more observer than participant) and observer-as-participant (more participant than observer) to complete participant. My positioning would fluctuate between participant-as-observer and observer-as-participant. The latter obtained when the STs were working in extended group work. During these periods I would circulate between groups, occasionally posing pedagogical questions and often being asked similar questions by the STs since they appeared to regard me as another TE in the room, rather than a researcher. The STs' stance might have been aided by the fact that from the outset I had stressed that I was not watching them, but rather the TE. With respect to my personal interests and pedagogical orientations, I was acutely aware – as I have been throughout my teacher-education career – that we have a strong tendency to see only that which we value (Mason, 2002, p.7). Douglas (2014, p.58) supports this view with the suggestion that 'what is observed during research reflects how one conceptualises the world with the methodological framework for the research determining what is seen'. It was the latter point, namely 'the methodological framework for the research determining what is seen', that guided, as I now outline, how I proceeded with recording and exploiting my classroom observations.

Throughout my teacher-education career, I eschewed the use of formal, centrally-imposed observation forms. My reasoning for this was, and still is, that it is not possible to understand fully a lesson unless there has been deep dialogic engagement with the teacher so as to ascertain what she/he was trying to achieve. Coe's (2014) research on lesson observation bears out this particular claim. Thus, I would write a brief descriptive commentary of what was happening linked to questions that were either embedded in the overall lesson

description or in a questions-for-consideration column on the right-hand side of my notes. Drawing on Littleton and Mercer's (2013) concept of 'interaction and interthinking', these observations and questions would then form the basis of the post-lesson discussion and the co-creation of an understanding of the processes at work. It was only after the resulting discussions that I would write the formal observation report. This approach undoubtedly doubled my workload, but hopefully contributed to keeping some of my assumptions in check and increased my opportunities for seeing the world through the eyes of the teacher. My approach in this research was no different with my observation notes being brief descriptions with the embedded questions (see appendix one) becoming 'mobilized as a critical dialogue partner – not as a judge or a mirror' (Alvesson and Kärreman, 2011, p. 16) in the debriefing interviews (see below) with the TE. In summary, therefore, the considerable time I spent in the field was not about capturing a 'reality' (Cohen, Manion and Morrison, 2007, p. 405); instead, my focus was centred upon using the field as a reflective and reflexive space for the construction of ideas and the development and formulation of questions to be explored with the TE in ways that I now outline.

3.8.3 Debriefing and semi-structured interviews

As already noted, the context for this study was the lived-in reality of a teacher-education classroom and the processes involved in helping STs to see into practice. In Robson and McCartan's (2016) terms, this represented 'real-world research' because it entailed endeavouring to understand the participants' 'lived-in reality' (ibid, p.3). In the light of the research focus, it thus made sense to spend as much time as possible in the field to gain insights into how classroom life was structured and exploited. In determining the frequency and type of session to be observed, ethics in practice played an important role. Firstly, I did not want to become perceived as a burden. Secondly, I did not want to impose a schedule that might have been inappropriate. Guided by her knowledge of the purpose of the research, the TE was the one who determined the schedule in accordance with what she deemed relevant regarding the content and frequency of observed teaching. Serendipitously, it transpired that these sessions were positioned proportionately over the teaching year, the structure of which involved the STs being in university for two four-week blocks in the period from mid-September until early October, and then again throughout January, concluding with a one-week block in June. STs also returned for individual days at various points when on placement. When discussing my work in the hyphenated space of the insider-outsider continuum (3.6), I outlined the potential pitfalls of assumptions. Fortunately, the opportunity to conduct an

interview with the TE immediately after a session meant that my field notes could become an active ingredient in the subsequent meaning-making process (see appendix one), which included the important task of 'assumption hunting' (Brookfield, 2017) – both mine and the TE's. Each debriefing interview started in an open-ended way with the TE explaining the *what*, *why* and *how* of her just-completed session. My role at this stage was to listen carefully and make notes, including recording supplementary questions. After the TE's exposition, any remaining questions from my field notes that had not been covered by her explanations, together with any supplementary questions I might now have had, were melded into the interview process. Here it is important to note that, in collaboration with the TE, it was decided to adopt an action-orientated stance (Holstein and Gubrium, 2011), both to the debriefing sessions and the semi-structured interviews (3.8.3).

This decision was fully congruent with the constructivist assumptions underpinning the study and drew inspiration from Knight and Saunders' (1999) dialogic concept of interviewing, namely the construction of an interview as a 'collaborative enterprise of exploration' (p.148). This arrangement impinged in several ways on the generation of data. For example, it opened up the potential for increasing 'self-reflexivity' (Miller and Glassner, 2011, p.137) by providing a space for the mutual challenging of assumptions. The paradoxes and ambiguities I personally experienced in the hyphenated space of the insider-outsider continuum bear witness to this observation (3.6). The same obtained for the TE, who would frequently comment, 'I hadn't thought of it that way'. Second, this increased reflexivity could be construed as a useful heuristic, as 'a tool to understand better' (Finlay, 2012, p.318), thereby 'producing new perspectives' on the 'life situation' (Nielsen, 2007, p.219) of both the TE and me as researcher. Third, both interviewer and interviewee had the opportunity to act as co-researchers at key moments in the interview, as well as beyond, by continuing the debate through an extensive memoing process (3.8.4) and four semi-structured interviews.

The semi-structured interviews provided a reflective opportunity to look back at sequences of completed teaching. In essence, they were a continuation of the 'interaction and interthinking' (Littleton and Mercer, 2013) that characterised the debriefing sessions. Prior to the interviews, I would send the TE a list of open-ended questions for her consideration (see appendix two). Predominantly, these questions related to the generation of ideas from the empirical material. At the start of each interview there was an expatiation process whereby the TE would respond extensively to the questions. Following the TE's response to each individual question, I would probe certain points for clarification and continued development. When, early in the research process, I expressed an ethical concern that my incessant

questions in the post-session interview were perhaps a bit of a burden, the TE's response reassured me in this respect, and also provided a reflective insight into the construction of meaning:

You help me understand my own practice by putting up a mirror (camera / presence / note-taking / post-session discussion) so, even if the mirror is threatening to some extent, I still value the exercise. Here's a wonderful opportunity to really get to grips with and think hard about what I'm doing with my students – I might otherwise fall into a routine. (Personal communication, 30 September, 2016)

Within both the debriefing and the semi-structured interviews, my role would shift between being 'passive,' in the sense of active listening and note-taking, to becoming 'constructively active' (Gubrium and Holstein, 2012, p.33). I was not, therefore, a 'neutral' interviewer setting about mining uncontaminated nuggets of knowledge (Brinkmann and Kvale, 2015, p.57). Instead, it was a joint prospecting venture in which knowledge was co-constructed through a process of 'experiential animation' (Holstein and Gubrium, 2011, p.151), in which my experience, knowledge, and beliefs regarding the pedagogy of teacher education, became heuristic tools in the co-creation of a narrative. Admittedly, there may be those who might consider such involvement as a 'virus which contaminates the research' (Cousin, 2010, p.10). However, for reasons that I now outline, I prefer to regard my involvement as a positive bacterium in the culture medium of the epistemological petri dish of research. Here the key culture medium was an extensive memoing process that served to cultivate – and also challenge – ideas arising from the debriefings and semi-structured interviews, in what was arguably a very slow fermentation process spanning two years.

3.8.4 The nature and use of memoing

Memoing was developed in the initial version of grounded theory as a means of explaining analytic categories (Schwandt, 2001, p.156) and it remains an essential element of present-day principles and practices in grounded theory (Lempert, 2007). In other approaches to research, memoing can be employed in similar ways to document the decisions concerning the *how* and *why* of code development (Savin-Baden and Major, 2013, p.432). However, within the context of this study, I exploited the use of memoing in a much broader sense. Drawing on Saldaña (2013, p.41), memos were my 'private and personal musings before, during, and about the entire [research] enterprise' that acted as 'a question-raising, puzzle-piercing, connection-making, strategy-building, problem-solving, answer-generating, rising-above-the-data heuristic'. Saldaña captures the broad meaning-making potential of memoing, perhaps suggesting that not all roads ultimately lead to coding. For me, memoing provided

‘an interactive space and place for exploration and discovery’ (Charmaz, 2014, p.170), where I could conduct process-related conversations with myself relating to all aspect of the research. Further, these ‘private and personal musings’ became a springboard for follow-up interpretative activities with the TE, who generously gave of her time to respond to my ideas and questions. Sometimes these exchanges were very extensive. In one case, an email discussion on the issue of challenge and engagement amounted to some 4000 words. Flowing from these interchanges was a continual trickle of ideas and thoughts percolating down through the different strata of the study. This resulted, over time, in a sculpting and shaping of the research process and, very importantly from a transparency perspective, left a traceable imprint on the final product.

My memoing was an organic, emergent and, more often than not, an *a posteriori* process that provided a series of reflective spaces for different aspects of the research. One of the key purposes of my memoing was not to describe the *what* of events, but to focus instead on the *why* (Biesta, Allan and Edwards, 2011, p.229). In particular, I was interested in developing thoughts that could act as a sort of ‘theorizing trigger’ (Shepherd and Suddaby, 2017, p.61). This was very much theory-with-a-small ‘t’ involving the generation of ideas that could guide, in imaginative and creative ways, how the terrain of the study might be explored and interpreted by going beyond surface meanings. In this endeavour, I was influenced by Coffey and Atkinson’s (1996, p.154) assertion that it is through thinking beyond the data that ‘the real work of analysis and interpretation lies’. To this end, they advise that there should be ‘a constant interplay between the ideas we work with (play with very often) and the detail of form and content in the data themselves’ (ibid, p.155). Their approach closely resembled the ‘theoretical playfulness’ advocated by Charmaz (2006), which can fulfil such an important role in avoiding the forced and mechanistic management of data (Thornberg, 2012, p.253). Perhaps my greatest source of inspiration – and also reassurance – concerning the role of memoing, was derived from Cousin (2009, p.3), who, citing Stake (1995, p.19), proposes that ‘good research is not about good methods as much as it is about good thinking’. Central to ‘good thinking’ was the ongoing scholarship that required me to think *from* the data as much as *with* the data. It was memoing that provided the intellectual space not only to think *with* and *from* the data, but possibly *beyond* by opening up new possibilities and intellectual directions. Additionally, the major themes of the research were developed and refined in this way through the additional impetus and input of the TE’s engaged scholarship. In particular, many exchanges took place concerning the role of theory, a key research focus.

When reflecting on the memoing process, I realised that much of my memoing activity was of a *thinking-from*, abductive nature. I found it helpful to conceptualise abduction as a series of excursions into the literature occasioned by seeing something in the empirical material that warranted an explanation. The empirical material provided the conceptual tinder, whilst the writing-as-thinking dimension of memoing acted as the developmental spark. A more elegant metaphor for this process is provided by Atkinson, Coffey and Delamont (2003, p.149), who liken this process to weaving because of the ‘dialectical shuttling between the domain of observations and the domain of ideas’. In refining their weaving metaphor, they refer to the ‘repeated interaction among existing ideas, former findings and observations, new observations, and new ideas’ (ibid, p.156). I found this particular insight most helpful because I felt it gave me a warrant to take my time and develop reflective spaces for the development of ideas. These reflective spaces, in the form of the memoing process, were characterised by four main perspectives that operated *with*, *from* and *beyond* the data. I now outline each of these in turn.

My “ah-ha, perhaps.....” moments

These memos invariably arose when I was not explicitly working on the research. They represented out-of-the-blue ideas. St Pierre (2011) refers to such thoughts as ‘transgressive data’ that could include: *‘emotional data, dream data, sensual data, memory data, and response data’* (p.621, italics in original). Such transgressive data would often arise from my frequent re-listening to the interviews and focus group, all of which had been audio-recorded. This activity was in addition to the transcription of the recordings that I undertook (3.8.6). In so doing, I did not have a specific focus. I just wanted to keep exploring the empirical material, especially in light of the fact that my perspective, due to increased knowledge of the research and its ramifications, would have changed since the previous listening. This reflecting on the past through the lens of new knowledge in the present, is referred to by Revsbæk and Tanggaard (2015) as ‘analyzing in the present’. As with all memo-related reflections, they had to ‘earn their way into [the] analysis through their theoretical power to illuminate [the] data’ (Charmaz, 2014, p.201). Regardless of their illuminatory potential, all such ideas, even if they were rejected, contributed to the thinking process. Arguably, these reflective processes served as an anti-reification device – at least *pro tem*. What I found reassuring about operating almost subconsciously in this way, was the proposal from Revsbæk and Tanggaard (2015, p.385) that this is all part of the ‘work we do, when we are not truly working, the ordering and re-ordering we do when we are not consciously ordering and re-ordering things’. More often than not, these thoughts occurred on my daily cycle rides, suggesting a physical dimension to

theorising (St Pierre, 2011, p.622) and the generation of transgressive data. Interestingly, different stretches of road are now associated with particular ideas.

Reflexivity and ethics

Here memoing was key to fostering 'ethical mindfulness' (Warin, 2011), which, as already noted, was central to exploring my positionality, especially in relation to: the insider-outsider continuum; the many ramifications of the researcher-researched relationship; 'procedural ethics' and 'ethics in practice' (Guillemin and Gillam, 2004); and researcher as a key 'research tool' (Porter, 2010).

Data analysis and interpretation

These memos were perhaps in line with the more traditional conceptions of memoing, namely those conceptual notes-to-self that perform the function of developing and explaining the *how* and *why* of code development (Savin-Baden and Major, 2013, p.432). They were much pithier than some of my other memoing activities.

A springboard for 'engaged scholarship'

These memos tended to be much more intensive and extensive than some of the other memoing activities. The initial ideas flowing from the memos frequently furnished the intellectual grist for the process of engaged scholarship and the intersubjective creation of meanings.

As the above indicates, the boundaries between the different categories of memos were very fluid, indeed often mutually enhancing. The enactment of 'theoretical playfulness' took the form of a dialectical dance between the empirical material and theory-construction – a dance performed to an abductive beat where intuitive inclinations and 'informed hunches' (Janesick, 2001, p.533) flowed away from the empirical material in search of theoretical explanations and then flowed back with new insights and interpretations that often changed the rhythmic patterns of the research. In a sense the plot stayed the same with respect to the research questions; however, it was the story line that changed, often inspired by the influence of engaged scholarship. I would propose that memoing served to keep the research process vibrant and, perhaps more significantly, open, and acted as an antidote to both the foreshadowing and foreclosure of themes. Further, it played an important role in taking analysis beyond describing what the STs or the TE had said (what Braun and Clarke (2006, p.84) term 'semantic themes') to the 'latent themes'. These are the underlying ideas, rationales and assumptions that shape the 'semantic themes' (ibid). Through these processes,

I came to appreciate that memoing can illuminate the unexpected by casting rays of light that can penetrate the often impenetrable interpretative imbroglio of qualitative research. For examples of memos, please refer to appendix three.

3.8.5 Focus groups

Following the illumination metaphor above, a key element of the research was the elucidation of the nature of the STs' experiences in relation to their ability to see into practice with theoretical understanding. As noted in 1.6, the inclusion of STs in the research can bring an oft-missing dimension to studies of this type in the form of the ST perspective on classroom interaction (Zeichner, 2005a, p.748). I had piloted the use of focus groups in a previous research project and, moreover, had employed focus groups for many years as a dimension of ST course evaluations. In all previous instances, I had found focus groups to be a very useful tool to access the 'hidden curriculum' that shapes the STs' experiences of learning to teach (Barbour, 2005, p.745) by seeing these processes through STs' eyes (Loughran, 2007, p.9). Acting on the guidance of the TE, the focus groups were scheduled to take place at the end of the two main phases in the STs' academic year – that is, in December and June respectively. The exact timings were suggested by the TE in accordance with what she perceived to be the STs' prior levels of commitment. The groups were self-selecting in the ways outlined in 3.7.2. The groups in December each comprised three STs and those in June started with three, but each lost a ST after twenty minutes due to school-related commitments. The groups represented a cross-section of the course regarding age, previous teaching experience, and mix of native/non-native speakers of English, but were unrepresentative in terms of gender since they were all-female groups. Numerically, the focus groups encompassed half of the course.

My previous experience of focus groups suggested that a key strategy is one of holding one's nerve and trusting to the process. This meant keeping my participation to a minimum in order to ensure that the process was, under the circumstances, as naturalistic as possible. I base this assertion on recognising that a focus group is always going to represent a 'compromise' between the data generated by participants in naturalistic settings and the data I was seeking (Morgan, 1998, p.22). In this case, my interest was centred on how the STs found the learning processes they had undergone, especially in relation to their views on theory. The plan for each group was to start with an activity to generate conversations, rather like dropping a pebble into a pool and observing the resulting ripples (Yale University, 2015). Insights derived from the course-evaluation focus groups that I had run over a number of years suggested that

by providing the participants in advance with a stem sentence such as '*Learning to teach is like.....*', then references to the learning processes would surface almost immediately; further, there was also a strong likelihood of theory entering the conversation, too. This strategy was used for the focus groups in December whilst, for the focus groups in June, the planned starter activity was abandoned. I made this decision because the STs arrived talking animatedly about how busy they had been over the last two days due to having to complete standards-related, form-filling activities as dictated by the wider secondary programme. I just let them continue with this discussion-cum-rant to see where it would lead. It proved to be very relevant and illuminating, indicating a narrow and restrictive interpretation of the Teachers' Standards. Generally speaking, my level of intervention in all focus groups was limited. I would periodically sum up conversations to check my interpretations; sometimes I would ask for clarification of a particular point; occasionally I would act as a devil's advocate by challenging a particular statement. My rationale for this approach was, within the limitations of focus groups, to make the event as naturalistic as possible.

As with any research method, there are limitations and challenges. First and foremost, my presence as a moderator could well have limited the free expression of the group members (Neuman, 2011, p.459) – although there are some powerful counter-arguments to this assumption in 6.6. Fortunately, the issue of dominant voices did not arise. As already intimated above, a focus group can represent a high-risk strategy from a desired data-generation standpoint. To my relief, however, the ripples from the original pebble led to a discussion of relevant research-related issues, including theory. In reflecting on the process, I feel that the combination of the open-ended prompts and the participants' knowledge of each other, linked as they were by their shared context of being STs, promoted everyday-like communication, which, in turn, revealed 'dimensions of understanding' that other more conventional methods, for example individual interviews, might not have achieved (Kitzinger, 1995, p.299). I make this observation on the basis of two semi-structured interviews I conducted at the end of the year with STs who wanted to be part of the project, but were unable to attend the focus groups. Although I deployed as a starting strategy the stem-sentence gambit as outlined above, I felt that the interviews, when compared with the focus groups, were neither as naturalistic, nor as dynamic, in their creation of meaning. The focus groups were audio recorded and transcribed. I particularly enjoyed undertaking the transcription process myself. This was because of the vibrancy of the exchanges and, as I now explore, the thinking that was engendered as I transcribed.

3.8.6 Lost and found in transcription

A key issue is that much can be 'lost in transcription'. This obtains especially in relation to non-verbal aspects of communication, as well as verbal aspects such as intonation and tone of voice. As suggested by the term itself, transcription is about transformation from spoken to written form, thereby rendering it more of an analytical and interpretive process than a merely clerical one (Brinkmann and Kvale, 2015, p.203). Brinkmann (2013, p.61) argues that there is 'no golden standard of transcription' because 'everything depends on the purpose of one's investigation'; thus the quality of a transcription rests upon whether it is adequate for the intended analysis process (Silverman, 2011, p.367). In the case of this research, I felt that the first transcription, namely the initial interview with the TE, was not fully fit for purpose. My observations in this respect were not based on the 'quality' of the final transcription – this had been very skilfully executed by a university-approved transcriber – but more on the matter of the missed analytical and interpretive possibilities. I came to this conclusion because, despite listening to the recording and checking the transcription, I felt rather distant from it. I resolved, therefore, to 'handle my own rat' (Frost and Stablein, 1992, p.246) and do the transcriptions myself.

As I transcribed the materials, I came increasingly to appreciate the invaluable nature of transcription as a heuristic device. In particular, it became clear how transcription, analysis, and interpretation were inextricably linked, frequently in dynamic ways. This led to much memoing and also the clarification of meaning with the TE. In such instances, the TE would sometimes annotate directly the transcription in areas where I had questions. This particular strategy not only enhanced the ongoing analysis and interpretation, but it also deepened the 'engaged scholarship' dimension. I also found that the process of transcription represented an important 're-awakening of the social and emotional aspects of the interview situation' (Brinkmann and Kvale, 2015, p.207) which, when linked to my increased knowledge of the study, brought new dimensions to the thinking through 'analyzing in the present' (3.8.4). As I reflected on this process, I became even more aware that research has the potential to be an everlasting event devoid of theoretical saturation. For me, the situation was analogous to climbing a hill with a never-ending succession of false summits. Nevertheless, at some point, you have to stop and take stock of the panorama in front of you and draw out salient themes.

3.9 Analysis and the development of themes

Throughout this study, analysis took place concurrently with the generation of data. This obtained in particular with respect to the memoing activities in which the processes at work

were captured in Atkinson, Coffey and Delamont's (2003) weaving metaphor of a 'dialectical shuttling between the domain of observations and the domain of ideas' (3.8.4). In the sections that follow, I formalise the analysis process within the framework of thematic analysis (TA). However, TA can be a misleading term since it suggests a single analytic method (Clarke *et al.* 2019). For Braun, Clarke and Hayfield (2019a), TA constitutes an 'umbrella' term for a wide range of approaches to TA which can be conceptualised under three broad 'types', or 'schools', as Clarke *et al.* (2019) prefer to call them. Their reasoning here is that although each of these schools is distinctive in relation to their underpinning theoretical and philosophical assumptions, with each possessing different procedures for analysis, there remains, nevertheless, a great deal of freedom in approach – hence the term 'school'. In the light of this fluidity and flexibility, I propose to provide a rationale for positioning myself within a specific school. I will then proceed to elaborate on the analysis process and the development of themes.

3.9.1 My positionality within thematic analysis

Clarke and Braun (2017, p.297) describe TA as:

...a method for identifying, analyzing, and interpreting patterns of meaning ('themes') within qualitative data. TA is unusual in the canon of qualitative analytic approaches, because it offers a method ... rather than a methodology

This definition is little changed from Braun and Clarke's original conception of TA in their seminal 2006 paper, which has become one of the most cited articles of 2006 on Google Scholar (Braun, Clarke and Hayfield, 2019a) with, at the time of writing (August, 2019), over 58,000 citations. Clarke and Braun's contention above, that TA is 'a method ... rather than a methodology', could be construed as being simultaneously illuminating and misleading. In one sense there is clarity because TA offers a method in the form of a series of tools and techniques for analysing data. As such, TA is not accompanied by a pre-packaged framework that includes theoretical assumptions and formulae for analytic scholarship, as is the case, for example, with methodologies such as interpretative phenomenological analysis, grounded theory, or discourse analysis (Terry *et al.*, 2017, p.21). In these terms, therefore, TA is not held to be a methodology. However, it would be misleading to assume that TA is atheoretical. Instead, TA is conceived as being theoretically flexible since, unlike with 'branded' methodologies of the types just mentioned, theory is a co-requisite rather than a prerequisite (*ibid.*, p.34). Nevertheless, TA does need to be located within certain key philosophical assumptions that are congruent with the research design employed and it is the researcher's task to undertake this philosophical positioning. It was this flexibility that attracted me to TA because I felt that

it occasioned deeper thinking concerning the interplay between philosophical assumptions and methods, rather than following a predetermined path.

