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BECOMING A TEACHER OF EARLY READING: AN ACTIVITY SYSTEMS ANALYSIS OF THE JOURNEY FROM STUDENT TO NEWLY QUALIFIED TEACHER

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Helen Claire Hendry BA, MA, PGCE

School of Social Sciences

Bishop Grosseteste University

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Becoming a Teacher of Early Reading: an activity systems analysis of the journey from student to newly qualified teacher
Helen Claire Hendry

Abstract

Education policy in England requires student teachers to demonstrate effective teaching of early reading, including systematic synthetic phonics, in order to qualify. However, central monitoring of student teacher satisfaction in initial teacher education (ITE) indicates that some students feel inadequately prepared to teach reading as they enter the profession. Furthermore, recent policy changes to ITE on postgraduate routes have increased time in schools and reduced time in the university. In this challenging climate, little is known about how student teachers develop knowledge, understanding and practice for teaching early reading whilst moving between the different learning environments of schools and university and how they adapt to the first term as newly qualified teachers (NQTs).

This research used a longitudinal, collective case study design involving seven lower primary (3–7 years) postgraduate certificate in education (PGCE) students enrolled at one university in the East Midlands of England. Semi-structured interviews, classroom observations and documentary analysis with the students and their teacher mentors were used to gather data from entry onto the course to the participants' first term as qualified teachers. A conceptual and analytical framework, developed using activity theory, provided an original and innovative way of examining the complex interplay of influential factors within and between schools and the university. Conceptualising ITE as the product of multiple activity systems identified important tensions between the goals and expectations of schools and the university and the potentially unexamined impact of institutional responses to policy on becoming a teacher of early reading.

The findings indicate that student teacher progress was constrained or facilitated by key elements of the activity systems involved which highlight implications for university organisation, mentoring and whole school participation. Recommendations from the research include a new continuum of teacher development and an ideal activity system for ITE and induction for early reading.

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Chapter 1 Research outline

1.1 Introduction

As a former early years teacher and teacher educator, I know that not all children learn to read easily or learn to love reading, but I believe that teachers have the potential to encourage and support this process. Reading is a fundamental skill for life and future learning, but it is also valuable for its own sake, providing the opportunity to think, to understand new perspectives and concepts, and to make emotional connections, as well as shaping our capabilities as communicators in verbal and written language. This research emerged from my own personal interest in early reading and learning to teach which has been formed by a complex amalgam of experiences as a pupil, student, teacher and university tutor and my deeply held conviction that learning to teach reading needs as much attention and support as learning to read.

I learned to read before I started school, in a home environment where I was immersed in books. I became a reader through exposure to print and shared stories. Reading was natural, enjoyable and easy for me, and my motivation to read widely endured and led me to later study literature as an undergraduate. I carried my enthusiasm for reading into my one-year postgraduate course in early years and primary teaching but I have no recollection of any session which included either theory or practice about teaching reading. I remember content focused on pupils learning to write emergently through exposure to print, and I believe that there was some suggestion that this was also how children learned to read. During school placements, my experience of teaching reading mostly involved 'hearing readers' as they read their designated individual texts aloud and writing notes in their reading record on words they had found difficult. I began my first post as a new teacher with the expectation that I should read stories to my class every day and listen to them reading, but I had very little understanding of the reading process or how to support it through teaching.

My first year of teaching was extremely difficult and unhappy. My mentor and head teacher had strongly held ideas about the 'right way' to teach and monitored and criticised me until I conformed. A particular focus for their judgement was teaching

reading. The school employed a highly prescriptive system of 'look and say' reading where each child was assigned a set of flash cards from which to memorise key words at home. They were given a new reading scheme book to read once they had learned the corresponding flash cards in isolation. I was expected to hear every member of the class read daily and test their recognition of key words. Organisationally this was a challenge, but more significantly it soon became apparent that some children struggled to memorise key words and were therefore unable to move forward in their reading over a number of weeks. With little support from my mentor, few strategies learned from my course and no other personal experiences to draw on, I am ashamed to say that some children made extremely limited progress. My mentor seemed more interested in whether or not I was following the system correctly and so did not discuss the progress of the pupils or suggest other ways to help them. It was through a process of trial and error and informal discussion with family, friends and colleagues that I improved my approach to teaching reading by gradually encouraging children to use, what I later came to understand as, graphic, semantic, syntactic, contextual and phonic cues to read unfamiliar words.