As already noted, TA constitutes an 'umbrella' term for a wide range of approaches which can be conceptualised under three broad 'schools' (Clarke *et al.*, 2019). The labels they employ for each school are 'coding reliability', 'codebook', and 'reflexive' (ibid, p.847). Where the differences between schools are at their most salient can be found within the area of data analysis, especially in relation to the coding process. 'Coding reliability', as the name suggests, employs a very structured approach underpinned by a positivist philosophy with an emphasis on reliability (Clarke and Braun, 2018, p.108); 'codebook approaches' combine highly structured and positivist-inspired techniques with elements of a more qualitative philosophy in a hybrid approach (Fereday and Muir-Cochrane, 2006); and 'reflexive' TA is located very firmly within a qualitative orientation. For Clarke *et al.* (2019, p.848, emphasis in original), this implies an emphasis on 'meaning as contextual or situated, reality or realities as multiple, and researcher subjectivity as not just valid but a *resource*'. On the basis of these premises, I judged the 'reflexive school' of TA to be fully congruent with the underpinning principles of this study. Particularly apposite in this respect were: the study's emphasis on the intersubjective creation of meaning (3.5), especially between my 'self' as researcher and the TE; the harnessing of engaged scholarship; and the active approaches to data generation (3.8.3) and subsequent analysis.

Against this backdrop, I now propose to explore what such a positioning entails for the practical elements of the research, namely data analysis, coding, and theme development. This discussion takes place within Braun and Clarke's (2006) six-phase framework for reflexive thematic analysis (see also Clarke *et al.*, 2019; Terry *et al.*, 2017; Braun and Clarke, 2013). The choice of the term 'phase' is designed to signal that, in keeping with most approaches to qualitative research, the processes involved are non-linear, messy and iterative (Terry *et al.*, 2017, p.23), occasioning the researcher to shuttle back and forth between the different phases of: *familiarisation with the data; generating codes; generating themes; reviewing potential themes; defining and naming themes; and producing the report*. The danger with a list of this type is that it becomes reified as 'the procedure'. In this respect, I felt I had considerable leeway to choose a suitable route according to prevailing conditions, and the changes in direction that I needed to undertake. What follows is an account, or log book, of the journey taken.

3.9.2 Familiarisation with the data

In the initial stages, familiarisation with the data involved a series of activities. First of all, I had experienced extensively as an observer the source of the data as represented by the interactions in the teacher-education classroom. Sometimes I would not be clear concerning the meaning of some of these interactions (3.6); however, I was able to clarify issues almost immediately with the TE in the post-lesson debriefing. After a day of observations and interviews, I would mull over what I had observed in the sessions and heard in the post-lesson debriefing, sometimes re-listening to the debriefing recordings that very same day, but certainly over the following days. In the case of the four focus groups, I shared a summary of my immediate feelings and observations with the STs, inviting them to add any comments as deemed appropriate. With the decision to 'handle my own rat' (3.8.6), the process of transcribing was a powerful vehicle for deepening my knowledge of the data in ways that went beyond the merely semantic to deeper, potentially latent meanings. Thinking whilst transcribing led to much memo writing (3.8.4) and further reading as I played with and pursued ideas. Even when the data had been coded, I would undertake waves of re-familiarisation by re-listening to recordings and searching out pieces of information in transcribed texts. This was particularly intensive during the theme-development stage (see below). After about two months of the processes outlined above, an initial attempt at coding took place with the first transcripts.

3.9.3 Generating codes

Following Terry *et al.* (2017, p.26), my coding procedure entailed the 'systematic and thorough creation of meaningful labels attached to specific segments of the dataset'. At the time of the initial coding, I sought out segments that captured something interesting in the data at the micro level in relation to the research questions. In contradistinction to the familiarisation phase, which could be described as being much more freewheeling, I endeavoured to make the development of codes both succinct and systematic, whilst remaining open and inclusive. An important element of this process was the creation of coding labels that were both pithy and pregnant with meaning, so that they would pass the 'remove the data' test (Braun and Clarke, 2013, p.122); in other words, in stand-alone form the codes would evince the salient properties of the data with which they were associated. To facilitate such understanding, I found it useful to create labels involving gerunds in order to evoke a greater sense of the processes at work (Charmaz, 2006, p.49), for example '*balancing safety and risk*', '*striking a balance between freedom and prescription*', and '*feeling comfortable with not knowing*'.

On average, coding took place one or more months after the familiarisation procedures of the type already outlined. This meant a constant series of texts coming online throughout the year. Further, as the research progressed, coding decisions were being made against the backdrop of the knowledge of previously analysed texts. This knowledge became pivotal in proceeding from manifest meanings to more implicit and latent interpretations (3.8.4). I would also re-visit texts, reconsider the code labels, collapse codes and rephrase them. This meant that some 198 codes were reduced to about 70. My aim here was to ensure that I was considering deeply the data and not just ‘cherry picking’ (Morse, 2010) elements according to some preconceptions I may have had. Further, it also helped to ensure that I was not playing ‘fast and loose’ (Terry *et al.*, 2017, p.25) with the data and jumping straight to the formation of themes. However, the collapsing of codes did act as a useful precursor to the development of initial, ‘candidate’ themes.

3.9.4 Generating themes

It is interesting to note that Braun and Clarke have slightly amended their six-phase approach from 2006 by accentuating active approaches to data analysis through the use of the term ‘generating themes’, rather than the original ‘searching for themes’. This shift in emphasis suggests an explicit distancing from more positivist, hybrid-type approaches. Nevertheless, the definition of a ‘theme’ has remained consistent in that it ‘captures a coherent and meaningful pattern in the data that is relevant to the research questions’ (Braun and Clarke, 2013, p.328), with a sub-theme encapsulating, elucidating and developing a specific aspect of its associated theme. At this juncture it is perhaps apposite to note the difference between a code and a theme as defined by Braun and Clarke (2013, p.224, emphasis in original):

A good code will capture one idea; a theme has a **central organising concept**, but will contain lots of different ideas or aspects related to the central organising concept (each of those might be a code) (Braun and Clarke, 2013, p.224, emphasis in original)

The idea of a ‘central organising concept’ suggested to me that a good theme would span the empirical material in its entirety, setting out patterns of meaning that speak to the research questions. I found that the data-collapsing process referred to above, made the development of themes more manageable. Following Dey (1993, p. 51), who describes theory ‘simply as an idea about how other ideas can be related’, the generation of themes was, for me, a theorisation-type process in which groups of codes were organised around a central organising concept. However, the resulting prototype themes, or ‘candidate’ themes, as Braun and Clarke (2013, p.224) prefer to call them, represented merely a starting point.

3.9.5 Reviewing potential themes

Throughout the theme-generation phase I returned repeatedly to the empirical material so as to be able to consider carefully the essence of a potential theme and the effectiveness of its central organising concept. To facilitate this process, I loaded all of my coded transcriptions, including memos, into ATLAS-ti. Using the search function, this meant that I could swiftly navigate twenty-six different documents with a view to checking whether each theme encompassed effectively ‘the important things captured by the coded data relevant to the central organising concept’ (Terry *et al.*, 2017, p.30). This turned out to be an intensively iterative undertaking. During this phase, nine themes were reduced to five; only one of the original themes was retained (*Theorising: the L-word and not the T-word*); some sub-themes were promoted to major themes, for example *creating an invitational vision*; in some cases a code became part of a theme’s name, as with *playing the long game*, or even a whole theme, as with *learning from challenge and productive failure*; and candidate themes such as *beyond the theatre of the mind* were entirely rejected because they were too narrow in scope.

3.9.6 Defining and naming themes

I was mindful that the themes should not only ‘capture the contours of the coded data’ (Braun and Clarke, 2006, p.91), but should also exhibit internal coherence in terms of the content and scope of the theme-supporting codes (Clarke *et al.*, 2019, p.856). Further, there needed to be a clear demarcation between themes, thereby making each theme distinctive. Braun and Clarke (2006, p.91, italics in original) refer to these activities as achieving ‘*internal homogeneity* and *external heterogeneity*’. By this they mean that a theme displays internal coherence through the way in which it revolves around a central organising concept, whilst being linked to, yet sufficiently distinctive from, other themes (Terry *et al.*, 2017, p.33). This latter point was not easy to accomplish because of the simultaneity of some of the processes involved. Further, if a particular theme was quite complex, then I also employed sub-themes, the function of which was to ‘capture and develop notable *specific* aspects of the central organising concept of one theme’ (Braun and Clarke, 2013, p.231, italics in original). These are the final themes and sub-themes:

Theme 1	Orchestrating lived experiences
Sub-themes	Asynchronous contingency management
	Synchronous contingency management
Theme 2	Playing the long game: beyond tips for Monday morning
Theme 3	Creating an invitational vision

Theme 4 Learning from challenge and productive failure

Theme 5 Theorising: the L-word and not the T-word

3.9.7 Summarising the data analysis processes

Braun and Clarke (2013) liken the development of themes to quilt making, inviting the reader to imagine a patchwork quilt comprising six separately-patterned squares. They link each of these squares to a theme in thematic analysis, whereby the pieces of material that 'create those patterns are akin to codes' (ibid, p.231). The six squares are then combined to 'create an *overall* patchwork pattern for the quilt' (ibid, italics in original). However, they fail to make a distinction between creating a *patchwork pattern* and *quilting*, which are two separate processes. This arises when they suggest that:

It's your role as analyst to work out what piece of fabric (codes) to use, and the best way to combine those pieces to create certain patterns (themes), that together produce the overall patchwork quilt (analysis) (ibid, p.231)

The problem with this metaphor is that it does not proceed beyond the *patchwork stage*, but purports, nevertheless, to be *quilting*. The misappropriation of a quilting metaphor for the development of themes is not unusual in qualitative analysis; see for example the introductions to Denzin and Lincoln (2017, 2011 and 2005). In drawing together my approach to data analysis, I have 'corrected' the quilting metaphor by extending it because in order to proceed from a patchwork pattern to a quilt, there are other stages that need to take place. First, you need some strong backing which must be expertly stretched over a quilting frame because a good quality quilt requires a good backing that provides the structural stability for the rest of the quilt (Brunner, 2012, np). Second, you require 'batting' or 'wadding', which is the lining material between the back of the quilt and the patchwork-patterned top. However, a '*genuine* quilt is the front, backing fabric and batting' (Sedgwick, 2018, emphasis added); further, it is both a *process* and *product*. Modifying, extending and elaborating on the quilting metaphor, here is a summary of the steps that I undertook:

- The many months of data familiarisation, thinking, memo-writing, coding, reading, theme generation, and refinement, were represented by the quilting frame over which the study was stretched.
- The backing material for the quilt was made up of the research questions.
- The patchwork pattern comprised themes in the form of pieces of fabric onto which were stitched, where applicable, further sub-themes. Care was taken to

ensure that my candidate themes provided a good fit with the coded data and the overall data set. The themes were assembled on the patchwork.

- The themes, with their attendant sub-themes, were stitched together into a patchwork pattern to form the narrative. The codes were contained within the batting and, although invisible, fulfilled the function of supporting and giving substance to the themes and sub-themes with which they were associated.
- The quilting process (analysis) then took place. This entailed stitching together the three main components: patchwork, batting and backing material; that is, themes, codes – now invisible but giving structure – and the research questions. The final stitching followed the outlines of the themes and sub-themes, bringing them further into relief (a fine-grained analysis with an easy-to-obtain overview) and securing all three components together into a coherent whole.

3.10 Some concluding thoughts

An ongoing theme of this chapter has been the elucidation of dilemmas faced before and during the research, together with their resolution. Guiding the positive outcomes that were achieved was the study's conceptual framework. Careful consideration has been given to the framework's underpinning philosophical assumptions and their role in shaping the data-generation, data-analysis, and theme-development activities within the reflexive school of TA. The complexities of my positionality as a *quasi*-insider have been examined, especially in relation to working the hyphen on the insider-outsider continuum. My dual role of researcher and co-constructor of knowledge has been subject to scrutiny. Here the focus concentrated on active approaches to data generation allied to engaged scholarship, in which memoing as a tool for thinking played an extensive role. Finally, considerable attention has been given to the ethical framing of the study through the carefully-orchestrated interplay between procedural ethics and ethics in practice. It is to the outcomes of the processes discussed in this chapter that I now turn, namely the themes that were generated.

4 Generated Findings: An Overview

4.1 Introduction

As noted in sections 3.5, 3.8.3 and 3.8.4, the emphasis throughout the study was on the ‘construction of empirical material’ (Alvesson and Kärreman, 2011, p.45), rather than the mining of uncontaminated nuggets of knowledge (Brinkmann and Kvale, 2015, p.57). In line with this perspective, from their seminal article onwards, Braun and Clarke (2006, p.80) have stressed that the idea of themes ‘emerging’ or being ‘discovered’ does not take into account the active role of the researcher. In their most recent work, they have reiterated strongly that themes are *generated* and not *found* (Clarke and Braun, 2018); indeed, the generation of themes is, for them, ‘not a trivial concern [but] central to the underlying philosophy of reflexive TA’ (Braun, Clarke and Hayfield, 2019b, np). Within this study, based on reflexive TA, as researcher I was active in the generation of themes, often in collaboration with the TE. It is for these reasons that I have employed the term ‘generated findings’ as part of the heading for this chapter.

My point of departure for what follows consists of providing a summary of the themes outlined in 3.9.6. This is in line with Braun and Clarke (2006, p.92), who suggest that, prior to the detailed written analysis of each individual theme, a summary is provided concerning the basic ‘story’ that each theme tells, indicating how it fits into the overall research narrative. This process acts rather like an ‘expository advance organizer’ (Gurlitt, 2012, p.149) or as an ‘abstract’ (Terry *et al.*, 2017, p.31) for each theme. But in addition to providing a sense of direction for each stage in the analytic story, my purpose here was also to indicate, where applicable, how the themes were co-constructed with the TE. Here I was working with a participant who possessed a strong analytical penchant for problematising her own teaching – ethically, empirically, and reflexively. In providing this overview, I also endeavour to elucidate how each theme was not only distinctive, but also displayed a strong internal coherence around a central organising concept. And whilst there should be minimal ‘bleeding’ of codes between themes (Terry *et al.*, 2017, p.28), so as to reduce the possibility of duplication, clear links should exist between them in ways which demonstrate how they work together to produce the research narrative. When citing sections of the empirical material, I use the following referencing system that relates to the data-generation activities outlined in 3.8.1:

Transcript description	Code
Debriefing interviews from September/October teaching period	D1
Debriefing interviews from January teaching period	D2
Interviews with TE in October, December, February and June	TE1-TE4
Focus groups in January plus ST-chosen pseudonym, e.g. Marie (F1)	Pseudonym + F1
Focus groups in June plus ST-chosen pseudonym, e.g. Audrey (F2)	Pseudonym + F2
Individual ST interviews plus ST-chosen pseudonym, e.g. Scott (I)	Pseudonym + I

Following on from the thematic overview, I then explore each theme in greater depth. For each theme I adopt the same format, namely a brief introduction followed by the analysis. I conclude the chapter with a summary of the key insights derived from the analysis process.

4.2 Overview of themes

Theme One *Orchestrating lived experiences.*

	<i>Asynchronous contingency management</i>
Sub-themes	<i>Synchronous contingency management</i>

In developing this theme I was very much influenced by Dewey's (2012) concept of experience as outlined in 2.9.3. In other words, experience can be seen to connote both experimenting through trying things out, as well as experiencing in the sense of undergoing a particular process. Although the construction of themes in this study flowed from the interpretation of underlying ideas, rather than frequency of items, it is perhaps worthy of note that references to 'experiencing' in the Deweyan sense occurred over forty times in the empirical material, thereby eclipsing other themes in terms of ubiquity and forming a constant leitmotif in the research narrative. Additionally, from time to time, the TE would herself explicitly employ the term '*lived experience*' (D1-D2, TE1-TE3). Consequently, in the second phase of the academic year, I suggested to the TE that the fashioning of '*lived experiences*' was a dominant feature of her pedagogy. She concurred by stating, '*I want them to **feel**. I want them to **experience things***' (D2, emphasis in original). We agreed that a theme could be based on the creation of such experiences, hence *orchestrating lived experiences*. However, she would often stress that her approach in this respect was instinctive. Just how she did this, therefore, developed into a focus of my thinking. Unravelling this particular 'mystery' took on a particular significance because it appeared to be the starting point for the key research question of how, and with what underpinning rationale, the TE helped her STs to see into practice with theoretical understanding from the confines of a teacher-education classroom.

From my observation of sessions, I became aware that the direction taken was often determined by the TE's reactions to the STs' responses. In educational terms, these were examples of 'contingent interaction' (Gillies, 2019), namely the in-the-moment ability to respond to, and run with, STs' reactions and use the resulting interaction to develop the learning in emergent ways. However, there appeared to be more to this high-level skill than met the eye because it often involved a pedagogical precursor in the form of the TE 'engineering' situations that would lead to a deeply-felt reaction on the part of the STs. This reaction would then be 'unpicked' by the TE using her contingent-interaction skills. What I was witnessing here brought a new dimension to the approaches to modelling encountered in sections 2.9.1-2.9.4; further, it also called to mind the 'manipulation of environments' (Alexander, 2008) and the idea of 'pedagogy as a contrivance' (Widdowson, 1990) that were discussed in section 1.5. Thus this conceptualisation of how *lived experiences* were *orchestrated* suggested to me two sub-themes that were promoting these processes: *asynchronous contingency management* and *synchronous contingency management*.

Asynchronous contingency management entailed 'engineering' situations that appeared to be purely happenstance, but which were, in effect, carefully-constructed, *a priori* pedagogical contrivances occurring in a teacher-education classroom. Because the STs' reactions were often predictably unpredictable, both affectively and cognitively, such experiences called for in-the-moment analysis choreographed by the TE. Here the purpose was to help the STs to understand, from a theoretical perspective, the root causes of their reactions and, thereby, see more deeply into practice. Because of the real-time dimension to this process, the term *synchronous contingency management* seemed to be most appropriate, especially in relation to the *asynchronous/synchronous* juxtaposition. The dynamic and symbiotic relationship between these two sub-themes is captured through the use of the term *contingency*, the dictionary definition of which contains contradictory characteristics that reflect the dynamics of the TE's classroom. This suggestion arises from *contingency* possessing Janus-type qualities, because it can simultaneously denote something of a happenstance nature occurring, as well as planning for the happenstance (Merriam-Webster, 2019).

Theme Two *Playing the long game: beyond tips for Monday morning*

In my interactions with the TE, it became clear that she regarded learning to become a teacher as an integrated, ongoing '*project*' (D1 and TE3), rather than a series of one-off events in the form of '*tips for Monday morning*' (TE1-TE4 and D1-D2). To this end, she *orchestrated* the *lived experiences* through '*a continuous series of drip-fed encounters*' (D2) that involved revisiting

experiences in increasingly sophisticated and challenging ways. Very prominent in this analysis were the *in-vivo* codes of ‘drip-feeding’, ‘leaving traces’, ‘gently does it’, and ‘the sowing of seeds’. The TE’s approach brought to mind the importance of ‘continuity and interaction’ (Dewey, 1963) in professional development that was discussed in 2.7.1. Her idea of a long-term project, and especially one that transcended ‘tips for Monday morning’, went hand-in-hand with the most ubiquitous metaphor in the empirical material, ‘to play’:

I would like to encourage them to think that they have the freedom to experiment and to play. And I use the word “to play” with this approach because hopefully that lessens the stakes. (TE3)

The combination of ‘long term’ and ‘playing’, allied to the Deweyan concept of continuity and interaction, suggested the theme of *playing the long game: beyond tips for Monday morning*, indicating that this involved a much deeper and longer-term project than a ‘tips for teachers’ approach. At root was the idea broached in 2.6.3 that ‘the greatest enemy of understanding is coverage’ (Gardner in conversation with Brandt, 1993, p.7). However, in order for the STs to be able ‘to experiment and to play’ (TE3), they needed to have a space in which to do this – and also an incentive. It was the theme of *creating an invitational vision* that provided both the incitement to participate, as well as the pedagogical wherewithal for structuring the *lived experiences*.

Theme Three *Creating an invitational vision*

This theme featured two central organising concepts. The first concerned the long-term exposure to a particular approach to language teaching and the accompanying unspoken hope that certain elements of the approach would be adopted by the STs. The emphasis rested very much on the *invitational* rather than the *evangelical* by orchestrating ‘images of the possible’ (Hammerness, 2006, p.82) through the *lived experiences* and associated discussions that featured a ‘language of possibility’ (Rosaen and Schram, 1998). Crucial here was a non-dogmatic congruence between medium and message (2.9.1), hence the *invitational*. One ST summarised this situation as ‘opening up ipsative avenues of possibility’ (IScott). By this he meant that STs were ‘invited’ to consider what might work for them in a particular context, rather than being subjected to a one-size-fits-all approach. Second, *invitational vision* referred to the TE’s professional wisdom – her *phronesis* (2.6.4) – that enabled her to predict what activities could be ‘engineered’ to encourage the STs to become engaged not only with the approach to language learning being advocated, but also with the deeper principles – the so-called ‘underlying game’ (Perkins, 2009) as mentioned in 2.9.1. It necessitated the TE enacting this educational vision in the practical terms of *lived experiences*. Here her purpose was to

create a framework for engagement based on being challenged, a process that could often feature failure of some kind, but in a way that fostered new learning in the longer term.

Theme Four *Learning from challenge and productive failure*

The concept of challenge assumed many forms, as reflected in codes such as *'desirable difficulties'*, *'disorientating dilemmas'*, *'creating dissonance'*, and *'creating discomfort'*. For the TE, such processes revolved around orchestrating for the STs *'activities that allow them to fall on soft material, pick themselves up and work out what made them fall and what could prevent them from falling again'* (D2), hence the idea of *learning from*. The process of the STs puzzling out *'what could prevent them from falling again'* also provided the concept of *productive failure* (Kapur, 2014). *Challenge and productive failure* incited at least some measure of bewilderment, intrigue, puzzlement, temporary failure and, above all, uncertainty on the part of the STs. And it was the next theme that played a key role in the puzzling-out process.

Theme Five *Theorising: the L-word and not the T-word*

The TE interpreted theory as not being *'a T-business'*; instead, it was *'an L-business. It's literature'* (TE1). By referring to theory as *'literature'*, she had in mind *'the concepts that people have thought about and struggled with for you to be more knowledgeable about the field you're entering'* (TE1). She saw her role as providing STs with *'ways into this big, big literature'* (TE1). Her concept of theory, as *'big literature'*, was therefore similar to Boyd's (2014b) *'vertical dimension'* of knowledge (1.5) that involved drawing on published, public knowledge such as journals and professional textbooks. Further, citing Thomas (2007), she explained how she deployed literature as a *'thinking tool'* that enabled the STs to *'play with concepts that people in the field are conversant with and they use all the time'* (TE1). It should be noted that by *'people in the field'* the TE did not have in mind MFL teachers, but rather key academics specialising in instructed language learning. This interpretation of theory bore a close resemblance to one of Orchard and Winch's (2015) theoretical strands discussed in 1.5, namely that of *'conceptual understanding'*, which involved having at one's fingertips a command of the educational concepts and principles underpinning practice, and being able to articulate and contest them where applicable. By way of illustration (TE1), the TE cited, just in passing, key learning principles proposed by key second-language academics (Johnson, 2008; Ellis, 2005; Macaro, 2000; Swain, 1985), as well as from more generic learning theorists (Bjork and Bjork, 2014; Illeris, 2007; Nuthall, 2007). It is for the above reasons that this theme has been called *theorising: the L-word and not the T-word*.

I now turn to a more detailed examination of the five themes. Underpinning each theme is the key focus of the study, namely the strategies the TE employed to help the STs to see into practice with theoretical understanding.

4.3 Theme one *Orchestrating lived experiences*

As noted in 4.2, driving this theme was the emphasis the TE placed on wanting STs to *'feel'* and *'experience things'* (D2), whereby *'experience'* carried a dual passive-active meaning since it could signify both undergoing certain processes, as well as actively trying them out. At the heart of this undertaking was the desire, on the part of the TE, to render learning about teaching as visceral and real as possible. However, in order to achieve this outcome, considerable *'manipulation'* of the pedagogical environment was required (Alexander, 2008). Driving this process forward were the sub-themes of *asynchronous* and *synchronous contingency management*. While *asynchronous contingency management* captured the idea of *'pedagogy as a contrivance'* (Widdowson, 1990) through the *'engineering'* of specific situations, it was the *synchronous contingency management* that provided the in-the-moment unpicking of the *'engineered'* experiences. The latter was designed to help the STs to see into practice. I now explore the finer detail of this theme and its associated sub-themes.

The TE was unequivocal in the value she placed on *lived experiences* within her teaching, describing them as the *'the key, the cornerstone'* (TE1). In particular, she wanted to avoid the *'imaginary'* (D1), to go beyond *'just watching'* (D1), and to enter the personal world of *'feeling'* and *'experiencing'* (D1) through provoking a *'frank, raw reaction'* (D2) to *lived experiences*. Her ultimate aim was to *'create meaning out of experiences'* (D1) in ways that held the potential to transform her STs' *'way of being in the world'* (TE, personal communication, 22.12.17) by opening up *'different existential possibilities, different ways of being'* (ibid), thereby helping her STs to *'start to see the world in a different way'* (TE4).

The TE's chief meaning-making vehicle in this respect was her teaching of Serbian, of which there were four lessons in first phase of the course. Serbian represented not only a language the STs had not encountered before, but also a new approach to the fostering of the target language in the classroom (see Christie, 2016). However, the TE was constantly mindful of the challenges involved in helping STs to see practice through new eyes, especially practice possessing a plethora of novel attributes from the STs' perspective. Overall, her approach was one of caution, as exemplified through her instructions to the STs about the learning of Serbian: *'I want you to live that experience as if you were a learner and park the critical mind'* (D1). Her rationale here was: *'If I ask them to do a dual task of experiencing Serbian as a learner*

and deconstructing all the aspects, it is just too much' (D1, emphasis in original). Here her purpose was two-fold: first, to create a deep personal resonance related to a particular activity; and second, having had the experience, to unpick it from a pedagogical perspective. In a sense, the personal preceded the pedagogical, and thus provided a context for exploration. The wisdom of this approach was discussed spontaneously by the STs in the first focus group, where they observed how unpicking practice was a two-stage process:

Alex *I don't know about the others, but whenever we had Serbian I was just, "Oh this is kind of fun." And then I wouldn't notice a lot of things because I was enjoying it too much and I wasn't trying to be analytical about what was going on.*

Marie *Because afterwards, when we talked about all the things that she did, you just don't really realise what's going on unless you're asked to focus on what's going on.*

Alex *Yeah, like when she listed everything and then, "Oh yeah!"*

Another key strategy for seeing into practice revolved around the *re-living* of previously *lived experiences*. Here the purpose was to uncover new levels of pedagogical meaning that could be brought to the STs' attention. The processes at play often relied on exploiting learning/non-learning in Serbian as a springboard for launching, revisiting, or deepening important pedagogical points. To this end, small extracts of Serbian would be re-taught throughout the course, and thereby be *re-experienced*. Again, this approach was designed to avoid the 'imaginary':

So I don't want to engage with, "Do you remember Serbian? Do you feel you could do this, this, that and the other?", and it is all imaginary. I want them to go back into the situation. To be put back into the situation. (D2)

When theorising *re-living lived experiences* as a means of seeing into practice, the TE drew on her knowledge of cognitive psychology and, in particular, the role of the episodic memory pathway – that is, the memory pathway that helps us remember, often in quite global terms, previous events. She also employed the metaphor of '*creating echoes between experiences*' (D2), thereby suggesting that she viewed experience not as a done and-dusted event, but rather a carefully-crafted concatenation of experiences that would continue to reverberate over time:

It is a bit like the episodic memory. If you go back to the situation you might remember other things that were talked about and discussed at that point. It is the little echoes between one experience and the next, and the next, and the next. (D2)

The TE recognised that this strategy of *re-living lived experiences* was not without the risk that the STs might think they were '*going over old ground*' and that she was '*treating them like little kids*' (D2). However, the 'risks' she took always paid off in the sessions that I observed by

dint of the challenge of uncovering new levels of understanding in previous experiences. This process of peeling back a layer of experience to reveal a new insight could perhaps be likened to a palimpsest, on which superimposed texts can be carefully scraped away to expose previously hidden messages. Nevertheless, the TE did note that the likelihood existed that the STs could drift into '*spectator mode*' and become '*switched off*' (D1), thus indicating perhaps that there was no sure-fire guarantee that experiences *per se*, or even revisiting experiences, provided an automatic gateway to learning. She hypothesised that having '*too many things to notice*' (TE2) heightened the dangers of not noticing. For her, the key to seeing into practice was to be '*more constrained, a bit more focused*' (ibid). To this end, she had to make a multitude of decisions concerning what to emphasise: '*I am making choices and I am eliminating all sorts of additional layers cos I'll be happy if they get **that one***' (taps desk for emphasis) (ibid). Her strategy here suggested the importance of paring down the pedagogical possibilities so as to increase the chances of noticing.

Yet, arguably, a TE making such decisions was not necessarily straightforward because, as the TE phrased it herself, there existed the ever-present issue of '*how to make what is self-evident for me self-evident for them*' (TE2). This fundamental dilemma lay at the very heart of the continuous challenge of how best to get the STs to see into practice. The TE viewed this as a complex undertaking because '*they're all going to get it very, very differently ... They have strong filters. They latch onto certain things and not others*' (TE2). The situation was further compounded by '*the issue of time and cognitive overload*' (TE2). And then there was the constant conundrum as to what '*get it*' actually meant, for it was all too easy to make assumptions that: '*They are coming up with this, and therefore they've got this. "Right, we're moving on. You've got this."*' (Claps hands together) "**No!**" (TE3, emphasis in original).

The subtext in the above, namely the incompatibility of coverage with deep learning, featured prominently throughout the TE's approach. At all costs, she wanted to avoid a '*pretend-Jenny situation*' (TE1, D1), namely role-play situations in which STs pretend to be pupils learning subject matter, which they (the PGCE STs) had already mastered at a very high level. She saw no pedagogical value in such activities, not only because of the imaginary dimension, but also because she viewed the lack of context as an impediment to learning: '*context gives meaning and therefore, if it is out of context, you go back into that robotic, "Do it like this because I'm telling you to."*' (TE2). Here her rationale was that if the STs are unable to identify with or understand the reasons behind an activity, then they will '*go back to their own ways in the classroom. So I still **need** to refer back to the whole for them to understand **why** we are trying to do something*' (ibid, emphasis in original). The use of the term '*context*' is particularly

apposite since, etymologically speaking, it connotes a ‘weaving together’, thereby implying an avoidance of fragmentation. Through the skilful exploitation of experiences, both *asynchronously* and *synchronously* (4.3.1 and 4.3.2), the TE wanted the STs not only ‘to create meaning out of what they experience’ (D1), but also to ‘really come to grips with, “Oh, it is not really that straightforward”’ (TE2). In other words, through *lived experiences*, the intention was to foster an appreciation of teaching’s complexities.

But what of the ST perspective on this matter of *orchestrating lived experiences* as a means of seeing into practice? In a focus group discussion concerning how the course fostered the STs’ professional development – what Iris called opportunities for ‘happy teaching’ (F1Iris) – I made a rare intervention and enquired how this was achieved. The response was an instant and unanimous chorus of ‘*Serbian in September*’ (F1). My suggestion that this constituted decontextualised learning – and was therefore ineffective because it took place in a teacher-education classroom and not the real world of school – prompted immediate and strong objections led by Iris who was at pains to point out: ‘*But we are students and we are real students. We were students of Serbian, as well as students of how to teach a language*’ (F1Iris). Iris then provided an interesting analogy of the Serbian experience:

It’s like seeing a show from three points of view: from the public [audience], from the stage, and from the backstage (agreement from others). It’s great. At the same time, it gives you a view that’s unique in my opinion (agreement from others).

What Iris appeared to be suggesting is the cultivation of multiple perspectives, the stimulus for which stemmed from some form of *lived experiences*. According to Alex (F1), this was all part and parcel of how the TE kept on ‘*trying to make us experience things rather than just tell us things. It’s actually an elaborate way of teaching us something without simply telling us the facts*’. The STs (F1) explained how these experiences were amplified and elucidated through: observing bespoke lessons taught in school by a former graduate of the course; having follow-up seminars run by the same teacher, often featuring material she had videoed to exemplify key points; and undertaking, at the university, workshops with school pupils. These additional inputs appeared to have played an important role both in cultivating different perspectives, as well as helping certain principles to click into place. For Alex (F1), seeing techniques from Serbian employed in school lessons by a graduate of the course well versed in the approach being advocated, prompted the pedagogical penny to drop: ‘*This is where I understood all the techniques (TE’s name) was using when we saw them in (teacher’s name) teaching*’. In a personal communication (12.2.17), Kara noted the importance of the sessions in the teacher-education classroom for seeing into practice, especially practice that had not been

encountered before: *'One key strategy is teaching us Serbian. We were learning a new language in a way that none of us had before'*. Kara's last point was particularly pertinent because it arguably pointed to the 'real' nature of this teacher-education classroom. But this observation raises the question as to how to get someone to see past the surface features of something they have not previously encountered and help *'them to understand the reasons why, to go beneath the bittiness, the surface [and] give themselves permission to try it out'* (D1). Thus a constant challenge for the TE was centred upon *'getting them to notice what there is to notice and making the implicit explicit'* (D1). So how did she create such experiences and render explicit the implicit from within those experiences? To consider these questions, I now explore the two sub-themes of *asynchronous* and *synchronous contingency management*.

4.3.1 Sub-theme one: asynchronous contingency management

At root *asynchronous contingency management* (ACM) represented a pedagogical paradox in which the seemingly aleatory was in fact a carefully-constructed, *a priori* 'pedagogical contrivance' (Widdowson, 1990) created through happenstance-engineering. For example, the TE would sometimes manipulate teaching sequences in ways that impinged heavily on the STs' ability to learn effectively, leading to a feeling of frustration amongst a class of normally highly successful language learners. Such reactions would be 'provoked' by tinkering with the teaching process so as to replicate some of the common pedagogical pitfalls in language teaching: *'You plan, you design a stage to have moments when it is going to go skew-whiff. But that is in the overall design'* (TE3). Examples of this strategy (D1) in the teaching of Serbian included: covering material too quickly; missing out key teaching steps; and not scaffolding language adequately, especially in pairwork. The TE's philosophy was: *'They have to experience ... They have to feel'* (D1). In the above instances, the *'feeling'* and *'experiencing'* acted as the springboard for noticing aspects of cognitive load theory (Sweller, 1994 and 1988) and the need for appropriate affective and cognitive scaffolding (Christie, 2016).

The above and similar examples suggested that TE was consciously sowing uncertainty and confusion as a means of helping her STs to see into practice more clearly. On checking out this assumption with the TE, I discovered that her underlying philosophy was one of *'the pursuit of uncertainty being the space in which one learns the most'* (personal communication, 12.12.16) and that the creation of uncertainty was actually a carefully-constructed process, which was *'very guided, actually. Structured. It is convergence in the pursuit of divergence'* (D2), thereby creating another dimension to the pedagogical paradox of ACM. Perhaps the

most powerful instance of ACM was springing on the STs a surprise Serbian test several months after their last formal Serbian input. The TE's rationale for this strategy was:

*I knew that there would be a mixture of frustration, hatred, shock, surprise etc. I wanted that to be a vehicle to explore what they had remembered and what they had forgotten. And to **learn** from those lessons that what works for them also might work in the classroom. Or what hasn't worked for them, therefore doesn't necessarily work for children. (D2, emphasis in original)*

Affectively charged words such as '*frustration, hatred, shock, surprise*', indicated that the TE was not afraid to bring to the surface a range of emotions that possessed the potential to give access to underlying assumptions that might have remained undisturbed if more anodyne strategies had been employed. Her readiness to do this is captured in the following exchange (D1):

- I/er *So you are creating certain conditions, stepping back and seeing what happens?*
TE *Yes.*
I/er *What could we describe that as?*
TE *L'apprenti sorcier.*
I/er *Which is what?*
TE *L'apprenti sorcier. I don't know the English*
I/er *The sorcerer's apprentice?*
TE *Yeah.*
I/er *But the sorcerer's apprentice caused chaos.*
TE *Big mess, big mess, big mess.*
I/er *So you create mess?*
TE *Yeah.*
I/er *Cognitive, emotional mess?*
TE *That's it.*

In its most dynamic form, as intimated in the above, ACM could perhaps be likened to a 'pedagogical alchemy' that transmutes the base metals of hidden cognitive and affective processes into powerful, reflective material. However, not all manifestations of ACM were designed to create a '*cognitive and emotional mess*' and a '*raw, frank reaction*'. At a less intense, and indeed more ubiquitous level, ACM was the key planning tool for placing STs in classroom-realistic situations in which they had not found themselves before. This obtained in particular for the target-language strategies being fostered (D1); inductive approaches to grammar teaching (D2); and the promotion of pupil interaction language (D1 and D2). Underpinning this approach was the TE's view (TE4) that mere intellectual understanding was not enough because it could give '*that little illusion you have understood something*'. Instead, she wanted the STs to '*experience little things ... because they need to be confronted with a*

problem (hits the back of one hand against the open palm of the other several times) *and go, "Oh, right."* (ibid). Through this process the TE planned to engender '*hopeful affordances*' (D1), namely the appropriate conditions for the STs to be curious and open-minded enough '*to give it [the approach] a chance. One way that they might give it a chance is to see how complex it is, the thinking behind it, and the reasons why*' (D1, emphasis in original). In similar vein, she wanted to engender a '*dispassionate, but also compassionate way of looking at things. Dispassionate in the sense of criticality, distance, and understanding the reasons why*' (D1). And it is *synchronous contingency management*, and its role in helping STs to gain critical distance and understand the reasons why, that I now propose to explore.

4.3.2 Sub-theme two: synchronous contingency management

While ACM entailed 'engineering' specific situations for the purposes of engendering cognitive and affective reactions on the part of the STs, *synchronous contingency management* (SCM) involved the in-the-moment ability to respond to and unpick, from a theoretical perspective, how the STs had reacted. Here the purpose was centred upon '*understanding the reasons why*' (D1). In elucidating the essence of SCM, it is helpful to consider what the TE aimed to achieve in respect of promoting STs' theoretical understanding. First, she harboured an antipathy towards formalised reflective frameworks such as Kolb (2015) and Gibbs (1988) because she regarded them as '*an intellectual enterprise with little meaning/relevance*' for the STs (personal communication, 19.12.16). Equally irrelevant, in her view, was sharing with STs some of the dilemmas she faced when teaching them: '*But how can a student teacher make the link and learn from what's going on your head? It seems to be a bridge too far to me*' (TE2). Her approach to reflection was to keep it '*embedded in the learning process*' and '*just do it*' (ibid). Second, citing Vanassche and Kelchtermans (2014, p.123), the TE stated that she wanted her STs to apply '*knowledge (a broad repertoire of theories of teaching) and skills to reflectively judge particular situations and decide on appropriate actions accordingly*' (personal communication, 19.12.16). The TE's citing of Vanassche and Kelchtermans, although applied to what she hoped her STs would be able to do, summarised perfectly what was also required of her when helping her STs to make sense of experiences. In short, she needed to be able to draw on '*a broad repertoire of theories of teaching*'. For the TE, this was integral to her teaching role (TE3); but equally important, in her view, was being able to feel '*comfortable with not knowing*', something that would not have obtained earlier in her teaching career when she felt she '*ought to know the answers*' and her role was '*to provide them*' (personal communication, 30.12.16).

Being able to feel *'comfortable with not knowing'* stemmed from the confidence of having done her *'homework'* (ibid). This involved the key principle of planning for the *'unpredictable'* (TE3), where the *'unpredictable'* was often *'predictable'* on the basis of the TE having explicitly *'engineered'*, through ACM, a particular reaction on the part of the STs. In other words, through her ACM strategies she could often predict what the STs' reactions would be, and thus could prepare in advance how to respond to them. I would propose that this process could be captured in the oxymoron of the *planned-for 'unpredictable'*. The TE's reasoning for this was that *'if you start planning for the 'unpredictable', you become more skilful when the real unpredictable happens: a) you spot it and b) you know how to react in a pedagogical manner'* (TE3). Following through on the idea of the *planned-for 'unpredictable'*, the *'real unpredictable'* would be the *unanticipated unpredictable*. When the latter occurred, the TE no longer had a sense of inadequacy from not knowing; instead, she professed to be merely *'intrigued'* (personal communication, 30.12.16). This suggested that, through her experience and extensive preparation for the *planned-for 'unpredictable'*, she regarded not-knowing as a developmental opportunity rather than an existential professional threat. This observation is borne out by the TE herself who provided an insightful metaphor in which she referred to herself at the start of her TE career as a *'butterfly without flowers'* (TE4), implying inadequate knowledge and not knowing what to attend to. That situation had now changed (TE4, emphasis in original):

I/er *So what sort of butterfly are you now?*

TE *I think I'm plotting a course. I want that flower; that flower; that flower, but I still want to be attentive to what flower **they've** noticed. Because that gives me an insight into what they are ready to notice and what they are not quite ready to notice yet.*

But how did the STs view this process, especially in relation to *'applying a broad repertoire of theories of teaching'*? The answer to this question was perhaps best exemplified by a comment made after a spontaneous debate amongst the STs, in which they had just deployed, in the most matter-of-course way, different theories as tools for thinking about declarative and procedural approaches to language learning (4.7). At the end of the discussion, Marie (F1) observed that she was *'pretty sure most people would not have understood what we have just said'* (Laughter from rest of group). *It means we are using our own language'*. It would appear that the STs were utilising the discourse of the discipline as a tool for thinking. But what was the source of this discourse? Its origins, as with most of the STs' references to theory, flowed

from the TE's SCM skills (4.7) in unpicking *lived experiences* from a theoretical perspective. Iris (F2) provided a summary of the principles involved:

I think the approach she is using is maieutic in the sense she is taking out from us all our reflections about how we learn; how people can learn; all the differences, not all, because it's infinite, but the many, many differences that are in learning.

Intrigued by her thinking, I wrote to Iris asking for further exemplification. I was particularly interested in her use of the term '*maieutic*', derived from the Greek for midwife, to capture the SCM process. Here is part of her response:

Maieutic: of or denoting the Socratic mode of enquiry, which aims to bring a person's latent ideas into clear consciousness ... I linked [TE's name] approach to that because I felt helped by her to give life to my ideas and realise them with much more clarity, but without being told what I had to think or to do. (Iris, personal communication, 10.12.17)

Iris' observations were analogous to Scott's (1Scott) earlier comment (4.2) on how the TE opened up '*ipsative opportunities*'. However, what Iris and Scott did not realise, or certainly did not mention, was the role of the *planned-for 'unpredictable'* and the discrete directional forces that were being deployed, a process the TE referred to as '*convergence in the pursuit of divergence*' (D2). Nor would they have been aware of the thinking that went into creating learning experiences replete with dilemmas and incipient dissonance – not to mention the preparation that was required to equip oneself to respond, from a theoretical perspective, to STs' reactions to *lived experiences*. The themes that now follow serve to unravel these particular mysteries. Further, I also return to SCM in 4.7 where more practical examples are explored.

4.4 Theme Two *Playing the long game: beyond tips for Monday morning*

As discussed in 4.2, at the heart of this theme is the Deweyan concept concerning the importance of 'continuity and interaction' in providing STs with the space to be able '*to experiment and to play*' (TE3) with pedagogical ideas as part of the '*project*' (D1 and TE3) of learning teaching. In what follows, I examine the nature of this long-term '*project*', especially in relation to its underpinning idea of a '*gently-does-it*' approach (D1, TE3, TE4) and, in so doing, demonstrate how the TE's vision of professional learning aimed to cultivate depth of understanding, rather than '*decorative*' (D2 and TE4) '*teaching tips for Monday morning*' (TE1-TE4 and D1-D2).

Throughout the study, the TE marshalled metaphors such as '*drip-feeding*' (TE1-TE4, D1), '*sowing of seeds*' (D1, TE3 and TE4), and '*leaving traces*' (D1), to support the notion of '*gently does it*'. For her, '*gently*' not only meant '*slowly*', it also '*encapsulated a respect*' for the STs'

past (TE4). By 'past,' she was referring to the STs' previous educational experiences, to their apprenticeship-of observation (2.8). For the TE, it was vital that the STs felt that their opinions and beliefs were recognised as legitimate by *'honouring where they come from so they're not on the back foot'* (TE3). Ensuring that the STs felt comfortable in their own skin provided the *'solid foundations for them to move further'* and avoid *'reluctant, defensive learning'* (TE3). Honouring the STs' beliefs was realised by *'starting from where they [STs] are at and giving them very, very tiny steps'* (TE3) in *'a continuous series of drip-fed encounters and experiences'* (D2). This approach appeared to advocate that the process of learning teaching was not something that could be hurried, and that the point of the departure was the individual and not an externally-imposed, *a priori* curriculum. Regarding the 'revisiting' process, the TE invoked Gardner's (2009) concept of *'multiple entry points'* (D1), which she defined as *'meeting the same concept from different angles'* (TE1 and D1) and *'going back to and expanding'* (TE4); indeed, she even referred to this process as *'a spiral curriculum gone mad'* (D1). Audrey (F1) characterised this approach as *'multifaceted'* because *'there's so many different ways that she does one thing'*, whilst Kara (F1 and F2) often employed the term *'multiple entry points'* – with which she was familiar from learning theory – to describe the professional learning on the course:

I think the 'drip-feeding' and 'multiple entry points' from [TE's name] have really helped with these Gestalt moments (of which I am looking forward to more!) (Kara, personal communication, 10.2.17)

Through *'multiple entry points'* the TE was creating a personal continuum of experiences for her STs that involved exploiting insights from a previous experience to mediate and modify personal interpretations of new-but-similar experiences. Alex (F1) summarised this process as initially entailing not seeing *'all that was involved in what she [the TE] had been doing. But the second and third time she came back to it, it was like "Oh, now I get it."'* This view was supported by Iris (F1), who remarked that having the opportunity to revisit issues from a different perspective enabled her to *'think about many things and re-see many things that I saw before in a different way, and reconsider them'*. Through this process, the TE aimed to avoid *'too much coverage'* (D1), the natural corollary of which was a *'hurry-along curriculum'* [a reference to Dadds, 2001] (D1); that is, the pursuit of coverage at the expense of deeper understanding. This was realised through orchestrating learning experiences that were *'deeper and more intense'* by dint of *'paring down to one key process and then hitting that process from all sorts of angles'* (D1). The TE did acknowledge that continuity with the group

permitted her to pursue such a strategy, and thus have the opportunity to proceed beyond delivering *'teaching tips for Monday morning'* (TE1-TE4 and D1-D2).

With regard to the above, it should perhaps be noted that these STs appeared to be comfortable with viewing their professional learning as an unpredictable and long-term endeavour; further, they were not in search of silver-bullet solutions that could be applied instantly to their teaching. Kara (F1), for example, held the view that *'learning is not linear and everyone had their own messy path'* and there was *'more to this learning malarkey than meets the eye'* (D2). Similarly, Scott (I) expressed the view that *'learning is not linear and ... every human being is unique'*. He further proposed that if a one-size-fits-all approach were adopted, then *'you are not teaching so that innate capacity can come out from within. You're trying to mould capacity'* (ibid). Scott had articulated a dilemma which the TE acknowledged she was facing (TE4); indeed, she cited Dewey's deliberations concerning whether education was *'development from within or formation from without'* (Dewey, 1963, p.17). Like Dewey, she favoured the *'within'* dimension, but also acknowledged the role of the *'without'*. However, she was mindful that *'from within'* took time as the STs constructed and developed their new understandings. Here she was prepared to *play the long game* with each new idea by encouraging the STs to: *'Take a bit. Play with it. Experiment. Be curious about it. Try it out. Try with this group. Try with that group'* (D1). Iris (F2) likened such experiences to the ingestion of a slow-release pedagogical pill:

It is a kind of pill containing what you have done that you have to explore and expand slowly in different circumstances, in different years, and with different classes. I'm trying to take this year as a stimulus that I will develop until my pension probably (laughter). It is a starting point.