When I began this research, after a career in primary teaching and five years as an English tutor on a primary postgraduate certificate in education (PGCE) programme, the feelings of inadequacy and isolation that I experienced as a new teacher of early reading remained a vivid memory. By this time, the context for learning to teach reading had changed a great deal but I was concerned that the experience of student teachers might not be much improved. According to an annual national survey of newly qualified teachers, student teachers were consistently less satisfied with their preparation to teach reading than with their initial teacher education (ITE) routes overall (DfE 2012). In contrast to my experiences as a student, the university where I worked provided taught content and school-based tasks designed to link theory and practice about teaching reading. However, schools and universities were now expected to use systematic synthetic phonics as the first method for teaching reading. This method involved teaching grapheme-phoneme correspondences for all the letter to sound relationships in the English language and then 'decoding' unfamiliar words by breaking them into their smallest sound constituents (or phonemes) and blending them back together to read them (McGuinness 2004; Rose 2006; DfE 2010a). In this new context, I wanted to investigate the experience of learning to teach reading in an attempt to

better understand why some student teachers still felt, as I once did, inadequately prepared to support early readers once they became new teachers. I hoped that this research would offer some insight into ways in which schools and universities could ensure that student teachers became confident and competent in the teaching of early reading and began their careers able to help young children to develop the skills and motivation to read.

Throughout the study, I have chosen to refer to the participants as 'students' or 'student teachers' and 'new teachers', 'pre-service teachers' or 'newly qualified teachers/NQTs', and their experiences as 'initial teacher education' or 'the PGCE course' and 'induction' or the 'NQT year'. These terms reflect my belief that becoming a teacher is a complex process of learning and development which is not adequately conveyed by vocabulary referring to training. I refer to learning to teach but also 'becoming' a teacher as I think that teaching involves knowledge and practices that can be learned but that this process involves changes to individual understanding and beliefs which shape a teaching identity.

1.2 Policy context for teaching reading

This study took place at a time when the reading curriculum, methods and resources for teaching reading in English primary schools were subject to particularly high levels of central government control, external monitoring and prescription. While pedagogies for teaching reading have been a source of debate for over a century (Huey 1915; Chall 1967; Goodman 1967; Clay 1972; Smith 1988; Adams 1990; Goswami and Bryant 1990; Ehri 1998; Torgerson et al. 2006; Clark 2014; Dombey 2014), attempts to standardise the teaching of literacy in England came to the fore with the introduction of a National Curriculum in 1989 and subsequent guidance for teachers in the *National Literacy Strategy* (DfEE 1998; DfES 2001). Reading was further highlighted in the political agenda for 'raising standards' in education (Dombey 2014; Ellis and Moss 2014) after the *Independent Review of the Teaching of Early Reading* otherwise known as the 'Rose Review' (Rose 2006). Following this, inspections of schools and ITE included a new focus on the teaching of early reading (Ofsted 2010, 2012a, 2015), and curriculum guidance and educational policy required that teachers used systematic synthetic phonics as the first teaching method for teaching reading. This focus was with the intention of increasing standards in reading which, according to national testing of

primary pupils, had made little progress since 2000 (Jama and Dugdale 2012). Despite academic arguments and inconclusive research about the value of a 'phonics first' and synthetic phonic approach to teaching reading (Goswami and Bryant 1990; Johnston and Watson 2005; Torgerson et al. 2006; Goswami 2008; Clark 2014; Dombey 2014), the policy of teaching systematic synthetic phonics was enforced through the national expectations for qualified teachers (DfE 2013a) and national pupil testing in Year 1 primary school classes (DfE 2013b). Even specific curriculum materials and resources were recommended and match-funded for schools to use with their pupils (DfE 2013c). The revised *National Curriculum* (DfE 2014), which came into being during the induction year of the participants in this study, further emphasised teaching using a synthetic phonics approach. The recent history and high-stakes nature of teaching early reading therefore provided a unique cultural context and an important element in this research.

1.3 Policy context for ITE

Following the 'Rose Review' (Rose 2006), the Department for Education (DfE) introduced new measures to monitor teacher preparation for early reading. ITE programmes became rated nationally, according to NQT's satisfaction with their preparation to teach early reading and systematic synthetic phonics, using an annual survey (DfE 2012). In subsequent years, the Office for Standards in Education (Ofsted), a national inspectorate for all provision relating to compulsory education, introduced a phonics monitoring inspection for any universities who dropped below the national average of satisfaction in the NQT survey (Ofsted 2015). Any ITE providers judged to be less than 'Good' during such an inspection would automatically receive a full inspection of their ITE provision. The judgements of these inspections were critical for the providers concerned as they were used to guide future government allocations of student teacher admission numbers.

As a teacher educator in this climate, there seemed to be an external focus on measuring outcomes rather than due consideration of how student teachers learned or the development of evidence-based ways to support them. From my own experience, there was an annual reduction in student satisfaction with preparation to teach early reading and phonics between the university survey which took place in the final term of the PGCE and the national survey in the second term as NQTs. As this study commenced,

the results of the NQT survey (DfE 2012) indicated that 89% of new primary teachers in England rated the overall quality of their ITE as good or very good (n=5,200) whilst only 68% gave the same rating to their preparation to teach reading, but there was little information available as to why this might be the case.

In addition to concerns about student satisfaction, there were national changes to postgraduate ITE which made it more school-based and presented a new challenge for students, schools and universities. In the academic year 2013–2014, when the majority of data collection for this research took place, traditional PGCE routes were required to increase the number of days which student teachers spent in school from 90 to 120 in their 38-week courses (DfE 2015a). This meant that the amount of time available in university sessions to focus on early reading decreased and so the quality of the students' learning experiences became more reliant on their time in schools. My prior experiences of visiting students on school placements, and my own difficulties when I was a new teacher, made me concerned about the level of support available for student teachers as ITE became more focused on schools. I knew that school approaches to both teaching early reading and mentoring student teachers were very variable and anticipated that the increased reliance on schools could have a detrimental influence on some student teachers' learning. Through my involvement in university preparation for increasingly school-based ITE, I was aware that the speed of these changes allowed little time for all parties concerned to adapt. I anticipated that one particular challenge for student teachers might be to negotiate potentially different expectations and practices for teaching reading, in different schools and between higher education and schools, with reduced input from the university. I later came to conceptualise these tensions as movements through different 'activity systems'; the theoretical background to this is explored below. This study was designed to provide a greater understanding of the experiences of student teachers as they moved between these different contexts for learning and the impact of both school and university-based ITE on this process.

1.4 Conceptual and analytical framework

The process of becoming an effective teacher of early reading is a complex one with multiple factors at work. These include individual understanding, motivation and beliefs about pupils and teachers, the influence of the ITE provider through the programme, the influence of different school-based experiences as students and NQTs, and the

overarching influence of government policy and expectations for the teaching of early reading. Student teachers need to learn about teaching strategies, the curriculum and practice for teaching early reading, but this process is one which can both influence and be influenced by students' identities and beliefs (Lortie 1975; Grossman 1990; Brown 2001; Hung and Chen 2002; Loughran 2006; Bannink and Van Dam 2007; Feiman-Nemser 2008; Korthagen and Wubbels 2008a; Lerman 2012). There is some agreement that teacher knowledge takes different forms which include knowledge for teaching, knowledge of teaching and knowledge of learners (Shulman 1986, 1987; Feiman-Nemser 2001; Phelps 2009). However, there is also disagreement that these elements can, or should, be segregated or objectified as fixed or individually held (Sfard 1998; Ellis 2007a, b; Engeström and Sannino 2010).The teacher knowledge needed to become a teacher of early reading is a combination of concepts, routines, responses, actions and reflections gained and changed in a complex and often spontaneous interplay between individual and circumstance (Feiman-Nemser 2008; Kessels and Korthagen 2008).

The design of this study was, therefore, based on the principle that the process of becoming a teacher was most effectively viewed holistically as a sociocultural process which takes place through interaction with others in schools and usually a university. According to Vygotsky (1978), learning draws on shared signs and symbols, including language, to mediate changing understanding. Eventually, the psychological processes of the individual are transformed as they internalise cultural forms of behaviour and language (Vygotsky 1978; Daniels 2001, 2008). Consequently, becoming a teacher in any discipline results in a change to student teacher thought and action which is shaped by, and shapes, the cultural environment in which they are situated. Edwards (2010: 65) describes this process as 'encoding' the knowledge and understanding underpinning teaching practices and then 'decoding' this knowledge to apply in different contexts and solve problems. This encoding of knowledge, understanding and practice for teaching is flexible and collectively established within school communities through relationships and cultural history (Ellis 2007b).