Iris' analogy of taking a slow-release pedagogical *'pill'* that enabled one to *'explore and expand slowly'*, on a personal basis, previous experiences, resonated strongly with the TE's concept of *'a project'*. In this respect, the TE reported being inspired by van Lier's (1996) definition of *'the curriculum as a project'*, namely something requiring *'personal investment and self-determination, together with the vision to pursue a particular ethos whilst being responsive to the context and the quality of the interactions therein'* (personal communication, 18.12.16). *'Being responsive to the context and ... the interactions therein'* might easily be a reformulation of *synchronous contingency management*, whilst *'personal investment and self-determination'* both underscore her observation above of respecting the individual and their past history (TE4). Concerning *'the vision to pursue a particular ethos'*, such an intention formed the central organising concept of the theme that now follows.

4.5 Theme Three *Creating an invitational vision*

While the previous theme examined how the TE conceptualised learning teaching as a long-term '*project*', the focus here was on what drove this '*project*', namely a vision, on the part of the TE, '*to pursue a particular ethos*'. The TE regarded the creation of a vision as fundamental to her role:

I try to have, and to manifest, to demonstrate a particular vision for languages teaching and to say right, "This is what I believe in. This is me. This is what I believe in. Take it or leave it. This is what the approach is. This is what it purports to do". (TE1)

I explore the creation of this vision and how it was designed to '*invite*' the STs to participate in the '*project*'. Concerning her vision for language teaching, it was an approach pioneered over a twenty-year period by her institution (see Christie, 2011 and 2016). At the epicentre of this approach was the fostering of spontaneous target-language use by pupils, something which remains very rare in many classrooms (Ofsted 2012; 2011; 2008; Dearing and King, 2007). What follows examines the dilemmas faced by the TE in pursuing this '*particular ethos*'.

The issue of professing and promoting a vision of language teaching had been the subject of much moral deliberation (TE1 and D1) on the part of the TE, as she oscillated between pedagogical proselytisation and something more invitational and less dogmatic. Indeed, the challenge of plotting a path between '*freedom and prescriptivism*' was mentioned in all four major interviews (TE1-TE4). The TE reflected that in the past she had perhaps been '*wilfully dogmatic*' (TE1) by conveying messages such as: '*This is the way. We're staking our claim here*' whilst simultaneously feeling '*very cautious about, "You shall teach that way because..." and that's been a strong moral dilemma for me*' (ibid). Findings from the initial stages of her own ongoing Ph.D. study helped her to find an equilibrium in this matter. In her data, the research subjects (former STs) advised on the benefits of promoting '*a strong positional message that they feel they can have faith in*' (TE1) to provide, at least in the first instance, guidance. Their unambiguous message to the TE was '*please be dogmatic*' because '*it gives us that assurance, but we never felt that you judged us*' (TE1). Thinking deeply about these promptings, the TE made a decision not to become '*dogmatic*', but '*pedagogic*' (TE1). Her reasoning was that '*if I make the teaching convincing enough, they might be attracted by the teaching*' (D1). At root, bringing about change hinged on the '*approach itself, rather than "Do it this way!"*' (D1, emphasis in original). Consequently, letting the pedagogy '*speak*' in an invitational way helped her to resolve her pressing moral dilemma of dogmatism (TE1) and reconcile the tensions of believing in a particular approach with not wanting to coerce the STs into adopting it: '*So I've*

got to find a way of making you believe in it, whilst at the same time respecting the freedom for you not to believe in it'. But how did she balance out being passionate for a particular approach with being non-prescriptive? I propose that the answer lies within the oxymoron of 'non-judgemental evangelism'. By this I mean that she believed deeply in the 'good news' of the approach, but would not judge anyone for not adopting it.

The STs in this study picked up very strongly on the TE's desire to be non-judgemental. Alex (F1) captured this overall feeling on the part of the STs with the observation that *'she displays this openness which means that you feel you can talk to her about anything; and if she does judge, she doesn't let on'*. Further, the TE would continually reinforce the non-judgemental aspect, at least implicitly, by stressing that she did not want 'robots' or 'copycats' (D1) whilst, at the same time, appreciating the importance, certainly initially, of mimicry, which she regarded as *'a tool and not the end product'* (TE3). Further, she took professional pride in the fact that STs felt able to disagree with her or, as she phrased it, *'give a gentle, diplomatic, courteous two-finger salute to my training'* (TE4). In such instances, the TE harboured the hope that, by respecting the individual, she could *'open chinks in her [the individual's] way of seeing and allow her to see other ways of doing things that could benefit her and her learners'* (TE4), with the result that a ST might start to think, *'All right, I'll follow you on that little ride of yours'* (ibid). The TE's non-judgemental stance was based on her personal premise that *'you have to be happy with who you are before you can become somebody else. Otherwise you get that negative transformation'* (TE3). By 'negative transformation' she meant, *'Do it like this 'cos otherwise I will judge you negatively'* (TE3). Preserving the integrity of the individual was thus a fundamental principle for the TE. She described this process as producing a *'happy amalgam between solidity and transformation'* (TE3), which entailed *'respecting who they are, their values, their principles, their way of being, their way of seeing the world'* (TE4) whilst, through the creation of a safe environment, encouraging the STs *'to start to see the world in a different way'* (ibid). But she realised that although she did her best to remember what it was like for her at the same stage, it was impossible *'to ever be in their head'* (TE2); indeed, it was only possible to *'try and see the world from their eyes, their point of view, and their background so that you understand why they interpret the world in the way that they do'* (TE2, emphasis in original). In terms of encouraging change, she considered it vital to *'model the way in which I'd like them to behave in the classroom'* and trust that formation from without would catalyse development from within (TE4). Such an approach entailed striking a *'balance between freedom and prescriptivism'* (TE3).

In achieving such a balance, she underscored very strongly the need for the STs to work out things themselves, but not entirely without her mediation – because it was *‘too facile to say, “You discover it. You go ahead and you re-invent the wheel and I’m just the guide on the side”’* (D1). She wanted the STs to think and make *‘judicious choices based on their own professional nous instead of just copy, imitate and think later’* (TE2, emphasis in original). This was to be realised by helping them, through appropriate interventions, to develop *‘professional wisdom’* that *‘is born out of experience and reflection on that experience’* (TE2). In a sense, this represented a reprise of Iris’ maieutic hypothesis (4.3.2) in that the TE’s mediation helped to give life to ideas without telling the STs what to think or do. For some, such as Kara (F1), this role led to surprises *‘like discovering new things, like opening a new door and thinking, “Oh, you’ve got to think about that as well, and oh there’s that as well”’* (said in an excited voice). Kara’s observations, and the manner in which she made them, suggested a vision that was not only invitational, but also inspirational. Supporting the notion of an ‘inspirational vision’ was a serendipitous and spontaneous interchange that took place between the STs from both focus groups during the change-over between sessions (F2):

- Kara *I wouldn’t have been inspired by teaching if I couldn’t have come to this course first. No way.*
- Alex *Yeah.*
- Iris *I wouldn’t be able to see things in the same way.*
- Kara *Now I see the joy and the possibilities. And how to help the kids see the joy and be empowered* (Audrey murmurs agreement).

The above indicated a ready acknowledgement on the part of the STs that they had been inspired by the TE’s vision and the vistas that it opened up. In a personal communication (26.02.17), the TE clarified her concept of ‘vista’ as being *‘the “vision” of what lies beyond ... the landscape of opportunities but one you can only “re-cognise” if you can make sense of it, and you can only make sense of it if you already have some “schema”’*. The opening up of a *‘landscape of possibilities’* required the TE to see the world through the STs’ eyes and then, from their starting point, help them to develop new *‘schema’* so they could *‘re-cognise’* and thus glimpse these new vistas. As noted in 4.2, Scott (I) summarised this process as *‘opening up ipsative avenues of possibility’* because the development was very much on a personal basis. Further, despite the pedagogical vicissitudes some of them had experienced on placement – or perhaps because of them – a vision acquired through the university course continued to act as a guide and mentor (4.7). For example, Anna (I), who had been in a school that was very negative towards the university and the use of the target language, noted that her lesson structure had been highly influenced by the school but her core philosophies, such

as fostering '*deep thinking*', '*authentic resources*', and '*the value of exposing children to real target language*', had all come from the university, thereby inspiring her in the future '*to live the language*' and try and pass on the passion that she had for language learning by reconciling '*covering the curriculum*' with encouraging her future classes '*to play with the language*'.

On the basis of these examples, the theme of *invitational vision* was a source of sustained inspiration, certainly at the espoused level, and demonstrated that there existed '*different ways of skinning the language-teaching cat*' (TE1). Further, *invitational vision* appeared, with its inspirational dimension, to transcend mere teaching technique and become something that was perhaps more profound in that STs were being encouraged not only to see into, but beyond, current practices. The TE's vision in this respect involved the not-so-secret hope that the STs would '*exercise their professional judgement and interact with the curriculum in a way that the curriculum remains the servant of their own pedagogical purpose, as opposed to the master of it*' (TE3, emphasis in original). To arrive at this point, the TE required another sort of vision, namely one that enabled her to *orchestrate lived experiences*, which then acted as a pedagogical fountainhead feeding the stream of possibilities that flowed through the course, from which the STs could draw ideas enabling them to '*pursue their particular ethos*'. However, as the next theme now demonstrates, this process often entailed negotiating many challenges, and the experiencing of initial failure, before in-depth insights could be drawn for practice from the complexities of practice.

4.6 Theme Four *Learning from challenge and productive failure*

This theme encapsulated the TE's aim of stimulating thinking through the conscious creation of dilemmas and difficulties that were designed to provide a reflective foil to the STs' assumptions and beliefs, hence the term *challenge*. *Productive failure* involved utilising *asynchronous contingency management* (4.3.1) to create activities that would cause the STs to struggle, and possibly even 'fail' in the first instance. However, by causing the STs to '*come a cropper*' (D1), the TE maintained they would be motivated to consider the deeper features of an issue by working out '*what made them fall and what could prevent them from falling again*' (D2). Such '*learning moments*' (TE4) varied in intensity from gentle waves of dissonance to teetering on the edge of a professional and personal abyss. In what follows I explore the nature of these '*learning moments*' and consider how they helped STs to see into practice.

In connection with some of the teaching activities that took place in the teacher-education classroom and involved real children on an intensive language-learning day, the TE made frequent use of the metaphor of standing on a cliff edge and staring into the abyss. The

challenge of the situation was having *'a duty towards those pupils'* so it was *'not a fake, contrived situation in that regard'* (TE4). In reference to one ST, she noted that she/he:

...was at a cliff edge, constantly at the cliff edge, and that really made [her/him] appreciate the abyss and the risk and what [she/he] had to do to stay on the cliff and not sort of fall. (TE4)

For the TE, a key element of challenge involved the STs having to find the requisite *'inner resources'* (TE4) to solve a particular problem that was often very real, for example teaching one's peers a new word through paraphrase on very limited Serbian or teaching a new language to pupils on a university-based language day. Standing on a metaphorical cliff edge, and staring into a potential professional and personal abyss, added urgency and a sense of realism *'because it's only when you are at the cliff edge (smacks back of one hand against the open face of the other hand several times), when you really have to do it for real, you suddenly think, "How do I go about it?"'* (TE4). For the TE (TE4), the challenge of such experiences was in marked contrast to the:

...pretend understanding that you get when you go to lectures and seminars and when there is a very skilled lecturer, you think you understand everything; it is all commonsense ... and then you have to do it and (clicks fingers) it all goes to pot.

The TE placed great value on ferreting out *'pretend understanding'*, which she referred to on occasion as *'compensatory mimicry'* (TE3) because if you have to *'borrow your solutions, instead of working them out, the result is not as effective'* (TE4). The bottom line consisted of *'making sense of things in ways that make sense to **you**, as opposed to somebody else'* (TE4, emphasis in original). This would sometimes involve going beyond the pretend and staring into a real abyss; at other times, the *'learning moments'* could arise through *'disorientating dilemmas'* (TE3) and *'necessary problems'* (TE4) that were more naturally occurring. Nevertheless, the TE set great store on *'problems'* which she regarded as a positive force because *'it is only when you are confronted with a particular difficulty that you get your brain in gear'* (TE4). Pursuing a pedagogy that prized cognitive/affective strain over cognitive/affective ease as a means of fomenting the learning process, required of the TE a mindset that was comfortable with discomfort on the part of the STs (TE1). Notably, this had not always been the case, since the early years of her ITE career had been marked by a desire to be needed and appreciated. Pedagogically, this meant that she opted for making the learning as comfortable as possible by reducing any potential dissonance or discomfort on the part of the STs (D1). As her career progressed, her approach became characterised by a *'tough-*

love' dimension in which the previous dissonance-reducing strategies were replaced by dissonance-creating ones:

My initial anxieties coloured my need to be appreciated by my students and structured my input likewise (tips for Monday morning: aren't I helpful eh!?) and I'm now more comfortable with their discomfort: 'tough love' has become a better guide. (Personal communication, 30.12.16)

A key component in the TE's tough-love pedagogical repertoire was the way in which she orchestrated events so that the STs had to puzzle out things for themselves, to '*struggle to arrive at meaning*' (TE3), as she put it. The TE's premise was that the STs were '*adult enough to know the secret agenda behind the exercise*' (D2), an observation that was borne out in different ways by the STs. For example, Kara (F1) noted that learning '*sticks in your head more when you find out for yourself*', while Audrey (F1) thought it was more effective when '*you have to search for yourself*'. Marie (F1) was more expansive on this issue:

Sometimes she's just expecting us to find the theory hidden and she's challenging us to guess. She is getting us out of our comfort zone and wanting us to search for that meaning and that understanding that we're perhaps not getting.

These STs' comments mirror the TE's basic thesis that '*you are learning a lot more than if it was just routine*' and in '*any learning situation struggle is part and parcel of the process. You've got to be comfortable with the idea of being uncomfortable*' (TE4). These observations suggested a conceptualisation of a TE's role as being analogous to the grit in an oyster; that is, the TE injects into the learning process dilemmas and problems that can ultimately produce something of value in the form of a 'pedagogic pearl'. In the context of ITE, 'grit' can perhaps be interpreted as inciting at least some measure of bewilderment, uncertainty, intrigue, puzzlement or temporary failure on the part of STs. Here we return again to the power of *asynchronous contingency management* as a tool for provoking pedagogical thinking (4.3.1). The apotheosis of this strategy was arguably the surprise Serbian test (4.3.1) and the way in which it was designed to produce 'failure'. Here the TE was unequivocal in her view that there was '*learning to be had in learning to fail*' (TE4). However, the orchestration of *productive failure* was underpinned by careful scaffolding and mediation. The TE's metaphor for this support was one of allowing '*them to fall on soft material, pick themselves up and work out what made them fall and what could prevent them falling again*' (D2). Fortunately, neither metaphor involved STs pitching themselves down an almost sheer rock face to reach the pedagogical pastures below, in the manner of a barnacle gosling's precipitous journey from rock-face nest to the relative safety of the sea. Such death-defying antics were definitely not the order of the day for a number of reasons which I now outline.

First, because the TE wanted uncertainty, confusion, discomfort, and short-term failure to exercise a *nurturing* instead of a *negative* effect on the STs' learning, she drew on Eraut (1994, p.33) and his notion of it taking up to two years of teaching experience for certain concepts to become clear and embedded. By referring to Eraut, she explicitly explored with the STs how '*feeling at sea*' (D2) was normal, and exhorted the STs not to give themselves '*a hard time for feeling that way*' (D2). Second, as discussed in 4.4, she was keen on producing an environment in which the STs had '*the freedom to experiment and to play ... because hopefully that lessens the stakes*' (D1). In her view, being in the university provided an environment that lessened the stakes because '*they're not feeling judged/criticised for holding certain views and they feel they can express these views in a safe environment*' (TE3). The STs in the final focus groups certainly appeared to concur with this particular standpoint. Iris (F2) captured the ST consensus very effectively by describing the university as '*a nurturing environment*' in which '*to build or develop ideas and links between people, between minds, between views*'. The TE speculated that this was partly due to the fact that '*all of that layer of the school, of judgement, PGCE, QTS, all that had gone*' (TE4) when the STs were at the university. Third, of crucial importance was avoiding challenges that were too hard or too soft, too big or too small. Following the Goldilocks principle, they had to be 'just right'— that is, orchestrated in such a way that they created a catalytic rather than a constraining and corrosive effect on development. What the TE hoped to engender through the types of challenges discussed was a '*sense of self in a state of permanent discovery*' (TE3). The natural corollary of this state was the ability to cope professionally with a '*constantly recalibrated north*' (TE3), by which she meant an ongoing oscillation between old and emerging understandings, and thus potentially be able see practice through new eyes. As the next theme demonstrates, central to 'seeing through new eyes' was the role played by theory.

4.7 Theme Five *Theorising: the L-word and not the T-word*

The summary of this theme in 4.2 drew attention to how the TE's notion of theory and theorising involved drawing down literature (her term for theory) from the field in order to '*play with concepts that people in the field are conversant with and they use all the time*' (TE1). In what follows, I explore how this process operated. To this end, I employ as indicated in 4.3.2, the lens of the practical strategies associated with *synchronous contingency* management; that is, the in-the-moment unpicking of *lived experiences* in ways that helped the STs to see into practice with theoretical understanding. I then explore these processes through STs' eyes. In those instances where the TE explicitly refers to 'the literature', I use her terminology. In other places, where this is not the case, I use the term 'theory' with the

meanings ascribed to it in 1.5, namely that of systematically organised public knowledge of a conceptual, empirical or normative nature which can be utilised as a lens to view, interrogate, and interpret practice.

The point of departure for *synchronous contingency management* concerned the TE having to decide how to mediate the STs' reactions to *lived experience*. To this end, the TE would perform in her mind a sort of 'pedagogical triage', a process involving deciding '*which one [idea] I pursue, which one I park, and which one I defuse*' (TE1). Earlier in her career as a TE, such in-the-moment decision-making had not been part of her pedagogical repertoire because, in her view, she did not possess an adequate command of the requisite literature. She described this situation as lacking the appropriate '*ammunition*' (TE1). Consequently, she stuck rigidly to a script with the result that '*it left no communicative space; no open space; no divergence, and so on. Whatever went on in their heads, I have no idea. I was fulfilling a script*' (TE2). By contrast, she was now devising her own script that actively fostered '*divergence*' (TE2 and D2) in pursuit of understanding – both on her part and that of her STs. If the TE decided to explore an idea, then she would draw down key concepts from the literature; however, she was careful not to '*bamboozle*' (TE2) the STs by bombarding them with too much information. As noted in 4.4, this was very much a drip-feed approach. Often the start of this process would involve just noting on a flip chart '*key concepts that are going to crop up later on*' because it was '*good for them to notice these things and because it will leave a trace. It has that priming effect*' (D1). Concepts would then be re-visited as described in 4.4.

When making in-the-moment judgements concerning which ideas to '*pursue*', '*park*', '*deflect*', or '*defuse*' (TE1), the TE's *phronesis*, namely her ability to act wisely in specific situations (2.6.4), was constantly in evidence. Often this required a balancing act between keeping a particular focus in mind and pursuing potentially productive tangents. Sometimes those tangents would only be followed for a short distance before being '*parked*'; at other times, a tangent could become the main focus of the session, although the latter was relatively rare, with the TE referring to this as allowing the STs '*to derail a session*' (TE1 and TE3). But she did not regard this as '*improvisation*' because she had '*enough ammunition there already*' (TE1), indicating that any tangent pursued would be buttressed by an underpinning of literature-related rigour. However, in all the sessions observed, it was apparent that the TE had anticipated some of the STs' reactions and was therefore able to select in advance appropriate extracts from the literature, the purpose of which was to deepen their understanding of incipient issues. To the STs themselves, she described the chosen literature as having '*neat labels to talk about some of the stuff you have started to talk about*' (D1); further, the readings

conveyed '*complex concepts in accessible ways*' (D1). '*Accessible*' was related to being short extracts that focussed directly on something that had just been experienced. Here we witness the emergence of a key strategy in the teaching, namely that of *percept before precept*, whereby principles would first of all almost exclusively be experienced and explored through the lens of the STs' perceptions as expressed in their everyday language, before being labelled in essentially more 'scientific', theory-related ways, and linked to the literature. Scott (I) described the process thus:

You may tell someone something and they may nod in that instance ... but it is one thing to understand something on a conceptual level, but you need a pragmatic level as well.

Scott was suggesting the importance of the interplay between experience and conceptual understanding, with the former providing the context for the development of the latter. Arguably, it was the literature that delivered the conceptual grist to be ground in the mill of experience. In this case, 'grist' was obtained by the TE drawing down, at the moment of need, elements of published and public knowledge that were of relevance to the experiences in question, thereby helping STs to see more deeply into practice with theoretical understanding. For example, when the group was discussing the multisensory nature of the Serbian (D1), Iris made a suggestion that learning might be more effective if all your senses were activated. The TE, picking up on this suggestion, linked Iris' proposal to concepts of 'vividness and intensity', thus connecting a ST-generated insight with a literature-related label. Further, drawing on her knowledge of, and access to, relevant literature, she was also able to provide the group with a short section from Johnstone (1989) on this particular topic, as well as an extract from Stevick (1976) discussing a similar theme. Such extracts often comprised four or fewer pages. Conceptual understandings would therefore be '*drip-fed*' on a need-to-know basis in what was essentially an inductive, bottom-up process.

As already noted in 4.3.2, the STs in the focus group found it amusing how they were starting to speak the language of language-teaching theory. The topic of that conversation was related to inductive/deductive approaches to language teaching. In the third Serbian session, I actually observed the genesis of these concepts, which arose after the STs had experienced an inductive approach to the teaching of grammar through the medium of Serbian. In the ensuing discussion, the TE sensitised the STs to Johnson's (2008) work on comparing and contrasting inductive/deductive methods and then provided them with a four-page extract from Johnson. Here the *L-word* came into its own as a source of thought-provoking ideas with which '*to play*', and thus act as a tool for thinking. This approach was replicated many times throughout the course as STs' observations and questions were melded at the moment of

need with the literature, thereby serving to guide the STs in the calibration of their own personal and professional conceptual compass. The TE judged such a use of literature to be *'useful because they see that people have asked themselves those same questions that they are now asking'* (TE1).

But this was not necessarily always the direction of conceptual travel. Occasionally, the TE would pursue a top-down, deductive approach. This was achieved by giving the STs a video or text that was to be used as a lens to help unpick their experiences in the next session. For example, a short YouTube video of Bjork (2016) on cognitive approaches to learning served as a lens to analyse the second Serbian session. Bjork's framework not only helped the STs to notice a whole range of hitherto unnoticed strategies, but also encouraged them to adopt the related technical discourse, for example *desirable difficulties; massed practice; variability; spacing; withholding answers; reducing feedback; and interleaving*. Discussion of these points catalysed additional observations derived from experience, which the TE, in turn, linked to the literature in an initially *'light-touch'* (D1) way. However, such interactions provided an invaluable and authentic *entrée* to concepts for consideration at a later date. In a sense, such concepts were being consigned, *pro tem*, to a cognitive waiting-room. For example, the TE's reference to the *'hurry-along curriculum'* (Dadds, 2001) was the starting point for theorising the ins and outs of coverage versus understanding (Gardner in conversation with Brandt, 1993, p.7) and mastery versus performance (Coe, 2014; Hymer and Gershon, 2014). Notably, the TE was not improvising but rather constantly taking the initiative based on her knowledge and experience. She was capturing a pedagogical moment and converting it into a teaching opportunity replete with the promise of future learning. This was in stark contrast to what she termed the *'factory teaching'* (D1) approach she was obliged to adopt on other courses where *'it is very, very narrow. And it is almost like a record that can play itself. I can push the play button, and off you go'* (D2).

None of the TE's teaching on the MFL PGCE course ever gave the impression of being *'like a record that can play itself'*; in fact, there were some examples of teaching that were particularly ambitious and involved the TE and STs playing with insights from the literature to develop new theories. This approach was only apparent in the second phase of the course (D2) when the STs had both more experience and a larger repertoire of literature-related insights with which *'to play'*. I observed two successive days of such activity, the format of which was as follows:

- An explicit focus was adopted, for example how to make sense of new input through the creation of meaning.
- Relevant extracts of Serbian relating to this focus were re-taught.
- STs were asked to link their school experiences to the focus.
- With experiences 'rekindled' in this way, the literature that had been drip-fed over several months was used as a prism to refract the practice and see beyond its surface features.
- Through playing with the literature, STs were challenged to develop hypotheses as to what was happening.
- The TE fed in further literature to challenge and enhance insights, which were then 'played with' and mixed into the overall experience. From this 'new mix', the STs could further develop their own hypotheses.