The concept of 'communities of practice' (Lave and Wenger 1991; Wenger 1998) was initially considered as a way of theorising the work-based learning of student teachers. Lave and Wenger (1991: 57) highlighted 'newcomers' learning through stages of participation with experienced 'old-timers' and their enculturation into accepted practices through the 'constant interaction' of understanding and experience (Lave and

Wenger 1991: 52). However, this model alone did not offer sufficient explanation of how 'newcomers', the student teachers, coped with movements between the communities of schools and university (Amin and Roberts 2008) or the influence of potentially contrasting expectations, as experienced on school placements (Lea 2005). Instead, cultural-historical activity theory, referred to here as activity theory, proposed by Engeström (1987, 2001, 2008, 2011), offered a unique conceptual and analytical framework to examine learning through participation in different systems from a sociocultural and historical perspective and so was used to shape the methods and analysis of the study.

1.5 Activity theory

Activity theory concepts were adopted to provide a pertinent conceptual and analytical framework to examine the different activity systems at work in an ITE partnership and the experiences of student teachers working within and between its boundaries. Building on Vygotsky's concept of mediation, activity theory stems from the work of Leontiev (1977) who proposed that all human consciousness was shaped by socially situated activity towards a goal, and viewed human activity as part of a larger system of rules and motives. Activity theory elaborated that a workplace or learning environment in which the different elements (division of labour, community, rules and mediating artefacts) interact towards a common goal is an 'activity system' (Daniels 2004; Arnseth 2008; Engeström 2008, 2011). Central to this proposition is that the features of each activity system provide a 'conceptual map' of the ways in which cognition is distributed within the system (Cole and Engeström 1993). This, therefore, offered a unique way of understanding the culturally mediated learning of student teachers. Cole and Engeström (1993) highlighted several key tenets of activity theory which make it applicable to the field of teacher education:

- Cognition occurs through interaction and language and is conceptualised in the abstract as well as through action.
- The tools and goals for any activity affect the way that cognition is distributed.
- Cultural schemas might be used to organise 'knowing'.
- Cognition is distributed over time and can move vertically and horizontally between understanding of individual perspectives and history.
- There will inevitably be tensions and contradictions in this process.

Third-generation activity theory (Engeström 2001) was particularly important to the framework of this study as it introduced the possibility of multiple activity systems working together. It was intended to be used as an interventionist methodology to reveal and reconfigure the different perspectives visible in multi-agency working, where communities held different historical ways of organising and communicating their work. Engeström (2001: 137) argued that the boundaries where different systems collide or intersect offered the opportunity for 'expansive learning', including the possible creation of shared new language and organisation. In this study, activity theory was not used to create a method which stimulated 'expansive learning' but instead to provide a relatively new and original perspective for research in ITE and early reading through the concepts of activity system elements and disturbances and contradictions within and between them (Engeström 1987, 2001, 2008; Johannsdottir 2010; Nummijoki and Engeström 2010). While some of the difficulties and challenges of adapting to a new school 'culture' are well documented in research with NQTs (Findlay 2006; Newman 2010; Haggarty et al. 2011; Haggarty and Postlethwaite 2012), there has been little attention devoted to the potential influence of activity systems in research with student teachers on specific elements of ITE and induction such as early reading. Therefore, activity theory offered a way of exploring student teacher learning in their ITE programme and NQT role and the expectations and organisation for the teaching of early reading in different schools. As Edwards (2000: 197) suggested, sociocultural research and activity theory in education have the potential to investigate the interplay between complex elements within four key themes: culture and mind; knowledge and action; agency, interpretation and response; and expansive learning and institutional change. Whilst this research focused on the 'micro' level of individual student teacher development, it was also essential to investigate influences at the 'meso' level of school and university and the 'macro' level of external forces in education (Guldberg 2010: 169). The specific ways in which activity theory was used to shape the methodology of this study are explained in detail in Chapter 3.