The purpose behind her approach was to provide an antidote to the type of enculturation that, in her view, emasculated reflection:

*I wanted them to go back to reflecting on **why** they do certain things before they become completely enculturated into a particular way of doing and that's it. They stop reflecting. I want them to see the link between **why** we are advocating certain things in the classroom and the literature that we have been using. (D2, emphasis in original)*

But here the TE faced her moral dilemma (4.5) of how to '*model the balance between freedom and prescriptivism*' (TE3) because she did not want to become '*too directional and too controlling, too puppet master*' (D1). This was achieved, perhaps implicitly, through the TE constantly stressing the contestability of different ideas and the importance of context when making pedagogical judgements. And as ever, the concept of '*playing with the literature*' (D1) that had been enacted by the TE since the beginning of the course, came to the fore. Arguably, stressing the contestability of knowledge, and its context-related nature, sanctioned playful experimentation. For example, discussions around the different positions on the interface hypothesis (Ellis, 2005), which addresses whether explicit knowledge plays a role in second-language acquisition, provided a wide range of possibilities, as the word 'hypothesis' would seem to suggest. The TE did not pull her pedagogical punches because, in addition to the 'interface hypothesis', other complex ideas from the literature were introduced as part of the final step above, for example the differences between semantic meaning (i.e. the decontextualised meanings of lexical items or of specific grammatical structures) and pragmatic meaning (i.e. the highly contextualized meanings that arise in acts of communication) (Ellis, 2005). However, because the STs were continually challenged to relate these 'theories' to their everyday practice and their experiences in Serbian, this was not abstract, decontextualised knowledge delivered from a pedagogical pulpit, but rather a

standing invitation to revisit assumptions in the light of changing realities. Above all, she aimed to transcend the ‘commonsense’ and ‘the given’ (TE1) by exploiting the literature to help the STs to gain an entrance:

...into a particular world that uses language in a particular way and packages that reality in a particular way. It doesn't limit what they see, it's not a lens in that sense. It actually opens up other stuff. (TE1)

However, ‘open[ing] up other stuff’ also required skilful *synchronous contingency management* that challenged the STs to think more deeply about the sorts of questions they needed to ask – not only about the language-learning process, but also of themselves and the assumptions they might be making: ‘I say, “Well, that particular question you asked yourself, here’s what the literature has said about it.”’ (TE1). Thus by challenging the STs to see a problem in the context of the literature, and to draw on that literature, the TE was exploiting literature as a practical, pedagogical tool and a heuristic device. However, in order to be able to do this, she needed continuity of interaction with her classes, which she described as having ‘a tomorrow’ (D1):

- TE *You need the freedom and space to be responsive to what has cropped up in one session.*
- I/er *You are being responsive today because you have already analysed what you want to try and do tomorrow.*
- TE *That is because I have a tomorrow.*

However, one of the constraints faced by the TE was an absence of ‘a tomorrow’, and thus no ‘freedom and space’ to engage with emerging pedagogical concepts; in short, instead of operating in *an open dialogic space with a tomorrow*, she found herself in *a constricted space with no tomorrow*. For example, at the time of this study (2016-17), the university was operating in a market place in which it offered its academic wares to school-led training courses, principally to School Direct schemes. This was in the form of awarding Qualified Teacher Status and Masters-level modules. During the year in question, some subject-specific sessions were provided by the university for its School Direct ‘customers’. These were badged as ‘pedagogy for learning’ (PfL) days. The expectation was that such sessions would involve School Direct and Core STs (the name given to university-based STs) being taught together. Here it should be noted that the broad content of these sessions was predetermined in generic terms across all subjects. Hence, schools could see what they were ‘purchasing’ and each session took the form of a one-off event with a centrally-prescribed title. Consequently, the TE found herself in an *a priori* pedagogical straight-jacket because ‘the timetable that has been issued and disseminated to all the schools says **this**, and therefore my job is to deliver **this**’

(TE1, emphasis in original). On observing two of these sessions, I noticed a shift in the TE's approach because theoretical strands that could have been pursued were not taken up in ways that had been evident elsewhere. This obtained both for building on previous knowledge, as well as for the exploitation of openings to introduce new theoretical ideas, thereby arguably curtailing opportunities to see into practice with theoretical understanding. On raising this issue with the TE, she confirmed that this was indeed happening. She explained that she faced the constant conundrum of ascertaining what would '*make sense for a School Direct audience*' (D2). By way of insight, she elaborated on her thinking concerning whether to pursue a point that had cropped up on the theory of language acquisition:

I didn't want to spend too long on this since I had already explored this with the Core students but I didn't want the School Direct to feel left out. Oh the delicate diplomatic dance! (D2)

But there was more to this situation than not wanting the School Direct cohort '*to feel left out*'. At root the issue for the TE was that she thought she needed to adopt a totally different style because she '*felt on display with the PGCE Core and School Direct, not really the owner or designer of the process at all*' (D2). A dominant theme was of '*delivering*' something on a particular day that offered value for money:

I also get the feeling that, when the School Direct are there, I tend to go into "You need to get your money's worth" mindset and I treat these PfL days like INSET days, as one-offs, on a specific theme, since these days are spread out through the academic year. (Personal communication, 19.12.16)

The prevailing perception on the part of the TE concerning the School Direct cohort was that they wanted their '*money's worth*' and that '*they think that your job is to equip them with a repertoire*' (D1, emphasis in original). Indeed, the TE acknowledged a shift in her pedagogy to more emphasis on coverage and the stockpiling of atheoretical activities, a process for which the TE would often employ the term a '*Dropbox*' approach (D1 and D2). By way of explanation, Dropbox is a cloud-based repository for documents provided by the eponymous Dropbox Company, hence the reference to 'stockpiling'. For the TE, the adoption of a '*Dropbox approach*' was reminiscent of her early days as a TE when she judged herself to have been '*a task manager*' (personal communication, 19.12.16) and '*a deliverer*' (TE1) intent on '*hurrying through all my material as if I were a sales person trying to impress clients by going through a catalogue*' (D2). And although it may be harsh to describe what was happening here as pedagogical recidivism as she slipped back into former ways of working that she sensed were not as effective, there was nevertheless an uneasy tension between being a '*sales person*' and the more Socratic approach – by which I mean intense questioning and challenging of

assumptions – she fostered when she had continuity of interaction with a group, and freedom concerning content.

But there was another challenge facing the TE that impinged on her continuity with the group, namely how best to navigate the compliance agenda as dictated by programme-wide demands. Within the wider secondary PGCE programme, the MFL STs were taught in an MFL-only group, whereas other subjects, due to low numbers, were placed in cross-subject groups. However, the MFL STs were required to attend certain programme-wide events. Compliance with programme requirements presented the TE with certain dilemmas. On the one hand, she did recognise the value of some inputs being done on a programme-wide basis, for example safeguarding and the Prevent strategy. On the other hand, she did harbour reservations about other inputs, since *‘it is curriculum coverage that seems to be the name of the game’* (TE4). Fortunately, the TE had a very understanding Programme Leader who would allow her to *‘discreetly resolve’* (TE2) these tensions by sanctioning the withdrawal of her STs from certain sessions and permitting a change of emphasis in prescribed session titles:

I will discreetly subvert the titles because I have the luxury to do that in the sense that I teach my MFL group. I have changed the title of sessions from “How to teach an outstanding lesson” to “Lesson structure revisited” (she laughs). (TE2)

In this instance, the rationale for such a change was that, drawing on Biesta (2010), she found the concept of an outstanding lesson and ‘best practice’ to be a *‘false and fatuous concept’* (TE2). However, she readily acknowledged that she could *‘subvert’* (D1 and TE2) the curriculum in this way because she had a MFL-specific group and, as such, was still *‘mistress of [her] own domain’* (TE1 and TE2). The TE would often contrast the agency she felt she could exercise on the PGCE secondary with the generic teaching, as a non-specialist, that was required of her on another course. Here the situation meant that:

I haven’t rebelled against the highly prescribed ways of doing things on the XXXX [course name], for example, because I don’t have the subject knowledge to do so. And it makes me feel very, very uncomfortable. (TE2)

This juxtaposition of differing course circumstances would seem to indicate that deep subject knowledge on the part of the TE played a pivotal role in providing the confidence to redirect the above currents of compliance in ways which enabled the exploration of more expansive possibilities. There is also the suggestion that even experienced and skilled TEs can become deprofessionalised through a practice architecture that limits agency and disrupts continuity with their STs. Further, it could be argued that theoretical understanding is a sensitive plant that requires a carefully-managed ecosystem if it is to take root and thrive. Fundamental to

this ecosystem is a TE who is able to draw down theoretical knowledge at the point of need and then skilfully and gently nurture, over time, incipient understandings (4.4). For this to occur, there would appear to be preconditions such as pedagogical freedom, the space to create and exploit *lived experiences* (4.3), and continuity of interaction with a group. The alternative, of which we have caught glimpses, would be a growth-limiting environment in the form of a constricted pedagogical space possessing no tomorrow and ‘learning’ construed as a series of one-off events. But what of the ST perspective? Did theoretical understanding take root and thrive in their particular world?

In one of my few interventions in the focus groups, I played devil’s advocate in a ST discussion about theory. Here I offered the view that I had not seen much theory on the course:

- Alex *Well yes, of course there’s lots of theory. We’re discussing theory all the time.*
 Marie *We’re learning about theories on teaching all the time.*
 I/er *I don’t see much theory going on.* (STs start talking animatedly across one another)
 Iris *Oh come on! (Laughter from all) Don’t depress us. As we enter our point of liminality (laughter from all), it’s like a continuous link between words that refer to other words that refer to the names of people and “Do you remember that? What is that called?”*

The above reaction on the part of the STs indicated very strongly that theory was an ever-present component of their course. From their perspective, theory fulfilled different functions. For Iris (F1), theory provided a set of ‘*tools to face the reality of classes*’ and beyond teaching it was ‘*a way to see people*’. This combination of the explanatory and the practical was also expressed by Alex (personal communication, 3.3.17) in that she regarded theory ‘as a set of ideas that have been pulled together to explain something practical’ and she found it ‘*empowering to understand the logic behind things that go on in the classroom*’. Marie (F1) considered theory useful from an explanatory perspective, ‘*It’s a way of seeing an aspect of teaching. I can link theories to my own teaching so it helps me understand*’. From Kara’s standpoint (personal communication, 12.2.17), theory had taken her on a personal journey of discovery and development:

Reading about learning has helped me develop as a teacher. It has deepened my connection with the process of teaching and learning, moving exercises on from just seeming like a ‘good idea’ and ‘engaging’ to becoming much more cognitive and meaningful.

Underpinning the above accounts is a concept of theory as a practical guide. This was particularly evident in the STs’ frequent references to the usefulness of an assignment on

Assessment for Learning (AfL). For example, Kara (F2) mentioned its profound impact on her classroom practice, not only in terms of assessment, but also with respect to classroom management:

I thought that my classroom management improved massively by watching Dylan William [a key academic behind AfL] videos, but nobody else noticed. I felt I had such a different rapport with the students.

For Iris (F2), the theory in the assignment '*really, really helped me to use assessment in a positive way (agreement from Alex), in a meaningful way for learners, and not just for me*'. Prompted by the STs' positivity towards this assignment, and what they perceived to be its practical relevance, I read the STs' work. Notably, AfL had not been explicitly experienced as part of the Serbian or other practical activities; nevertheless, concepts and principles relating to AfL had arisen naturally out of discussions of Serbian and ongoing school experiences. This meant that from an early stage, STs were grappling on an emergent, drip-feed basis with many different new concepts, all of which had some relevance for AfL but which, initially, were not directly linked to it. As the field notes attested, such concepts included terms such as: affective; *a priori*; achievement/attainment/ipsative; behaviourism, cognitivism and social constructivism; contingency management; conversational vigilance; dialogic; the 'GERM' (Global Educational Reform Movement) as coined by Sahlberg (2014); inductive/deductive; interactional symmetry; liminality; macro-/miso-/micro-levels; mastery/performance; pragmatic/semantic; procedural/declarative; scaffolding; and spirit versus letter. Sensitised to such concepts that had arisen from the *lived experiences* of the past four-month period, the STs were in a position to appreciate and make meaningful connections with the more formal inputs on AfL that followed after Christmas and built on concepts already encountered.

From the essay bibliographies, sometimes featuring over 60 entries for a 2000-word essay, there was strong evidence that these understandings had been developed slowly by a sagacious and simultaneously sparing use of the literature. However, the cumulative effect of this approach was that the STs employed over 40 different 'lenses', the most frequent of which were the Assessment Reform Group's (2002) original conception of Assessment for Learning; Swaffield's (2011) idea of assessment as 'sitting beside' from the French *s'asseoir*; and Harlen's (2006) informal-formative, formal-formative, informal-summative and formal-summative continuum. At first sight, this would appear to be a theory-into-practice approach *par excellence*. However, each of these concepts had grown out of the *lived experiences* that had been *orchestrated* in the teacher-education classroom, as well as from experiences in placement schools. Building on such *lived experiences*, the TE would constantly challenge the

STs to construct their own understandings and, when judged appropriate, would draw the relevant literature into the debate.

But the STs' appreciation of theory extended beyond the practicalities of helping them to implement what they judged to be effective assessment techniques. In difficult circumstances, theory appeared to act as a source of support, guidance, and encouragement. This obtained in those circumstances in which STs were not regarded as teachers in development, but more as servants of a school's pedagogical script. This could mean being required to follow a school's prescribed method of teaching, or having to follow simultaneously different styles of teaching insisted upon by a range of teachers, for whose classes STs were now responsible. Audrey (F1) captured the challenge of coping with these often contradictory constraints as *'juggling many, many different hats and then deciding which one to wear'* because *'you had to fit into their framework'*. For Alex (F2), navigating one's way through and around such constraints was very confusing *'because people had different expectations and focussed on different things'*. Thus, teaching became a matter of *'pleasing the people observing me'*. For as Audrey (F2) observed, the judgement of observers *'boils down to what you value'*. This obtained in particular for Kara (F2), who was told by a mentor not to chat to the pupils in the target language *'because it might alienate those who do not understand'*. For Kara (F2), theory came to the rescue in such moments of difficulty:

It kept me going. If I didn't know the theories, I would doubt everything that I felt to be true or that I believed, because I was told the opposite by teachers ... I was so glad that I'd read the theories (murmurings of agreement from Audrey) because I could keep going.

In similar circumstances, Alex (F2) felt forced into teaching in a particular way, *'schooled by the school'*, as she put it; however, on finishing the placement, she spent time returning to the literature, deriving inspiration and support from it for her future teaching in terms of how she definitely wanted to teach (F2Alex). In both these cases, it seemed as if theory possessed a 'Dear-Diary' dimension that acted as a confidante and non-judgemental friend who listened and offered guidance. Even when there was no conflict over teaching, theory appeared still to act as a guide: *'I think that I've been really, really surprised, how much theory actually helped me during this year'* (F1Iris). In the case of some STs, the TE's *'gently does it'* and *'non-dogmatic'* approach (4.4) to theory appeared to open up a series of options for action. In those cases where a degree of agency was possible, and then also exercised, the underlying motivation was often to render learning more meaningful and positive for the learners. Audrey (F2) described how she *'honed'* ideas proposed by different theorists. By this she

meant adapted for her context. Here she mentioned: Dweck's (2012) mindset theories and how she used a knowledge of these to help pupils to create their own vision; Bjork's (2016) concepts of '*desirable difficulties and interleaving*'; Sprenger's (2005) '*recoding of information*'; and classroom management strategies as promoted by Rogers (2009). Iris (F2) reported how she used theories '*she did not know before to shape [her] teaching, to change it (agreement from Alex)*'.

By way of a caveat, there was clearly a danger that theory could be marshalled in the support of pre-existing beliefs. However, there existed much evidence to contradict such a proposition. First, a show of hands after the third Serbian lesson suggested that this form of teaching was new to everybody in the group. Second, in the first focus group, it was a source of great amusement to the STs to reflect on how absolutist their perceptions of teaching had been at the start of the course. But now it was no longer a matter of '*a simple view of what's wrong and what's right*' but rather '*appropriate and inappropriate*' where '*you realise you need to have some balance*' (F1Marie) because '*there are many other views, actually. I mean, that is why I'm starting to become really like a relativist*' (laughing) (F1Iris). Such a mindset was in contradistinction to the early stages of the course, during which observing teaching in school was characterised by '*taking down notes and just going "Oh, this is terrible (laughing). What is going on?"*' (Laughter from the others) '*I was being hyper-critical*' (F1Alex, emphasis in original). Arguably, it was theory that played a really important role in this more nuanced and contextual understanding. Admittedly, there was no way of differentiating between 'espoused theories' and 'theory-in-use' (Argyris and Schön, 1974) because it had not been possible to observe STs in school. However, the empirical material, as discussed, provided a strong indication that the vision behind the university course appeared not to have been 'washed out' on contact with school, and that theory played a valued role in helping the STs to see into practice with theoretical understanding. Further, theory seemed to be something the STs turned towards, rather than away from, in times of difficulty.

4.8 Drawing together the essence of the generated findings

In concluding this chapter, I draw together some general observations concerning the essence of the generated findings. This broad-brush approach is intended to provide some preliminary thoughts prior to the more detailed literature-related discussions in the next chapter. My key observation is that through *orchestrating lived experiences*, at the epicentre of which was the teaching of Serbian, the teacher-education classroom became a practice environment in-and-of-itself (Segall, 2001) – that is, a place where practice was both practised and theorised. The

STs' practice-related experiences involved both experimenting through trying things out, as well as experiencing in the sense of undergoing a particular process. Because Serbian represented a new language for all, as well as a vehicle for a new way of teaching and learning, in-classroom experiences arguably became real rather than remaining at the level of the pretend. Yet, if the 'newness' of the Serbian made for real experiences, then the TE's skilled use of *asynchronous contingency management* generated an even more deeply-felt layer of reality, which arose from situations that had been '*engineered*' to create a certain amount of bewilderment and puzzlement through '*disorientating*' and '*necessary problems*'. These extra challenges often entailed carefully-crafted and sensitively-scaffolded *productive failure*, because there was '*learning to be had in learning to fail*'. This process was designed not only to bring to the surface long-held assumptions, but also to facilitate ways in which STs could feel comfortable with feeling uncomfortable, thus helping them to cope psychologically with the unpredictability that teaching can feature. At root the TE regarded struggle as an indispensable part of the learning process. But making the teacher-education classroom a practice environment in-and-of itself was premised on the paradox of the *planned-for 'unpredictable'*, the purpose of which was to create the uncertainty that the TE considered to be a prime space for learning.

However, the assumption was not being made that such experiences would provide an automatic gateway to learning; indeed, understanding was not something to be left to chance. To this end, both skilful mediation and time were needed. *Synchronous contingency management* constituted the chief mediating tool for 'unpicking, from a theoretical perspective', STs' cognitive and affective reactions to *lived experiences*, thereby starting the process of nibbling away at long-held assumptions about teaching and learning. Fundamental to this process was the honouring and validating of STs' biographic pasts, as well as providing a safe and non-judgemental environment. But perhaps the chief component in this approach was the *maieutic* dimension, whereby the TE brought the STs' latent ideas into clear consciousness and linked them to theoretical concepts. This entailed being able, at the point of need, to draw down pertinent elements of public theory which would then be supplemented with carefully considered short extracts from the literature. Through these processes, theory became a tool for thinking, something with which '*to experiment and play*'. These theoretical insights grew out of practical *lived experiences* on a *percept-before-precept* basis. Notably, STs deeply appreciated how the insights derived from theory supported them across a range of contexts. Helping STs to see into practice in this manner was not something to be rushed. Effective learning meant *playing the long game*, as captured through the TE's

'gently does it' mantra that employed *'multiple entry points'* to the same concept and sought to create echoes between experiences, often through the *re-living of lived experiences* that fostered new levels of understanding. But in order to participate, an *invitational vision* provided both the incitement, as well as the pedagogical wherewithal, for *orchestrating the lived experiences*.

Significantly, in order to operate in the ways outlined above, the TE needed continuity and interaction with her STs, for which *'a tomorrow'* was a *sine qua non*. In those instances where, because of compliance-related issues, she found herself in *a constricted space with no tomorrow*, then her pedagogy would become likewise more restricted and less *maieutic*. Sometimes she was able to navigate the constricting currents of compliance in ways that opened up broader and more expansive channels of learning – but not always. This indicated that enacting certain types of pedagogy was not only contingent on a TE's skill and vision, but also required specific permitting circumstances. Such pedagogical prerequisites suggested that exercising a high level of skill as a TE was not entirely an essentialist quality, even for the most skilled of professionals; in short, context mattered. So perhaps this brief canter through some of the study's key findings makes it possible to conclude that *'pedagogies that bridge theory and practice are never simple'* (Shulman, 2005a, p.56), and that engendering a dialectic between theory and practice in ITE is a *'problematic enterprise'* (Korthagen, 2001a). The discussions that now follow alight on these observations and link the generated findings to the wider literature.

5 Principles for Seeing into Practice

5.1 Introduction

In what follows I focus initially on the first research question concerning how, and with what underpinning rationale, an experienced TE constructs learning in a teacher-education classroom so that STs can see into practice with theoretical understanding. I concentrate in particular on orchestrating an interplay between the generated findings in chapter four, Korthagen *et al.*'s (2001) 'realistic teacher education' (2.6.4), and the modelling strategies as discussed in 2.9.1-2.9.4. In so doing, I suggest how the observations arising from these comparisons might be harnessed to add new dimensions to modelling, especially in relation to increasing the potential for disrupting the apprenticeship-of-observation (2.8-2.8.2) and intensifying the insights derived from experience (2.7.1-2.7.4). I subsequently proceed to explore the second research question, namely the role played by theory in the eyes of the TE and the STs. Against the backdrop of the first two questions, I then consider the supporting and constraining factors that impinged on the TE's pedagogy, as well as on the STs' overall learning. I conclude the chapter with some thoughts concerning the nature of the principles of practice discussed. When making reference to the generated findings, I employ a page-numbering system to facilitate ease of location; when referring to Korthagen *et al.*'s (2001) 'realistic teacher education', I adopt the term '*the realistic approach*' because this is how Korthagen and his colleagues generally refer to their work; and when citing themes and sub-themes, I use an italics-only approach.

5.2 Constructing learning in a teacher-education classroom

In this section, I explore further the observation made in 4.8, namely that the teacher-education classroom can become a practice environment in-and-of-itself (Segall, 2001) – that is, a place 'where practice gets theorized and theory is not only considered for practice but is indeed practiced as it interrogates practice' (ibid, p.225). In particular, I start to explore the principles that enable a TE to 'bounce back and forth between the concrete and conceptual' (Mintzberg, 2011, p.163). For as Shulman (2005a, p.56) reminds us, 'pedagogies that bridge theory and practice are never simple'. By furnishing insights into the principles at play here, I hope to extend current conceptions of modelling and also indicate ways in which to intensify strategies for the disruption of the apprenticeship-of-observation.

5.2.1 Avoiding an initial bifurcation of the intuitive and the rational

As will be recalled from 2.6.4, the point of departure for *the realistic approach* involved STs in the teaching of pupils on a one-to-one basis once a week for about eight weeks. The teaching, which had been audio recorded, was then unpicked in a debriefing session led by a TE (Korthagen, 2001b). The aim was to trigger a *gestalt*-type experience, which, through reflective activities, would be reduced to a conscious and explicit *schema*. By provoking and then exploiting for reflective purposes a *gestalt* reaction, this starting point for seeing into practice avoided, as discussed in 2.7.4, an initial bifurcation of ‘the rational and intuitive realms’ (Hébert, 2015). Similarly, in this study the TE would ‘engineer’ through *asynchronous contingency management* (4.3.1) – but in this case in a teacher-education classroom – reactions on the part of the STs encompassing their here-and-now perceptions of an event, together with ‘the images, thoughts, feelings, needs, values, and behavioral tendencies evoked by the situation’ (Korthagen, 2017b, p.533). The TE’s intention in this respect was unequivocally evinced in the sorcerer’s apprentice analogy – a desire to incite a ‘*raw, frank reaction*’, a ‘*cognitive and emotional mess*’, and even ‘*a mixture of frustration, hatred, shock, surprise*’ (p.80). The unannounced Serbian test that was used as a springboard for exploring memory-related issues (ibid) was an example of such a strategy.

Through *asynchronous contingency management*, but on a less intense but nevertheless personal level, the TE would often confront the STs with new and sometimes intriguing learning experiences, for example inductive approaches to the learning of grammar (p.94). Although less visceral, the stimulus for reflection was still a composite of the STs’ full range of reactions, feelings and thoughts. Admittedly, the freighting of learning experiences with a strong affective dimension does not guarantee that the STs will automatically see into the complexities and ‘entanglements’ of teaching (Palmer, 2017, p.3); for as noted in 2.7.4, it is always possible to have the experience and miss the meaning. Nevertheless, with such an intensification, the potential for ‘reflective traction’ (Brandenburg and Jones, 2017) has arguably been increased because, following Shulman (2005b, p.22), a lack of emotional investment lessens the intellectual or formational yield. The natural corollary of these processes is that the odds on loosening the overarching bonds of the apprenticeship-of-observation (2.8) have conceivably been narrowed. Yet irrespective of the level of intensity, it is here, for reasons that I now explain, that the TE’s approach to helping STs to see into practice potentially extends our current understandings of modelling.

5.2.2 Being a real and not a pretend learner

From the STs' perspective, *the realistic approach* involved practical experiences that felt 'authentic' (Korthagen, 2017b); further, through skilled mediation, such experiences, when reflected upon, often proved powerful enough to challenge existing beliefs and provide 'fruitful' insights into practice (Korthagen, 2010b). As already noted, such insights would often be derived from a ST teaching an individual pupil over a period of time. In this sense, it is perhaps apposite to suggest that these were 'real' experiences since they involved actual pupils, hence the authenticity claim above. However, I would propose that the *lived experiences orchestrated* by the TE were equally 'real' – despite taking place in a teacher-education classroom – by virtue of the subject matter being entirely new to the STs. On this particular point the STs were insistent: they were '*real students of Serbian as well as students of how to teach a language*' (p.78). This concept of '*real students*' stands in contradistinction to modelling that remains at the level of watching, or participating in, activities where the subject knowledge already exists on the part of the STs. In such cases, the experience is likely to be either vicarious or pretend – what the TE termed a '*pretend-Jenny situation*' (p.77). Further, in those rare instances in the literature where skilled TEs explicitly employ a 'confrontational pedagogy' (Berry and Loughran, 2002) by, for example, taking on the role of a non-comprehending pupil in a micro-teaching session, the STs are nevertheless still acting as 'pretend pupils' because they already possess the relevant levels of subject knowledge.

Such activities certainly have their merits, but are unlikely, for the reasons outlined, to provoke the same level of 'personal meaning and felt significance' (Feiman-Nemser and Buchmann, 1983, p.11) as the *lived experiences orchestrated* by the TE in this study. Thus, it could be argued that the modelling strategies discussed in 2.9.1-2.9.4, when juxtaposed with the orchestration of *lived experiences*, represent a much weaker intervention for disrupting the apprenticeship-of-observation (2.8.1). Further, as a result of the heightened felt-facticity factor (2.9.2) of the *lived experiences*, the chances of opening up '*different existential possibilities, different ways of being*' (p.75) have potentially been increased because the STs have the opportunity to proceed beyond merely acquiring a body of someone else's knowledge (2.6.4).

5.2.3 Continuity and interaction

Another way in which the TE's *orchestration of lived experiences* resembled *the realistic approach*, but differed from the pedagogical portrayal of modelling in the literature, revolved around the Deweyan (1963) notion of the importance of 'continuity and interaction' as

explored in 2.7.1. In essence, this entailed the TE exploiting an ‘experiential continuum’ in which insights from a previous experience were re-examined in the light of a new-but-similar experience. The resulting dialogic interaction both carried forward and refined understandings. Studies on modelling do not appear to stress this continuity dimension, thereby giving more the impression of one-off events. *The realistic approach* achieved ‘continuity and interaction’ through the weekly teaching task and its unpicking, whilst the TE fostered a similar process through orchestrating the *re-living* of previously *lived experiences*, but with a slightly different focus (pp.75-76).

The TE skilfully captured the above process though coining the term ‘*re-cognise*’ (p.88), suggesting thinking about an experience in a different way. I would venture that this was a case of ‘the same but different’, as the same or a similar experience would be re-/created and then peeled back in the manner of a pedagogical palimpsest (p.77). To this end, a *sine qua non* of the TE’s rationale for helping STs to see into practice involved a ‘*long-term project*’ (p.85) in which learning could not be hurried, as evinced through her ‘*gently-does-it*’ and ‘*drip-feed*’ philosophy (p.84) that eschewed any form of excessively front-loaded coursework (2.4.1) and any notion of a ‘hurry-along curriculum’ (p.84). Further, there appeared to be the underlying assumption that multiple entry points were required (Gardner, 2009; TE and STs, p.84); that learning was usually not a ‘one-shot affair’ (Nuthall, 2007, p.155) since it resembled more ‘the flight of a butterfly than the flight of a bullet’ (Jackson, 1968, p.167); and that coverage can be ‘the greatest enemy of understanding’ (Gardner in conversation with Brandt, 1993, p.7).

Invoking the *weak-strong modelling continuum* as discussed in 2.9.1, this philosophical stance finds itself at variance with the weak conception of modelling as a straightforward business devoid of complexities and unpredictability. Concerning the stronger version, there is a similarity in terms of the desire to highlight the ‘uncertainties and dilemmas of practice’ (Loughran, 2006, p.6). However, by contrast, the thinking-aloud and stepping-out strategies as outlined in 2.9.2 that are designed to elucidate such complexities seem to be characterised as in-the-moment, done-and-dusted events, rather than a carefully-crafted concatenation of experiences that have the potential to reverberate over time through the creation of ‘*echoes between experiences*’ (p.76).

5.2.4 Honouring and validating biography

An important element of both *the realistic approach*, and the strategies employed by the TE, consisted of helping STs, as part of a ‘*gently-does-it*’ philosophy, to appreciate how their biographic pasts could lead to implicit and powerful assumptions about their teaching present.

By its very nature, the *gestalt*/schematisation process is structured to bring to the surface the STs' underlying 'paradigmatic assumptions' (Brookfield, 2017) about teaching, and set in train the process of disrupting the apprenticeship-of-observation. But as noted in 2.8-2.8.2, 'it requires troublesome work to undertake the alteration of old beliefs' (Dewey, 1933, p.30). Therefore, what is the nature of the work that can challenge the 'avalanche' (Britzman, 2007) or 'authority' of experience (Munby and Russell, 1994) and unpack the STs' 'long-haul baggage' (McLean, 1999) containing 'personal history-based beliefs' (Holt-Reynolds, 1992)? Connelly and Clandinin's (1995) 'conduit' or 'funnel' metaphor (2.4.1) would not appear to provide the answer since the STs are not, in the ways just outlined, an 'empty disk space' or '*tabula rasa*' (Sugrue, 1997, p.222) into which pedagogical wisdom can be transferred – although that is how the weak end of the modelling continuum appears to operate (2.9.1), by providing a compendium of atheoretical teaching activities delivered through mock teaching demonstrations that provide 'trustworthy recipes' (Buchmann, 1987, p.157) for teaching founded solely on common sense (2.5.5).

By contrast, the strong end of the continuum does not salve STs with the soothing balm of commonsense solutions; instead, it poses a set of challenges arising from 'the curse of complexity' (2.5.6) and the 'contestability of knowledge' (Furlong, 2013). From what could be characterised as the 'complex, nuanced and contingent' (Cochran-Smith, 2005, p.184), there arises the tension of helping STs to feel confident, whilst simultaneously revealing the complexities of practice. According to Berry (2007), this process requires managing the tensions between 'confidence and uncertainty'. For the TE, '*uncertainty* [represented] *the space in which one learns the most*' (p.79). The TE's handling of this particular tension provides some useful insights into how modelling can be refined to intensify the insights gleaned from experience, and thus increase the likelihood of eschewing 'mis-educative experiences' (2.7.1).

The TE not only recognised and respected the STs' biographic pasts, '*their way of being, their way of seeing the world*' (p.87); she also valued each individual ST 'as a knower' (Cheng *et al.*, 2009, p.326) by '*honouring where they come from*' (pp.83-84), which entailed working with the grain of a ST's beliefs, rather than against it. For her, this meant that the STs needed to feel comfortable in their own skin before they '*can become somebody else*' (p.87) by entertaining the thought of change. Key in this respect was being non-judgemental and respecting the '*ipsative*' (p.73) dimension of development. The STs deeply appreciated the TE's non-judgemental stance encapsulated by what they described as her '*openness*', which meant that they felt they could '*talk to her about anything*' without the sense of being judged (p.87). Fundamental here was the TE being able to view the world through others' eyes,

especially in relation to their assumptions and beliefs (2.7.4), whilst gently encouraging them to experiment with new ideas. As noted in 2.7.4, such processes have variously been labelled as ‘relational expertise’ (Edwards, 2011), ‘relational pedagogy’ (Cheng *et al.*, 2009), ‘intellectual attentiveness’ (Hansen, 1999), or ‘epistemic empathy’ (Jaber, Southerland and Dake, 2018). Preserving the integrity of the individual, whilst opening up the possibility for change, was characterised by the TE as requiring a ‘*happy amalgam between solidity and transformation*’ (p.87), an observation that suggested the positive exploitation of complementary properties that featured both strength and flexibility. This is similar to Berry’s (2007) tension between ‘valuing and reconstructing experiences’; that is, simultaneously honouring and challenging STs’ biographic pasts.

Part of achieving such an ‘amalgam’ involved avoiding the willy-nilly imposition – as on the weak end of the modelling continuum – of an externally-imposed, *a priori* curriculum. As the TE herself recognised, citing Dewey (1963, p.17), professional development is a delicate dance between ‘*development from within [and] formation from without*’ (p.85). In such circumstances, there exists a tension between ‘telling and growth’ (Berry, 2007) involving whether a TE should provide ‘answers’ or encourage STs to reflect. The TE described this process as striking a ‘*balance between freedom and prescriptivism*’ (p.86 and p.96). Balance is the operative notion if one is to avoid falling into the trap of the ‘tyranny of teaching as telling’ (Loughran, 2006, p.94). Tensions in ITE such as those between ‘*freedom and prescriptivism*’ are not readily resolvable because, as Berry (2007) proposes, they need to be lived and managed through a TE’s *phronesis*.

The above approach stands in contrast to certain aspects of the current policy environment where pedagogical prescription and proscription can be the order of the day (2.7.3). The idea of *playing the long game*, and possessing the space and time to ‘*experiment and play*’ with ideas (p.85), constituted important elements of this balance. This was facilitated by the safe and ‘*nurturing environment*’ of the university that was acknowledged both by the STs and the TE as a place where the usual layers of judgement did not exist, meaning the STs could hold and ‘*express ... views in a safe environment*’ (p.92). This is reminiscent of Groundwater-Smith’s (2016, p.xviii) observation that universities are ‘safe places for unsafe ideas’, a ‘place of respite and reassurance’ (Hodson, Smith and Brown, 2012, p.188). Equally significant perhaps was the TE’s ‘non-judgemental evangelism’ (p.87), as expressed in her ‘*invitational vision*’ (4.5) that relied not on being ‘*dogmatic*’, but ‘*pedagogic*’ (p.86) – a process involving painting exciting pedagogical possibilities. As discussed in 2.8.1, such an approach opens up new vistas by creating ‘images of the possible’ (Hammerness, 2006, p.82) and engendering a ‘language of

possibility' (Rosaen and Schram, 1998). Notwithstanding the usefulness of painting a pedagogical vision, the TE was also aware that, because of the overarching issue of STs' biographic pasts in the form of the apprenticeship-of-observation, they might not be '*quite ready to notice yet*' (p.82). To this end, a more powerful intervention was required that might reduce the '*illusion*' (p.80) of understanding by causing the STs to struggle, and even sometimes initially fail, but, as a result, thereby possibly notice more.

5.2.5 Desirable difficulties: creating dissonance and discomfort

Fundamental to the TE's pedagogy was a desire to avoid 'mis-educative experiences' (2.7.1) that could have 'the effect of arresting or distorting the growth of further experiences' (Dewey, 1963, p.25). In essence, this involved avoiding operating at a 'tips for teachers' level; in other words, providing immediately implementable ideas for the classroom, but neglecting to problematise and theorise these activities in any way, thereby running the risk of curtailing a ST's 'power to go on growing' (Dewey, 1904, p.15). The TE wanted her STs (p.78) to have access to what Loughran (2006, p.6) terms the 'uncertainties and dilemmas of practice', and thus provide them with at least the possibility of becoming life-long 'students of teaching' (Dewey, 1904). The alternative would have been to set out to develop teaching technicians who implement 'best practice' strategies as part of a modern-day teacher-proofing agenda (Maguire, 2011) that renders almost obsolete the role of professional judgement. The first step in her approach entailed finding powerful ways to encourage STs to 'question the limitations of their existing interpretative frame of reference' (Oosterheert and Vermunt, 2001, p.149), and to do so in ways that transcended '*compensatory mimicry*' and '*pretend understanding*' (p.90).

As discussed in 4.6, the exploitation of *asynchronous contingency management* to create disorientating dilemmas, dissonance, and discomfort, led to '*learning moments*' (p.89) that varied in intensity from gentle waves of dissonance to teetering on the edge of a professional and personal abyss (pp.89-90). Such an approach in which a range of emotions and reactions is purposefully – and perhaps even predictably (pp.79-80) – provoked (puzzlement, bewilderment, intrigue, and even non-understanding) represented in several ways a departure from 'normal' pedagogical practices. First, the weak end of the modelling continuum tends to trade in soothing 'certainty' by providing 'pedagogical tips, tricks and techniques' (Berry, 2004, p.150) aimed at 'what works' and 'best practice' agendas (Biesta, 2010). The 'risk of reconceptualisation' (Oosterheert and Vermunt, 2001, p.152) is kept to a minimum – both on part of STs and TEs. The strong end of the modelling continuum does

explore the uncertainties of the practice, but arguably fails to do so with the intensity of the *productive failure* described in 4.6. The nearest example to this would be Berry and Loughran's (2002) 'confrontational pedagogy'; however, as already intimated above, this strategy is a product of extemporisation in role-play situations, and therefore arguably lacks the 'realness' factor discussed in 5.2.2. With the pupil-teaching experience, *the realistic approach* ostensibly involves similar levels of intensity to the TE's *productive failure*, through which the TE planned for the STs to '*come a cropper*' and then helped them to puzzle out '*what made them fall and what could prevent them from falling again*' (p.89).

However, unlike *the realistic approach* with its naturalistic setting, *productive failure* was very much a 'pedagogical contrivance' (Widdowson, 1990) of the type discussed in 1.5. In particular, it entailed the 'manipulation of environments' (Edwards, 2001a) in ways involving 'short-circuiting the slow process of natural discovery' (Widdowson, 1990, p.162). Ideally, such a pedagogy, following Leach and Moon (2008, p.21), should get under the STs' skin by challenging their 'thinking as usual'. A key element of challenge in the TE's approach, which would often, but not always, provoke *productive failure*, utilised what Bjork and Bjork (2014) term 'desirable difficulties', namely ensuring that teaching transcends telling by populating the pedagogical process with small challenges that engender cognitive strain rather than cognitive ease (Didau, 2015). According to the Bjorks' research, learning along these lines proceeds more slowly in the first instance, but in the longer-term there are heightened levels of understanding and improved retention of key points.

The oxymoron of 'desirable difficulties' sums up what the TE described as her '*tough-love agenda*' that involved getting the STs to '*struggle to arrive at meaning*' (p.91), a process that was often designed to 'get under their skin' by causing disorientating dilemmas, discomfort, and dissonance. This view is supported by Shulman (2005b, p.22) and his claim that 'without a certain amount of anxiety and risk, there's a limit to how much learning occurs'. The TE's rationale for this approach was that there was '*learning to be had in learning to fail*' (p.91). Nevertheless, adopting such a stance required the TE to feel comfortable with the STs' short-term discomfort – something the TE admitted she could not have done at the start of her teacher-educator career when pandering to the STs' desire for materials took precedence over any form of problematisation.

Importantly, however, such challenges needed to be sensitively scaffolded. From the STs' standpoint, it was apparent that they felt safe and secure in the non-judgemental environment fostered by the TE (p.87). It was also possible that her creation of an *invitational*

vision (4.5) played a significant role as an open invitation to ‘run the risk of reconceptualisation’ (Oosterheert and Vermunt, 2001). From the STs’ perspective, they not only felt comfortable with being nudged out of their comfort zones; they also appreciated the merits of ‘desirability difficulties’ in terms of the potential for more effective learning on their part (p.91). In this way, the TE managed the tension between ‘safety and challenge’ (Berry, 2007), and did so in ways that imbued the strong end of the modelling continuum with greater authenticity, the natural corollary of which was arguably increased reflective traction and greater potential for disrupting the apprenticeship-of-observation. But, as I now proceed to explore, increased reflective traction represented just the starting point for seeing into practice. It was the ‘interaction and interthinking’ (Littleton and Mercer, 2013) arising from the processes discussed thus far that provided the next step for seeing into practice with theoretical understanding. Here it will be noted that there is a strong interplay between the first and second research questions, with question one having set the scene for question two.

5.3 What role does theory play for teacher educator and student teachers?

The above heading is also the second research question. As will be recalled from 1.3.1, the origins of this study lay in a small-scale project undertaken with STs near the start of my Doctoral Programme. When conducting what was my first-ever research project, I stumbled across a ‘mystery’ (Alvesson and Kärreman, 2011) relating to the role of educational theory in ITE. The ‘mystery’ component arose from the STs’ overwhelmingly positive attitude towards theory, a reaction that ran counter to what some consider to be the ‘normal’ narrative in ITE; that is, that STs regard the theory taught as irrelevant (Sjølie, 2014) because it is neither ‘practical’ nor ‘accessible’ (Gore and Gitlin, 2004, p.35). My current study has explored the experiences of a similar cohort of STs taught by the same TE. In what follows, I confirm that the reaction of these STs proved to be equally ‘mysterious’ and outline how I deem this to be the case. I then turn to the TE’s views on theory, before exploring the classroom processes involved in helping STs to see into practice with theoretical understanding. Such pedagogies that have the potential to bridge theory and practice (Shulman, 2005a) hold a special significance for the research because, as noted in 1.6, little is known about the nature of classroom interactions between TEs and their STs (Sjølie, 2017; Rogers, 2011; Zeichner, 2005a). Finally, although the focus in what follows is on the second research question, there remains a strong interaction with the first question. This obtains especially in relation to *seeing into practice with theoretical understanding*.

5.3.1 The role of theory: the student-teacher perspective

Due to the ethical reasons outlined in 3.7.2, it was not possible to observe the STs in school. This rendered impracticable the teasing-out of any differences between STs' 'espoused theories' and 'theory-in-use' (Argyris and Schön, 1974). Consequently, STs' comments concerning their school-related activities had to be taken at face value since I was unable to enter the context myself. Nevertheless, there existed strong indications that the vision behind the university course, and the role played by theory in this, seemed not to have been 'washed out' (Zeichner and Tabachnick, 1981) on contact with school. Indeed, anthropomorphising for a moment, theory appeared to assume an important role as a confidante, non-judgemental friend, and guide. For example, in moments of need, such as coping with a school's prescribed way of teaching, using theory to envision an alternative approach provided a much needed chink of light at the end of a potentially constricting pedagogical tunnel (p.101). The latter restrictive scenario gave every indication of being a product of 'judgementoring' (Hobson and Malderez, 2013); that is, over-critical feedback based on an apparent belief on the part of some mentors 'that their approach ... is *the* right approach, one result of which is that some mentors appear to want to produce clones of themselves' (ibid, p.96, italics in original). In such cases, the STs would refer to how theory gave them hope through providing a vision of in the future being able to teach differently in less restrictive circumstance (pp.88-89 and p.102). However, in those cases where mentors adopted a more developmental stance, STs could exercise some form of pedagogical agency. Here theory also played an empowering role (pp.101-102), both as a source of inspiration and as a practical thinking tool, perhaps in a way reminiscent of Lewin's (1952, p.169) 'there is nothing so practical as a good theory' and of Britzman's (2003, p.4) observation that practice 'requires second thoughts', namely theory.

But there also arose other interesting dimensions to the STs' views on theory that ran counter to the general theory-related narrative, and thus formed part of the 'mystery' alluded to above. First, the STs' perspectives on theory were at variance with the dominant anti-theory discourse in the macro-policy environment (2.5.1-2.5.5). Whilst this discourse promulgated the view that theory is either not required (Gove, 2010), is of secondary importance (Carter, 2015, p.14), or is even positively harmful because it hindered effective teaching (2.5.2), the STs gave every indication of finding theory useful on many different levels. Second – and again this point provides a macro-environment counter-narrative – the STs gave the impression of regarding teaching as a complex activity rather than a simple, straightforward and linear process, which was merely a matter of common sense and could be picked up 'through participation in cultural patterns containing trustworthy recipes' (Buchmann, 1987, p.157). In

short, for them there was *'more to this teaching malarkey than meets the eye'* (p.85). The result of this mindset on the part of STs was that they were not in search of safety, certainty, and the procedural tricks of the trade (Berry, 2007). There was no 'seemingly insatiable desire for the practical at the expense of the theoretical' (Bullock and Christou, 2009, p.75), in the form of 'a manual for survival in the classroom' (Foster, 1999, p.139). Instead, they viewed becoming a teacher as an unpredictable and long-term endeavour, for which there were no silver-bullet solutions that could be applied instantly to their teaching. The STs' stance in this respect ran counter to the dominant policy discourse in England, which prizes practice over theory, valorises experience as the 'royal road to learning' (Britzman, 2007, p.9), and generally does not recognise the complexities of learning to teach (2.5.4). Third, as touched on in 1.3.1, they did not regard the theory taught as irrelevant (Sjøløe, 2014); in fact, theory appeared to help in promoting a vision of the possible (4.5). Fourth, I would even venture that the STs' palpable enthusiasm for their constantly developing theory-related discourse (p.82) signalled a new way of being, and perhaps even a unique sense of community fostered by a theory-inspired 'energising *esprit de corps*' (Marshall, 2014, p.276). Their discussion of deductive/inductive approaches to language teaching (p.94) provided a memorable example of this potential phenomenon.

5.3.2 The role of theory: the teacher-educator perspective

Concerning the theory-practice divide, there was much evidence in sections 2.4 and 2.5 that sacred story one (a theory-into-practice approach) and sacred story two (a practice-makes-practice approach) each derived its power and authority from the denigration of the other, whilst remaining blind to what could bind them together in productive and mutually enhancing ways (2.6.1). The TE's practice seemed to embody a synthesising of these two potentially unhelpful binaries. Indeed, her actions on the ground, as played out through the processes of *asynchronous/synchronous contingency management*, indicated a belief in an integrative, symbiotic, and non-dichotomous relationship between theory and practice (2.6.2). She regarded theory as a '*thinking tool*' (p.74) in the practical Lewinean sense above. As such, theory provided the frameworks, ideas, and principles that enabled the STs to '*play with concepts that people in the field are conversant with and they use all the time*' (ibid). Further, these concepts were reflected in her teaching in a way that involved a carefully-crafted congruence between medium and message (2.9.1). This manifested itself through the way in which key principles of the language-teaching methodology being advocated were mirrored in the TE's teacher-education pedagogy. Front and centre stage in this respect were the concepts of getting learners to '*struggle to arrive at meaning*' (p.91) and different forms

of dialogic interaction. But perhaps most fundamental to her philosophy of the role of theory and its exploration was, as with *the realistic approach*, that perceptual understanding should precede conceptual understanding (2.6.4).