1.6 Research design and participants

The central argument underpinning the design of this study is that students' and NQTs' knowledge, understanding and practice for teaching reading is shaped by the activity systems encountered during ITE and induction. This is reflected in the following research questions:

How do student teachers develop knowledge, understanding and practice for teaching early reading during a PGCE course and through the transition into the NQT year?

What is the nature and influence of the multiple activity systems involved in ITE and induction on the process of becoming a teacher of early reading?

In order to provide a contemporaneous view of student teacher knowledge, understanding and practice as it evolved, a longitudinal, collective case study (Stake 2008) of seven student teachers was designed to investigate their journey through a PGCE course to the end of their first term as NQTs. The collective case study design allowed for replication of methods, comparison of individual perspectives and cross-case analysis over time. This provided a critical level of detail to analyse the complex factors at work between individuals and their contexts for learning, as well as a chance to explore 'fuzzy generalizations' (Bassey 1999: 12) which might be applicable to student teachers more generally. I therefore became an 'insider researcher' (a role explored further in Chapter 3) at the university where I was employed in the East Midlands region of England. Seven student teachers, enrolled on the lower primary (3–7) route for their PGCE, were followed through the course to their first term of teaching. Data collection took place from their entry to the course in September 2013 to the end of their first term as NQTs in December 2014. The study focused on identifying changes to their knowledge, understanding and practice, and the multiple influential factors on this process, as reported by the students and mentors and observed in schools.

The research design was centred on the perspective that knowledge, understanding and practice for teaching reading are inextricably linked. A largely interpretive approach was therefore employed in order that the student teachers might explain their thoughts and intentions, teaching decisions and actions in the classroom in their own words. One key purpose of interpretive studies is to discover how participants cope with particular phenomena, their initial perspectives and how these change over time (O'Donoghue 2007: 32). This approach also allowed for multiple views of the experiences of student teachers that varied according to their individual perceptions of language and action (Geertz 1973; Martin 1993; O'Donoghue 2007). This study combined the student teachers' and mentors' perspectives from semi-structured interviews with observations of the student teachers' practice and 'thick description' (Geertz 1973: 6) of the multiple activity systems which they moved between. The methods and analytical tools were

informed by activity theory (Engeström 1987, 2001, 2008, 2011) as this provided an effective way to identify and compare specific influences of the roles, expectations and organisation for teaching reading in each school and university context. As well as using qualitative, thematic analysis based on a conceptual framework derived from activity theory, each classroom observation was analysed for characteristics of effective early literacy teaching using a schedule developed by Louden et al. (2005). This offered a way of comparing changes to practice over time and considering the links between differences in practice and the activity system where it took place.

1.7 Originality

The research offers an original contribution to knowledge in the field through the unique combination of focus on ITE and induction for early reading with concepts, methods and analysis derived from activity theory. The particular time period during which the research was conducted also provides new insight into the experience of student teachers negotiating increasingly school-based, postgraduate ITE in the unusually prescriptive and high-stakes climate surrounding early reading. Although researchers have studied student experiences of becoming a teacher in the past, sometimes with a focus on their induction year (Bubb and Earley 2006; Cook 2009; Piggot-Irvine et al. 2009; Newman 2010; Haggarty et al. 2011; Haggarty and Postlethwaite 2012), and sometimes with a focus on experiences within ITE (Twiselton 2000, 2004, 2006; Rowland et al. 2009; Ambrosetti 2010; Mutton et al. 2010; Rajuan et al. 2010; Anspal et al. 2012), there is a noticeable gap in research about how students manage the transition between different learning environments during their initial course and into their NQT year. Research which looks at ITE and induction experiences has also focused on more general teaching and learning concerns and not the specific issue of learning to teach early reading (Brown 2001; Findlay 2006; Hobson 2009; Cuenca 2011; Braun 2012). The most recent information available on student teachers' and NQTs' experiences of teaching early reading concentrated on their outcomes and reflections on their ITE once it had been completed (Ofsted 2012a, b) rather than the process of development during ITE and induction. This study offers an alternative, more in-depth and mostly qualitative perspective. Rather than focusing on outcomes, the longitudinal case study methodology provides much-needed evidence which might enable ITE partnerships to better understand the challenges facing students and NQTs and underlying reasons for them.