Unlike with *the realistic approach* that involved real pupils, the point of departure for fostering perceptual understanding stemmed from the expertly ‘engineered’ university-based experiences, which, for reasons discussed in 5.2.2, I am claiming possessed similar ‘authentic’ qualities by dint of the deep levels of personal meaning and felt significance. Shulman (2005b, p.22) supports such a view with his observation that without emotional investment there is ‘no intellectual or formational yield’. However, in line with Bullock (2011) and Ellis’ contention (2010) that experience does not equate automatically with understanding, the TE would unpick such experiences to extract the meaning. How she did this involved the use of theory, or the ‘L-word’ (4.7) as she phrased it, namely literature. In ways that I now explore, her philosophy shared many common features with *the realistic approach*. But perhaps more significant for this research are the ways in which the TE fostered a dialectical relationship between theory and practice. I would propose that these insights possibly provide new dimensions to modelling, especially in the light of the literature that discusses the difficulties experienced by some TEs in drawing down and deploying relevant references to public knowledge when modelling (2.9.4). This observation is made against the backdrop of Shulman’s (2005a, p.56) assertion that ‘pedagogies that bridge theory and practice are never simple’, especially since they involve the capability to ‘bounce back and forth between the concrete and conceptual’ (Mintzberg, 2011, p.163).

5.4 Bouncing back and forth between the concrete and conceptual

In this section, I demonstrate how the pedagogies employed by the TE to bridge theory and practice intensified and extended current approaches at the strong end of the modelling continuum. As a precursor to this discussion, I briefly explore two instances where the TE’s approach diverged both from the most advanced modes of modelling on the continuum, and also from a commonly practised form of reflection in ITE. Concerning advanced modelling, the TE avoided any form of ‘thinking aloud’ in, or ‘stepping out’ of, a higher-education teaching session (2.9.2). For her, expecting a ST to be able to take a principle from a higher-education centric teaching strategy, and apply it in a school setting, was ‘*a bridge too far*’ (p.81). Taking into consideration the literature on ‘transfer’ (2.4.2), this can be considered a very valid point. In terms of reflective practices, as discussed in 4.3.2, she rejected employing formalised reflective frameworks such as Kolb (2015) and Gibbs (1988). From her pedagogical

perspective, such frameworks ran the risk of reducing reflection to '*an intellectual enterprise with little meaning/relevance*'; instead, her approach was to keep reflection '*embedded in the learning process*' and '*just do it*' (p.81). In the light of issues concerning context-free models of reflective practice, and how they can neglect the affective dimension (Edwards and Thomas, 2010), the TE's approach potentially helped to avoid a bifurcation of the intuitive and rational realms (5.2.1). In what follows, I propose that the pedagogical underpinnings of '*just do it*' not only intensified current conceptions of modelling, but also, in some instances, took modelling into new territory, especially in relation to being able to articulate a knowledge of practice with theoretical understanding. Here *synchronous contingency management* played a particularly significant role, at the heart of which was a continual interplay between the concrete and the conceptual.

Whilst *asynchronous contingency management* created the *lived experiences*, it was *synchronous contingency management* that served to unpick them. The first stage of the unpicking process involved a pedagogical 'triage' whereby, according to the STs' reactions and observations, the TE would decide which ideas to '*pursue*', '*park*', '*deflect*', or '*defuse*' (p.93). The TE's *phronesis*, namely her ability to act wisely in specific situations (2.6.4), determined what would be attended to. How the TE exploited these situations resonated very strongly with *the realistic approach* in that she would initiate 'a reflective conversation with the situation' (Schön, 1983), with a view to picking a pedagogical path through 'situations of practice' with their accompanying complexities and uncertainties (ibid, p.14). As with *the realistic approach* and the *gestalt*-schematisation interplay (2.6.4), the TE would help the STs to see into practice by '*desituating* the knowledge derived from specific situations' (Korthagen, 2010c, p.102, italics in original) in order to create conscious mental maps that could then be explored. The metaphor of a mental map is arguably significant because a map is not the territory: it is merely a reduction or an interpretation of the territory (Korzybski, 1958, p.58). In this instance, the territory encompassed language teaching and learning; but, as discussed in 2.7.4, beliefs will often determine what is/is not noticed.

Consequently, the TE's first task was to discover what STs had perceived on the basis of the *lived experiences* she had *orchestrated*. Here the aim was to refine the STs' perceptions rather than provide them with a set of theoretical principles (Kessels and Korthagen, 1996, p.21). This initially '*light-touch*' (p.95) approach, featuring specially selected short extracts from the relevant literature (pp.93-94), provided an invaluable *entrée* to a new world as concepts were dipped into and sampled ready to be savoured more extensively – pedagogically speaking – at a later date. *Pro tem*, concepts were often assigned to a temporary cognitive waiting-room.

Further, as characterised by Iris (p.83), this refining of perceptions could be described as '*maieutic*'. This she defined as giving life to a person's latent ideas by bringing them into clear consciousness. Additionally, as noted by Scott (p.73), there was also a strong '*ipsative*' dimension to this process. Fundamental in both Iris and Scott's observations was the TE's exploitation of theory that acted as 'a guide, or a heuristic' (Kessels and Korthagen, 1996, p.21) for exploring the STs' interpretations of a specific situation. It was very much a drip-feed approach that encouraged the STs to start to notice features of practice and make initial links to the wider literature (p.94). But as I now explain, *how* the TE was able to do this potentially furnishes some invaluable insights into ways in which TEs might become better equipped to bring theory and practice into an integrative, symbiotic, and non-dichotomous relationship – or perhaps even simply start to make reference to theory in their ITE practice.

The path 'picked' could often be 'planned' in advance by anticipating the likely reaction of the STs. The examples on p.79 provide an indication of how the 'unpredictable' can be planned for and then orchestrated through *asynchronous contingency management*, hence the notion of the *planned-for 'unpredictable'*. However, the unpicking dimension was achieved by having done one's '*homework*' – often over a period of many years. What the TE meant by this was the undertaking of extensive reading that enabled her to build up, and then draw down when required, '*a broad repertoire of theories of teaching*' (p.81). The TE framed the literature as being '*concepts that people in the field are conversant with and they use all the time*' (p.74); indeed, she referred to this on several occasions as her '*ammunition*'. In her case, this comprised a wide knowledge of general learning theories, as well as theories of instructed language learning. As discussed in 2.9.4, some studies have indicated that the ability to articulate a knowledge of practice that is referenced to public theory does not necessarily increase with experience (Field, 2015; Lunenberg, Korthagen and Swennen, 2007). Instead, TEs continue to rely 'on personal experience and implicit theory, on common sense' (Bullough, 1997, p.20). By virtue of the hard graft of extensive and intensive reading relating to her pedagogy, this situation did not obtain for the TE. But theoretical knowledge is arguably not enough in itself, for if one is to problematise practice, then tolerance of ambiguity and feeling comfortable with not knowing would seem to play an important role.

It was perhaps significant that the TE was now '*comfortable with not knowing*', something that would not have obtained earlier in her teaching career when she perceived she '*ought to know the answers*', and her role was '*to provide them*' (p.81). By preparing as outlined, the TE felt empowered in ways that helped her to react when the 'real' unpredictable happened, or she decided to pursue a particular unplanned tangent (p.93). The TE's thesis here was that '*if you*

start planning for the 'unpredictable', you become more skilful when the real unpredictable happens: a) you spot it and b) you know how to react in a pedagogical manner' (p.82). In essence, being able to articulate a knowledge of practice, in ways that facilitated STs seeing into practice with ever-growing theoretical understanding, was more a matter of meticulous preparation than any spurious essentialist quality that enables some TEs, and not others, to teach in this way. However, it should perhaps be noted that the TE also orchestrated the *lived experiences* that arguably rendered her teacher-education classroom a practice environment in-and-of-itself, namely a place 'where practice gets theorized and theory is not only considered for practice but is indeed practiced as it interrogates practice' (Segall, 2001, p.225). With her strong theoretical background, tolerance of ambiguity, and a readiness to take risks because the danger of not knowing was now a matter of *'intrigue'* (p.82), the TE was able to hold 'theory and practice in mutually fortifying tensions' (Baumfield, 2015, p.92). An important element of such tensions – provided the TE had continuity and interaction (p.97) with her cohort – was the ability to bounce back and forth between the concrete and conceptual in ways that gradually built theoretical insights into practice. The route taken for the assignment on assessment for learning, with its arguably deep-seated outcomes (p.100), both practical and theoretical, provided, as I now explain, an interesting series of pedagogical insights into how such understanding can be developed.

I would contend that the STs' enthusiasm for this assignment, and what it ostensibly enabled them to enact, was engendered not only by *playing the long game* – in this instance four months of practical experiences and the drip-feeding of theory – but also by constructing an 'oppositional space' within the teacher-education classroom that actively worked to 'question the natural, the taken for granted, the recognized, the accepted and the acceptable' (Segall, 2001, p.237). Fundamental to creating such 'oppositional spaces' was the TE's *orchestration of lived experiences* that were powerfully underpinned by her willingness, through *asynchronous contingency management*, to unleash deep emotions such as *'frustration, hatred, shock, surprise'* (p.80) that were often linked to *productive failure* (4.6). I would propose that experiences of this type – provided they are skilfully unpicked, sensitively scaffolded, and both TEs and STs are comfortable with discomfort – present potent strategies for challenging existing beliefs in ways that can lead to 'fruitful knowledge about teaching' (Korthagen, 2010b, p.407). For as Dewey (1933, p.30) asserts, 'it requires troublesome work to undertake the alteration of old beliefs' For my part, I would venture that creating 'oppositional spaces' in the teacher-education classroom constitutes an important aspect of that work. In particular, in a safe environment where STs feel comfortable with discomfort, it

becomes possible to challenge ‘paradigmatic assumptions’ (Brookfield, 2017) and disrupt the apprenticeship-of-observation by converting the ‘private and hidden’ into the ‘public and communal’, so that assumptions ‘can be tested, examined, challenged, and improved’ (Shulman, 1999, p.12). And as the assignment example above attested, seeing into practice with theoretical understanding starts not with ‘theories, articles, books, and other conceptual matters, **but**, first and foremost, concrete situations to be perceived ... and their consequences to be reflected upon’ (Kessels and Korthagen, 1996, p.2, emphasis added). Indeed, Kessels and Korthagen go as far as to suggest that ‘without such perceptions, no knowledge is formed at all, no matter how beautiful the essays are that a student teacher may write’ (ibid). In this instance, the STs not only wrote ‘beautiful essays’; they also felt empowered in many practical ways to make life in their classrooms more meaningful, both for themselves and their learners (p.100).

5.5 Factors that support and constrain the pedagogy of teacher education

In this section, I consider the third research question concerning the supporting and constraining factors that impinged on the TE’s pedagogy, as well as on the STs’ overall learning experiences. I commence by exploring the extent to which the policy environment exercised a washback effect on the TE’s pedagogy. In particular, I explore the contrasting scenarios of *an open dialogic space with a tomorrow* (p.97) and *a constricted space with no tomorrow* (pp.97-100). I then proceed to examine supporting and constraining factors in the ITE environment as viewed, either implicitly or explicitly, through STs’ eyes. I conclude with some thoughts concerning the nature of the principles of practice discussed.

5.5.1 The pedagogy of teacher education in the thrall of market forces

In his critical interrogation of school-led training, Brown (2018) suggests that it is often not education principles but local market conditions that can determine the design of the ITE courses that universities are able to offer within the School Direct scheme. The TE encountered this issue when she had to teach her Core PGCE group together with STs from School Direct schemes (pp.97-98). Because of the centrally-negotiated content of these one-off sessions, she felt ‘*not really the owner or designer of the process at all*’. The natural corollary of this lack of agency was having to teach in *a constricted space with no tomorrow*. As noted on pp. 97-98, because of the perceived nature of the market, ‘sales’ considerations trumped pedagogical ones as the TE adopted what she termed her ‘*Dropbox approach*’ involving a veritable *smörgåsbord* of activities that aimed to provide STs from School Direct schemes with ‘*their money’s worth*’ of classroom activities. Here the TE appeared to have

become ensnared in the trap of wanting to ‘cover the waterfront’ (Kosnik *et al.*, 2009, p.174). Further, because she was no longer operating in an *open dialogic space with a tomorrow*, but rather a *constricted space with **no** tomorrow*, she was unable to *orchestrate lived experiences* that could be *re-experienced* (p.76) and then explored in the more challenging (4.6), Socratic, ipsative, and maieutic ways that were normally part of her signature pedagogy. Instead, she was operating in a fashion more characteristic of the weak end of the modelling continuum, for although there was some reference to theory, she eschewed pursuing certain theoretical ideas because the latter would have highlighted fundamental knowledge differences between the two groups (p.98). This represented not only the ‘*delicate dance*’ (ibid) she would often have to perform in response to the policy environment; it also suggested that exercising a high level of pedagogical skill is not necessarily an essentialist quality – context matters, even for the most skilled of professionals.

5.5.2 The spectre of Ofsted

There were some elements of the TE’s course that were centrally prescribed on the basis of perceived inspection requirements. The issue of what constitutes an ‘outstanding lesson’ and ‘best practice’ (p.99) was one instance of this phenomenon. Since such prescriptions did not mesh with the TE’s educational vision and principles, and because they would have impaired the continuity-and-interaction dimension of her course, she would ‘*discreetly resolve*’ and ‘*subvert*’ (p.99) these centrally-imposed agendas. For example, ‘*How to teach an outstanding lesson*’ became ‘*Lesson structure revisited*’. By dint of the TE being ‘*mistress of her own domain*’ and having ‘*a tomorrow*’, she was able to exercise a certain degree of street-level bureaucracy (Lipsky, 2010) and wriggle out of an externally-imposed *a priori* pedagogical straight-jacket, thus preserving the continuity-and-interaction dimension of her teaching. In discussing these issues, the TE made the very interesting point that she not only had the freedom to do this, but also the relevant pedagogical knowledge. This was in contrast to one particular course where she had not ‘*rebelled against the highly prescribed ways of doing things*’ (p.99) because she felt she possessed neither the freedom nor the subject knowledge to do so, although she could problematise the shortcomings of what was being prescribed in the form of the decontextualised modes of reflection as mentioned in 4.3.2. In her view, the lack of freedom and deep domain-related pedagogical knowledge reduced her to a ‘*deliverer*’ and a ‘*task manager*’ (p.98). This observation suggests that a high level of pedagogical skill in one area, is not readily transferrable to another. Subject knowledge matters.

5.5.3 The student-teachers' development: supporting and constraining factors

According to Beauchamp *et al.* (2015, p.160), the dominant skills-based nature of the English Teachers' Standards (Department for Education, 2011c) runs the risk of reinforcing a view of teaching not as 'a research-based profession and intellectual activity' but as 'a craft-based occupation' based on 'performative professionalism'. For example, frequent explicit reference to the Teachers' Standards in taught sessions, or using them to drive the teacher-education learning processes, could be construed as a sign of 'performative professionalism'. Concerning this study, although there was an emphasis on the Teachers' Standards within the general programme requirements as a means of measuring progress in school (p.60), reference to the Teachers' Standards did not occur during the forty-eight hours of teaching I observed. In this respect, there was no evidence of the TE being in thrall to a 'paradigm of technical rationality' (Menter, 2016, p.19) with all its 'teacher-proofing' overtones (Maguire, 2011, p.32). Following Dewey (1904, p.15), the TE did not focus on short-term skill-getting, which, without wider educational understanding, can lead to a plateauing effect that starts and ends with 'perfecting and refining skills already possessed'. In Dewey's view, such an approach would deprive the STs of the 'power to go on growing', the corollary of which is that they would not become life-long 'students of teaching'. It appears that the TE was not only *playing the long game* here; she was also ostensibly shielding her STs from the potentially restrictive impact of a compliance-driven environment as framed by the Teachers' Standards.

In those instances in the school context where the STs were not shielded from compliance-related agendas and other restrictive practices, being able to return to the 'safe' environment of the university provided a refuge from what some STs had perceived to be the professional pressures and judgements of school (p.101). The university, therefore, acted as 'place of respite and reassurance' (Hodson, Smith and Brown, 2012, p.188), as a 'safe place for unsafe ideas' (Groundwater-Smith, 2016, p.xviii). But there was also possibly an additional aspect to the feeling of safety because the STs were both inspired by the vision of language teaching being promoted (p.88) and, furthermore, they had first-hand experience of its effectiveness through the Serbian lessons, the bespoke observations in school, and the related follow-up sessions (p.78). Unlike in those circumstances where STs reject university-inspired ideas because they do not find them 'practical, contextual, credible, or accessible' (Gore and Gitlin, 2004, p.35), the reverse obtained. Indeed, as was noted in 5.3.1, the vision of language teaching being advocated, along with its underpinning rationale, acted as a form of refuge in those cases where STs were experiencing difficulties in school, especially in relation to 'judgementoring' (Hobson and Malderez, 2013) and its constraining effect through

hypercritical, restrictive, and restricting feedback. Here theory played a perhaps surprising role as a confidante, non-judgemental friend, and guide, as did the assignment on assessment for learning (p.101). Nevertheless, in the short term, a particular compliance agenda had to be observed; but in the longer term, there was 'critical hope' (Freire, 2014) that presented ways of transcending the constraints of current classroom practices. And arguably, following Freire (2014, p.2), in today's educational climate, 'we need critical hope like a fish needs unpolluted water'. In conclusion, therefore, the STs experienced few long-term constraining factors because, without their being aware of it, the TE discreetly navigated them away from the potentially hypoxic waters of technical rationalism and compliance.

5.6 Some concluding thoughts about principles of practice

When I reflected on the discussions in this chapter, and the ST learning throughout the study, I was struck by the challenge, multidimensionality, simultaneity, and often carefully-crafted 'unpredictability' of the classroom processes. This underscored for me Edwards' (2001a, p.163) observation in 1.5 that pedagogy is 'an intense, complex and discursive act, which demands considerable expertise', involving an 'informed interpretation of learners' and the ability to manipulate learning environments so as to optimise learning. In this instance, the learning environment was a teacher-education classroom, which had been 'manipulated' to produce a practice environment in-and-of-itself. Here the role of the TE involved invoking a pedagogical approach that not only created these 'situations of practice' (Schön, 1983, p.14), but subsequently also assisted the STs in seeing into the 'complexity, uncertainty, instability, uniqueness, and value conflicts' (ibid) of said situations. These observations resonate with Loughran's (2006, p.173) suggestion that a pedagogy of teacher education should not be set in stone with specific rules and procedures; rather, it is a multifaceted and principled practice that is 'responsive to the issues, needs and concerns of participants in ways that might make the unseen clear, the taken-for-granted questioned and the complex engaging'. Loughran's description of the pedagogy of teacher education captures the very essence of this particular study, both in terms of its purpose and its inherent complexities. And I employ the term 'complexities' advisedly because I am conceptualising the pedagogical process as a *complex* one, rather than something that is merely *complicated*. Borrowing definitions from complexity theory (Davis and Sumara, 2010; Davis, Sumara and Luce-Kapler, 2008; Davis and Sumara, 2006), I am interpreting a *complicated* scenario as possessing many components that function together in mechanistic, predetermined, and predictable ways. The components of a *complex* scenario, on the other hand, operate together in ways that are dynamic, emergent, unpredictable, and recursive.

The considerations that I have just outlined formed the backdrop to my contemplating whether I should attempt to draw up a framework outlining the TE's strategies. My conclusion was that such an endeavour would lead to an unproductive reification of complex processes, especially in relation to the recursive dimension. Nevertheless, in the chapter that follows, I do draw out the principles that underpin the processes at play regarding how this study extends certain aspects of the pedagogy of teacher education, especially in relation to modelling and the disruption of the apprenticeship-of-observation. What follows, therefore, is a set of principles that can be adopted and adapted responsively according to need, rather than applied in a recipe-like manner. My aim is to provide a slightly sharper and less diffuse pedagogical focus as I hone in on how I consider this study contributes to the knowledge base of the pedagogy of teacher education.

6 Conclusions and Further Research

6.1 Introduction

This research has concentrated on the pedagogical activities in a teacher-education classroom that finds itself operating against the backdrop of far-reaching structural changes in the field of teacher education (1.2). Throughout, the purpose has been both to explore how an experienced university-based TE constructed learning so that STs could see into practice with theoretical understanding, as well as to gauge the TE's and STs' views concerning the role of theory. In this concluding chapter, I propose ways in which I consider this study contributes to the knowledge base of the pedagogy of teacher education, suggest implications for practice, and outline possible limitations of the study. I then reflect on the research process and offer for consideration a potential addition to the lexicon of qualitative research. I conclude with some thoughts regarding future research projects.

6.2 Extending the knowledge base of the pedagogy of teacher education

In ways that I now outline, I propose that this study contributes to and extends current conceptions of the pedagogy of teacher education by:

- Demonstrating how it is possible to bounce back and forth between the concrete and the conceptual through the use of *asynchronous* and *synchronous contingency management*, which I would venture are new terms for the lexicon of the pedagogy of teacher education.
- Suggesting how a theory-into-practice and a practice-makes-practice conception of teacher education can be brought into dialogue with one another in ways that foster an integrative, symbiotic, and non-dichotomous relationship between theory and practice.
- Indicating ways in which modelling can be rendered real, rather than pretend; theoretical, rather than atheoretical; and cathected, as well as cognitive.
- Highlighting that exercising a high level of pedagogical skill is not entirely an essentialist quality of a teacher educator – context matters, even for the most skilled of professionals.

- Delineating a route by which student teachers can come to appreciate and prize theory as an indispensable and much valued part of their teacher-education course and future professional development.

6.3 Implications for practice

In broad-brush terms, there are several implications of the above for practice:

- A precondition for an expansive and challenging pedagogy of teacher education is Dewey's (1963) concept of 'continuity and interaction'. In this study we have seen how a *constricted pedagogical space with no tomorrow* can have a deleterious effect on pedagogy, no matter how skilled the teacher educator. Instead, an *open dialogic space with a tomorrow* is required.
- If the previous conditions obtain, then a 'gently does it' approach to learning that features 'multiple entry points' (Gardner, 2009) to the same and similar concepts can be adopted, thereby reducing the risk of coverage at the expense of understanding (Gardner in conversation with Brandt, 1993). The theme *playing the long game: beyond tips for Monday morning* captures the essence of this recommendation.
- If theory is to 'take root', then it requires a perceived relevance, on the part of the student teachers, to their experiences and expectations. Drawing on Korthagen *et al's* (2001) *realistic teacher education*, a percept-before-precept approach, linked to a carefully-selected drip-feeding of relevant literature, would appear to be a prerequisite for the building of conceptual understanding. To this end, and in the light of the difficulties experienced by many teacher educators in making the 'connection between their teacher education practices and public theory' (Lunenberg, Korthagen and Swennen, 2007, p.597), appropriate developmental support should be provided for teacher educators (see e.g., Jackson and Burch, 2019).
- Learning experiences need to strike both an affective and cognitive chord with the student teachers. This necessitates that careful attention be given as to how experiences can be *orchestrated* and *lived* in the teacher-education classroom so that they can possess high levels of 'personal meaning and felt significance' (Feiman-Nemser and Buchmann, 1983, p.11). The purpose here is to increase the 'reflective traction' (Brandenburg and Jones, 2017) required for optimising the possibility of extracting meaning from experience and disrupting the apprenticeship-of-observation.

- Key to disrupting the apprenticeship-of-observation is to awaken student teachers' awareness of how their biographic pasts influence their pedagogic present, especially in relation to their 'paradigmatic assumptions' (Brookfield, 2017). Here it is advised to start by honouring and validating student teachers' past experiences by working with the grain of their beliefs rather than against it.
- If student teachers are to 'run the risk of reconceptualisation' (Oosterheert and Vermunt, 2001), then the precondition is a teacher-education classroom that is a 'place of respite and reassurance' (Hodson, Smith and Brown, 2012, p.188), and a 'safe place for unsafe ideas' (Groundwater-Smith, 2016, p.xviii).
- Developmental work is required that helps teacher educators to create an environment for seeing into practice; that is, a classroom where 'practice gets theorized and theory is not only considered for practice but is indeed practiced as it interrogates practice' (Segall, 2001, p.225) in the ways outlined in this study.

6.4 Potential limitations of the research

In one sense, this study could be regarded as being very 'niche' by virtue of the focus on modern foreign languages and the small number of participants, namely twelve by the end of the course. The use of Serbian as a vehicle for 'real' experiences in a teacher-education classroom could be considered to narrow the scope still further by raising questions of applicability to other subjects. However, I would propose that subject-specific elements can act as exemplars that can be applied and experimented with in other contexts. I make this claim because of the way in which this study focuses on the TE-ST classroom interactions, which are arguably generic. Indeed, perhaps one of the unique contributions of this research to the knowledge base of the pedagogy of teacher education lies within these very interactions because, as noted by Zeichner (2005a, p.748), there is an oft-missing dimension to teacher-education research in the form of the 'instructional interactions between teacher educators and their students in teacher education classrooms'. Additionally, longitudinal studies that do consider such interactions are usually either conducted on a self-study basis or rely exclusively on extensive ST interviews and do not involve researchers being in the teacher-education classroom. It is my hope, therefore, that the insights derived and theorised from this process will 'speak' in some way 'to particular audiences in particular contexts' (Winter, Griffiths and Green, 2000, p.36) in relation to the demanding task facing all TEs that involves 'effectively connecting experience, theory, and practical wisdom' (Lunenburg and Korthagen, 2009, p.238).

6.5 Reflections on the research process

There might be those who would question a sample size involving just one research participant. Such reservations would be valid if contemplating this study through a positivist qualitative research lens that required a representative sample in order to draw conclusions about the group being studied (Boddy, 2016). However, such a view would constitute an ontological clash between an objectivist view regarding data ‘as *brute*, existing independent of an interpretive frame, waiting to be “collected” by a human’ (St Pierre, 2013, p.223, italics in original) and a constructivist perspective (3.5) that ‘recognizes that the viewer creates the data and ensuing analysis through interaction with the viewed’ (Charmaz, 2000, p.523). Further, as Braun and Clarke (2015, p.742) remind us, ‘bigger isn’t necessarily better’ since bigger sample sizes run ‘the risk of failing to do justice to the complexity and nuance’ of the area being studied. I would propose that a sample size of one enabled a rich and nuanced insight into the ‘black box’ (Darling-Hammond, 2006a, p.19) of the teacher-education classroom. However, I would advise that those embarking on a study with one participant need to be aware of a key danger, namely that if the one-and-only participant becomes ill and, for this or other reasons, is unable to continue with the research, then there are no fall-back positions. I was cognisant of this risk because the TE herself lost two years of PhD work due to the subject of her study falling seriously ill and not being able to continue with the project. Despite this awareness, I was still prepared to take the risk because it was central to the ‘mystery’ (1.3.1) I wanted to explore. On another note, I must admit to being slightly naïve in not consciously building a degree of redundancy into the study’s design in the event that it might not be possible to follow through on a particular dimension of the research, as was the case with the pedagogies of enactment (2.2). In retrospect, I was fortunate in that there was enough redundancy; but that was through chance and not conscious planning. I would proceed differently in the future.

One of my motivations for undertaking this study stemmed from what I perceived to be the potential for personal and professional learning arising from the complexities of the research (1.3.2). In particular, I had in mind my positioning on the insider-outsider continuum, the interplay between procedural ethics and ethics in practice, and the active embracing of subjectivity in the creation of meaning. How these complexities played out, I have outlined in 3.6, 3.7.1-3.7.2, and 3.8.3 respectively. In coping with these challenges, I would often experience a form of ‘vertiginous recursiveness’ as I struggled to scale the rocky terrain of a frequently shifting research scenario that would occasion me to double back on myself and attempt new and sometimes steeper and more exposed routes. However, such research-

design dilemmas, and the resultant detours, created welcome formative experiences – although perhaps more in retrospect than at the time. As the research progressed, I gradually realised that the way in which the different components in qualitative research interact forms a fundamental aspect of qualitative research design (Maxwell, 2005). Indeed, I came to view qualitative research as an interactive process and a ‘site of multiple interpretive practices’ (Denzin and Lincoln, 2005, p.6), in which there are no ready-made, off-the-shelf solutions. Guiding me in this dynamic and non-predictable environment was my conceptual framework that acted as an ‘informing backbone’ (Wisker, 2012, p.132) and an ongoing self-audit device (Lesham and Trafford, 2007, p.101) that arguably exercised a stabilising gyroscopic effect on the research process. This obtained in particular for the interplay between procedural ethics and ethics in practice (3.7.1-3.7.2).

My observation on the above, drawing on Law (2004, p.4), is that had I adhered rigidly to a predetermined design, then this would have been tantamount to donning a ‘set of constraining normative blinkers’ that would have framed, in an *a priori* manner, what I did/did not see and, in a couple of instances (3.7 and 3.7.2), could have resulted in unethical procedures. Thus it became of paramount importance to react ethically with ‘a participant-responsive flexibility’ (Wolgemuth *et al.*, 2015, p.369) within the guiding parameters of the conceptual framework. In short, as the study progressed, I became aware that it was much more than a ‘data source’ form of research with predetermined and fixed research frameworks (Locke, Alcorn and O’Neill, 2013, p.109). Further, a key insight for me was the realisation that, in research of this type, participants are potentially asked to share more ‘personal and identity-laden data’ (Smythe and Murray, 2000, p. 329) than in approaches that do not possess the emergent and in-the-field characteristics of this study. It is in relation to this point that I am proposing a potential addition to the lexicon of qualitative research.

6.6 A potential addition to the lexicon of qualitative research

Throughout the year, I was not only observing the TE; she, in a sense, was also observing me as I interacted with her STs in the classroom during group-work activities. She speculated that my interactions with the STs helped to foster a way of thinking that lifted them above their everyday concerns, but in ways that honoured how they were feeling:

You talk to them as if you were them. You know exactly how they feel, but you provide an explanation and a justification and you allow them, you give permission for them to feel that way; and you provide that little bubble of oxygen that gets them out of their mundane day-to-day lesson planning, marking books, into something a little bit more.
(TE4)

The TE suggested that, although an outsider, I was also very much ‘*an insider still*’ (p.47) as an experienced PGCE tutor; and this insider-perspective was something the STs sensed, could identify with, and felt secure with because, in her words:

*You have been **them** and then you have been **me** and therefore they could talk to you. It’s, it’s ellipsis. They don’t have to go into great detail about their circumstances because you know exactly what they’re talking about. They can be elliptical. You know. You pinpoint exactly and you say the right expression for their sort of feelings ... It’s what you do to me all the time. You crystallise it. There is a sharp, pinpoint, that’s-it moment, lots of little “eureka” moments.* (TE4, emphasis in original)

On the basis of the above, I would venture that TE had spotted a new term for the canon of qualitative research: the ‘elliptical role of the researcher’. By this she had in mind the way in which the researcher’s unspoken knowledge of a context is sensed by the participants and acts to deepen discussions because less time is consumed on their part through having to provide background descriptions. But as discussed in 3.8.3, there may be those who might consider such involvement as a ‘virus which contaminates the research’ (Cousin, 2010, p.10). However, I would contend that this stance was congruent with the framework of a constructivist philosophical perspective (3.5), within which the ‘positionality’ of the researcher is often central to the development of knowledge (Hamilton, Smith and Worthington, 2008) and in which subjectivity can be harnessed as a legitimate source of knowledge, fulfilling a ‘central epistemic function’ (Kuehner, Ploder and Langer, 2016, p.700). Further, the STs’ reactions, as observed by the TE, indicated one of the proposed beneficent effects of this research as outlined in the ethics application; that is, of increasing their reflective capacities (3.7.1).

6.7 Building on this study

A natural extension of this research would be to extend the study into ‘pedagogies of enactment’ (Grossman, Hammerness and McDonald, 2009) and their role in helping STs to see into practice. This would involve observing STs undertaking teaching in schools, and possibly in micro-teaching events at university, with a view to ascertaining any discrepancies between STs’ ‘espoused theories’ and ‘theory-in-use’ (Argyris and Schön, 1974). On this basis, it would be possible to determine whether theory continued to play a role in the STs’ conceptions of practice. In short, such a study could explore the links between knowing ‘why’ and knowing ‘how’ (Loughran 1997b, p.62). Further, in the manner of Douglas’ concept of ‘time-lapse ethnography’ (Douglas 2019 and 2017b), or Warin’s (2011) ‘qualitative longitudinal research’,

it would be interesting, in a few years' time, to conduct follow-up interviews with the TE and the STs so as to revisit the insights developed in this study.

However, an extension to this research is already underway. This involves harnessing the underlying principles of the second-order skills of teaching others to teach (Murray and Male, 2005) as explored in this study, to develop what I, and my co-researcher Dr Alison Jackson, are calling 'third-order teaching skills'. These are the processes involved in *teaching others to teach others to teach*. This project has been commissioned by a national school-centred programme for training languages teachers and encompasses both developing the twelve TEs teaching on their scheme, whilst simultaneously researching the process. Only time will tell how effective the insights developed by the research in this thesis will prove to be in the eyes of these new TEs. Nevertheless, I am looking forward to experimenting with employing elements of this thesis as building blocks in a potentially new field of teacher education, namely that of the *pedagogy of teaching others to teach others to teach*.

7 References

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8 Appendices

8.1 Appendix one: From observation notes to meaning-making discussions

This appendix provides exemplar material to supplement sections 3.8.2 and 3.8.3. To this end, we see notes from the first twenty minutes of a session in early January (5.1.17 from 13:00-15:00). How this teaching developed further can be explored in section 4.7 that features a detailed account of how the TE related real experiences to theoretical insights.

NB Extract below was originally handwritten, but is transcribed here for ease of reading. The interview transcript that follows these observation notes provides an example of how the questions embedded in the observations (these are in bold and italics) were used as grist for a meaning-making discussion.

Observation notes

TE explained that this was a session she had removed from the programme in the past, but was now reinstating it because of its importance. Contextualised the session and explained to STs that it was about 'stuff you've done' in terms of making links to previous experiences, readings etc. ***Explore her thinking here.***

A surprise Serbian test: a real test to exploit why they could/couldn't remember. Sense of suspense in the air. ***What was the rationale for this?***

Discussion of ST reactions to test and linking it to pupil-related experiences, drawing out implications for their teaching. Points for discussion for the STs were:

- 1a. List the words/expressions they got right
- 1b. See if these were the same as others in group. Why/why not?
- 1c. Explore what helped with retention of these expressions.
- 1d. Consider whether beyond own interest / effort / diligence, there are teaching strategies used during Serbian lessons which helped with retention of this information.

Reference to literature on remembering/forgetting, e.g. Costa and Nuthall, especially Nuthall's 30% finding. Discussion of the role of making language 'vital' (alive and relevant to pupils' needs) in order to help with retention. Issue of ongoing and repeated exposure. Constantly linking the ST discussion to their real experiences (in school and in Serbian). TE told class she had actually re-watched the recording of the last Serbian session so as to be able to refer to the 'life history' of the phrases being explored. This was three months ago. (Some interleaving and some gap! ***Explore this with TE***)

TE draws discussion together under 4 key theory-related headings that stressed the importance of:

- making sense of new input/understanding;
- creating a strong memory trace by using multiple entry points;
- drilling/repetition and regularly revisiting a new input;
- using/applying new input in self-initiated output.

Now teaching of small extracts of Serbian to illustrate above points. Total change in body language of class! They were very much back in the 'Serbian moment'. **Issue: mastery or performance?** (end of extract)

Transcription of start of interview following on from above discussion

- I/er What was going on? What went through your mind? And what were you trying to achieve? The usual stuff.
- TE It is the first week since Christmas. They spend the Christmas holidays writing their essays. They've got all these authors swimming in their heads. But it has been a little while, and it's going to be a little while before they go back into the classroom, so I still want them to feel the benefit of that recent school experience and to go back to reflecting on **why** they do certain things before they become completely enculturated into a particular way of doing; and that's it, they stop reflecting on why they are doing, pairwork, drilling, no drilling etc etc.
- I/er Did you have a particular reason for doing it in the way that you did?
- TE Yes (said in a drawn-out way) because I don't want ... I want them to see the link between why we are advocating certain things in the classroom to the literature that we have been using. So that's why I try ... I try the interleaving. I try the connection. "What did we do in terms of drilling and repetition and so on?" Here are a few quotes. What do the quotes mean? How do they relate back to the drilling?'

Note to self: Go back and analyse the PowerPoint for this and look in detail at the interrelationship between the theory and the practical experience. I feel that this will be very useful indeed in terms of potential lenses.

- I/er You were not only relying on the classroom experience, you were also relying on something else that was quite powerful. You actually saw it on their bodies sometimes.

Note She had to be reminded, after a long pause, that I was referring to Serbian! This is followed by laughter because, for her, the Serbian is a self-evident component.

- I/er Tell about the Serbian and the giving of the test?
- TE I knew that there would be a mixture of frustration, hatred, shock, surprise etc etc but they are adult enough to know the secret agenda behind the exercise. So they can cope with that. They're not treating the test as a test. But I wanted that to be a vehicle to explore what they had remembered and what they had forgotten. And to **learn** from those lessons that what works for them also might work in the classroom. Or what **hasn't** worked for them, **therefore** doesn't necessarily work for children.
- I/er What did you learn from the Serbian aspect of it?
- TE (Quite a long pause) There were a few surprises because I expected them to get **some** words and not others. And I expected them all to get the numbers. And they didn't.
- I/er Is there some sort of philosophy of teaching that is coming through from you in the way that approach this whole thing here of their experience in school, Serbian,

- the reading they are doing, the essay-writing. Can you sort of summarise that in some way?
- TE I want them to **feel**. I want them to **experience** things. So I don't want to engage with "Do you remember Serbian? Do you feel you could do this, this, that and the other?" and it is all imaginary. I want them to go back into the situation. To be put back into the situation – I didn't even tell them they were going to have a test – I wanted a frank, raw, reaction to suddenly capture all that spirit of (deep intake of breath to convey shock) "Oh my God, I'm going to make a fool of myself". So I wanted them to **re-experience** being back in Serbian.
- I/er Why?
- TE It is a bit like that episodic memory. If you go back to the situation you might remember **other** things that were talked about and discussed at that point. It is the little echoes between one experience and the next and the next and the next.
- I/er So this is an experience-creating process that you hope will have some sort of resonance with them in different ways.
- Yes
- I/er What did you discover from that?
- It's funny because you do not know if it is that mastery or performance and so on. Each time I went back to **some** aspects of the Serbian like the songs, the mimes, the pairwork and so on
- I/er Especially the song!
- TE Ah, yeah they all go: (she sings the first few lines of the song) And they all go for it. You get that sort of, "Oh wow! They're with it!" So at the planning stage I'm always a little bit diffident (concerned? Check) that they are going to find this boring, I'm going over old ground and treating them like little kids. So we are going to sing a song, "Gosh, what will they think that about this?" From experience, I know they actually enjoy going back to being little language learners and singing a song. And it creates that team, that sort of "We're in it together". They are little breathers and they go back into that moment when they first sang the song. And that has a sort of pleasurable, so I try to plan my lessons with my little settlers and stirrers (she laughs).
- I/er Oh really, you're doing it like that?
- TE Yeah, if I see two or three slides that are a bit quote-heavy, then I have a little slide that is going to go into group work, discussion, so as to sort of give the brain a little bit of space.
- I/er You had quite a few themes running through it. What prompted you to choose those themes and the framework of four boxes?

8.2 Appendix two: Examples of semi-structured interview questions

This appendix supplements section 3.8.3 by providing insights into the questioning process associated with the four semi-structured interviews with the TE. As will be seen, the questions would sometimes involve small extracts from the literature for the TE to consider.

1. Would you consider you have progressed perhaps predominantly from a 'provider of answers' to a 'poser of questions'?
2. How much of your role is achieving the right balance between confidence and uncertainty, both for you and the students?
3. Can you identify in any way with the following taken from Berry (2007)?

My purpose in teaching biology method in the way that I did was to look beyond this view of teaching as the 'stockpiling' of activities. My goal was to challenge the notion of teaching as an uncomplicated act of following particular tried and tested routines. I wanted student teachers to develop their thinking about why and how they might teach, so that they could evolve their own approaches and activities that were more congruent with facilitating their students' meaningful learning of biology.

4. You appear to be challenging/questioning stereotypical views of learning and teaching modern languages. Would you agree with this particular observation and, if so, how do you think you go about this process?

5. Can you identify in any way with the following from Berry (2007)? There is a bit of overlap with the above question, but there is also a supplementary element.

It is my belief that teacher education should provide opportunities for preservice teachers to 'see into' teaching practice in ways that challenge their existing perceptions and encourage consideration of alternative frames of reference. In this way, they may be motivated to consider new and deeper understandings of teaching and learning. A variety of methods may be useful for this process—for example, keeping a journal to record and reflect on pedagogic experiences. However, more powerful still, is the experience of teacher educators opening up their teaching practice to their students as they think aloud about the uncertainties, dilemmas, questions and contradictions they face in their own experiences of teaching preservice teachers. In my approach to teaching about biology teaching, I wanted student teachers to become more aware of their processes of pedagogical decision making, so that they might be more thoughtful about the pedagogical choices they made. I chose to work towards this goal by explicitly modelling my own decision-making processes for my student teachers.

8.3 Appendix three: Examples of memos

The vignettes that follow illustrate the different categories of memoing. The categories do not represent clear-cut delineations because there is a certain amount of fluidity between types of memo. Common to them all is the way in which the empirical material provided the conceptual tinder; and the writing-as-thinking dimension of memoing acted as the developmental spark.

My "ah-ha", perhaps..... moments

These memos arose when I was not working on the research. They are out-of-the-blue thoughts. As with all the reflections in the memos, they had to 'earn their way into [the] analysis through their theoretical power to illuminate [the] data' (Charmaz, 2014, p.201). Sometimes this was the case; and sometimes it was not. Such thoughts often occurred during my daily bike rides, providing a new take on the 'research-as-journey metaphor'!

31 March, 2016

Whilst cycling along the Old Moor road, a thought occurred to me concerning 'living contradictions'. This was prompted by just having read a bit of Berry and the Loughran (2005) in which she (Berry) referred to how certain dilemmas in the practice of teacher education often act as a catalyst for action, e.g. the tensions between informing and creating opportunities to reflect; planning for learning and responding to learning opportunities as they arise in practice; making explicit the complexities and messiness of teaching and helping student teachers to feel confident to proceed etc. In all of this I wondered if there were actually 'explicitly-engineered living contradictions'. For example, you engineer something in the short term that goes against your pedagogical grain, but do so in terms of long-term gain. This is so similar to the theoretical work surrounding the need to have a basic building blocks in place before being more creative. In such circumstances there are perfect opportunities to problematise such an approach with the students. After all, how on the one hand do you reassure and create a sense of safety and security and, on the other, how do you challenge? I think there could be a model of 'living contradictions' in here somewhere. (Conscious living contradictions, unconscious living contradictions, explicitly engineered living contradictions, living contradictions as a bridge to congruence between medium and message?).

Reflexivity and ethics

Reflexivity and ethics were key elements in the 'dialectics of mutual influence', namely principles within the research that 'span throughout and ideally shape all other aspects of the research process' (Ravitch and Carl, 2016, p.383). Memoing here thus became very important for maintaining 'ethical mindfulness' (Warin, 2011). Key points of reflection often concerned ethical dilemmas, as shown by the example below written after the final focus group.

This was an interesting session, and not quite what I was expecting – although in a sense, as I reflect, it probably was. The leitmotif was one of the standards wagging the professional development dog; in this case, new entrants to the profession. Here more expansive possibilities were being reined in by a restrictive regime of standards-related requirements – or that was how is being interpreted. Coverage in language-learning terms and 'compliance criteria' instead of 'learning' (Torrance, 2007) also loomed large. There is a danger on my part, especially where the standards are concerned, of partisan vituperation and using such arguments as an opportunistic pedagogical pathogen! Need to think carefully how some of this is expressed because I do not want to harm the university's 'partnerships' in any way (although there is massive congruence with the literature here), not to mention the internal dynamics of the wider programme that appears to be causing this issue under the banner of Ofsted. Perhaps explore in the literature the 'backwash' effect of standards and Ofsted on teacher education?

Data analysis and interpretation

An example of a memo written from field notes in September 2016:

Here the issue of an emergent model is potentially very significant, so the question is what sort of knowledge-building is going on and how is it orchestrated? But how 'emergent' is 'emergent'? What determines which issues 'emerge' and is their 'emergence' pre-planned in some way? Is 'emergence' the wrong metaphor? Is this similar to Paavola and Hakkarainen's (2005) concept of an 'emergent epistemological approach to learning'?

An example of a note when analysing interview data from January 2017:

XXXX appears to be fostering a plurality of professional visions that are different but equal because they share the same pedagogical DNA. As such this is not an 'anything goes approach' but rather a smörgåsbord of carefully chosen pedagogical possibilities, each with strong and interrelated underpinning principles.

Then there are small memos in ATLAS.ti relating decisions made when allocating codes, together with more general thoughts:

Coping with complexity and making choices

Created: 2017-04-01 13:24:27 by Super

Modified: 2017-04-04 08:06:39

Quotations: 1

Comment: This is reminiscent of adaptive expertise and the accumulation of professional wisdom; it is perhaps a realisation that teaching is not only complex, but the natural concomitant of that, making decisions whilst teaching, is equally challenging

A springboard for 'engaged scholarship'

These memos tended to be much more intensive and extensive than some of the other memoing activities. The initial ideas flowing from the memos frequently furnished the intellectual grist for the process of engaged scholarship and the intersubjective creation of meanings. For example, here is an email based on a memo. It is from 29.12.16 and was part of an on-going dialogue of possible interpretations of an interview held with the TE on 17.12.16. These exchanges, concerning the fine-tuning of interpretation of just one interview, ran to over 4,000 words. Of particular note in the longer exchange was the TE's level of analysis; her reference to professional literature; and the unstinting generosity with her time.

Dear XXXX,

As I dig into the data, one of the themes is potentially 'lived experience' – a term you use a great deal. Is what is in your mind similar to what is below? It is an extract from a speech by Dylan William on, of all things, assessment for learning. Secondly, in terms of the ethics of beneficence, would you say that the research project is helping you to undergo 'a process of externalisation' (see below). I ask this, because a constant leitmotif is you saying that much of what you do is instinctive. Any reflection on these points, together with anything else that strikes a chord in the three paragraphs below, would be most interesting and appreciated.

Many thanks

James

PS I have just done a bike ride on very slippery by roads.

Part of her 1,100-word reply from 30.12.16:

Hello again,

I had a lovely bike ride with my niece yesterday – and had to do a crash course on road safety and the Highway code with a hyperactive 10 year old.[.....]. Anyway...

Internalisation / externalisation: yes, a neat metaphor although I imagine the Japanese authors and Wiliam himself would explicate further in their writings (necessary prerequisites for this to happen? Triggers? Processes that are most helpful when internalising – that reminds me of the writing you'd done on proximal / prototypical activities + I suspect there will be psychological attributes to do with readiness. One internalises when one invests in the learning endeavour, is ready to do so and sees the benefit of it, and is immersed in the situation, values it, etc. otherwise, you get coerced, 'defensive' learning as Stevick put it. One can also internalise but at a level that is mimetic rather than owned. I remember a particular student who was very good at imitating other teachers but didn't quite 'have it' as the subject mentor put it and it took us a long time to figure out how to gradually allow this student to realise that she was simply imitating and that this has serious shortcomings.

[....]

I think we can confidently say that my verbalising, in your research project, (through interviews / post-observation discussions) does force me to think about what I'm doing in other ways than when I plan those seminars. I have a different audience, different sense of investment, different rationale when I talk to you than when I plan my input so it forces me to adopt a different perspective on what I do: does it help me externalise what was implicit? I don't know. It encourages me to think about it, to describe my thought processes and the benefit is to be found in the space that this creates, the opportunity to sit back and reflect, to transfer 'hot action' into cold decision making as Eraut puts it. But is there really transfer between this now explicit knowledge back into my practice?