The use of activity theory (Engeström 1987, 2001, 2011) as an underpinning conceptual and analytical framework for the research design builds on previous research in a new way by conceptualising that each school and ITE provider is a distinct activity system which influences student teachers' learning in different ways. Researchers have previously applied activity theory as a way of analysing interagency working and used it with participants from different activity systems in order to find new ways of working together (Warmington et al. 2004; Yamgata-Lynch and Smaldino 2007; Gallagher and Carlisle 2010). However, schools have seldom been presented as distinct activity systems unless there has been an obvious conflict of beliefs such as in Protestant and Catholic schools in Northern Ireland (Gallagher and Carlisle 2010). Jahreie and Ottesen (2010) proposed that student teachers' learning followed a trajectory shaped by different contexts, but used activity theory to examine student teachers' interactions in different ITE scenarios rather than to analyse the systems at work. Studies which have particularly influenced the design of this research have investigated differences between secondary school departments as activity systems (Douglas and Ellis 2011; Douglas 2012a), and differences between university and school perspectives on ITE using an activity theory approach (Douglas 2011a, 2012b; Hutchinson 2011). With a focus on primary school literacy teaching, Twiselton (2004) also used activity theory to explain the influence of student teachers' perceived object of activity, or their role and purpose as teachers, on their knowledge, understanding and practice.

This study is original having combined key ideas from these previous uses of activity theory to focus on student teachers of early reading. Hitherto, activity theory has seldom been used to chart the journey of student teachers or NQTs through different learning contexts. In this project, activity system elements were used to examine the influence of the rules, tools and interaction in each location on the student teachers' learning. The use of methods created to study the activity systems involved provided an original way to consider the impact of these on students at specific points in their ITE and cumulatively as they became NQTs. Findings from the study make new claims about a continuum of teacher development for teaching early reading, the impact of specific aspects of each activity system on student teacher learning about early reading, and inherent contradictions in ITE and induction. These offer implications for the preparation of teachers to teach early reading and suggest ways in which activity theory

can provide an important framework with which to examine teacher education more widely.

1.8 Summary

This chapter outlined the researcher's position as an 'insider researcher', motivated by her own experiences of teaching early reading and as a tutor in ITE, to better understand how student teachers can become confident and competent teachers of early reading. The policy context for teaching reading included a focus on systematic synthetic phonics and rapid changes to a new model of predominantly school-based postgraduate ITE. A sociocultural view of learning to teach informed the research and led to a primarily interpretive approach using concepts, methods and analysis derived from activity theory. A longitudinal collective case study design was adopted to examine the impact of these unique circumstances on seven lower primary (3–7 years) PGCE students' experiences and to provide in-depth information about changes to their knowledge, understanding and practice whilst becoming teachers of early reading. This study makes an original contribution to knowledge by offering new information about the experiences of students and the impact of different activity systems within ITE and induction on learning to teach early reading. The following chapter reviews the research literature which shaped the study. It focuses on four main themes: effective teachers, including effective teaching for early literacy and reading; changes to policy and pedagogy surrounding learning to read; initial teacher education and induction; and the use of activity theory in ITE research.

Chapter 2 Literature review

2.1 Introduction

The review of the literature underpinning this study analyses four main areas which relate directly to the research focus. Firstly, previous research on the nature and identification of effective teaching and teachers in general is critically discussed including models of 'teacher knowledge'. The section then focuses on what is already documented about effective teaching of early literacy, reading and phonics. The second section compares competing methods for teaching early reading and their relationship to current policy and expectations for teachers in the first years of school. Next, the review considers the process of becoming a teacher. This includes the internal and external influences on individuals' experiences of ITE and induction, and possible issues with the transfer of knowledge, understanding and practice between ITE and 'real life' as a classroom teacher. Finally, the use of activity theory to provide a conceptual and analytical framework for research in ITE and induction is examined and justified and two research questions emerging from the literature are identified.

The review of the literature therefore establishes what effective teachers of early reading might be expected to know and be able to do, and identifies key potential influences on student teacher development for teaching reading from social, historical and political perspectives. A possible general trajectory of student teacher learning is suggested which has not been fully investigated in relation to teaching reading. The review of the literature particularly highlights the need for new research which investigates the complex interaction between student and environment as they learn to teach early reading. It identifies the use of activity theory as a viable conceptual and analytical approach to research in this field of ITE.

2.2 Identifying effective teachers

In order to consider the possible links between student teachers' experiences during ITE and their development as teachers of early reading, it is necessary to synthesise what is known about the key features of effective teachers and the effective teaching of early literacy including reading. The importance of teacher quality in any subject, and especially in the early years of schooling, for the short- and long-term outcomes of

pupils is well established by previous research (Barber and Mourshed 2007; Margo et al. 2008; Chetty et al. 2010; Clifton and Muir 2010; Konstantopoulos 2011; Coe et al. 2014). However, external measures of teacher quality, such as qualifications, degree classification, previous experience or career history, have been shown to offer little consistent indication of the quality of their practice or impact on pupils (Hay McBer 2000; Harris and Sass 2007; Darling-Hammond 2009; Hunt 2009; Rinaldo et al. 2009; Clifton and Muir 2010; Coe et al. 2014). Schools judged to be in 'high-performing' jurisdictions, according to international comparative testing, recruit teachers from the top 10% of graduates whilst England recruits from the top 30% (Barber and Mourshed 2007; Clifton and Muir 2010). Nevertheless, a causal link between degree classification and teacher effectiveness is unclear. The OECD (2005) reviewed teacher recruitment, ITE and retention in 25 countries and concluded that after teachers reached a certain 'threshold' level of English, mathematics and science, further qualifications made no difference to teacher effectiveness and pupil outcomes. In previous studies, including large-scale reviews of research evidence in the UK and USA, there were no clear correlations between classifications such as teacher age or experience and likely success in terms of impact on pupils' learning (Hay McBer 2000; Harris and Sass 2007; Darling-Hammond 2009; Hunt 2009; Rinaldo et al. 2009; Coe et al. 2014). However, to add to the uncertainty, measures of teacher effectiveness, often based on comparisons of pupil outcomes through international and national testing, are themselves contested as unreliable (Wyse 2003; Tymms 2004; Hilton 2006). As becoming an effective teacher of early reading is not easily predicted from prior qualifications and experiences, other areas to be considered include personal characteristics, teacher knowledge and observable behaviours.

2.2.1 Personal characteristics

The personal qualities, dispositions and attitudes of teachers at all points in their career are generally agreed to have an impact on pupil learning (Hay McBer 2000; Day et al. 2006; Day 2008; Duckworth et al. 2009; Ripski et al. 2011; Gu and Day 2013). Studies of primary and secondary teachers have used a combination of interviews, observations and questionnaires to ascertain what qualities, dispositions or attitudes teachers and student teachers draw on in their professional lives (Hay McBer 2000; Day 2006, 2008; Tait 2008; Duckworth et al. 2009; Rinaldo et al. 2009; Gu and Day 2013; Johnson and Down 2013). These found that the personal quality of 'commitment' helped to retain

teachers in the profession and had an impact on their effectiveness. Teachers who were committed were more likely to maintain up-to-date knowledge of practice and adapt and reflect to be responsive to the needs of their pupils (Hay McBer 2000; Day et al. 2006; Day 2008; Hunt 2009). Continuing to maintain a high standard of professional commitment in the face of difficult school circumstances, external pressure and work–life tensions or 'resilience' was also an important personal quality in teachers whose pupils did well (Day et al. 2006; Pimentel 2007; Day 2008; Hunt 2009; Gu and Day 2013). The levels of reported commitment and resilience were found to have a statistically significant relationship to pupil progress in a study of 300 English primary and secondary teachers over four years (Day et al. 2006; Day 2008). Pupils of teachers with high levels of commitment and resilience were also more likely to attain results at or above the expected level in national tests in English and mathematics at the ages of 7, 11 and 14 (Day et al. 2006; Day 2008).

Further evidence of the importance of resilience and commitment, which are also referred to as 'grit' (Pimentel 2007; Duckworth et al. 2009; Johnson and Down 2013), comes from a study of 390 teachers enrolled in the two-year 'Teach for America' (TFA) programme where graduates in a variety of subjects were sent to teach in deprived urban schools in a range of age groups (Duckworth et al. 2009). In this study, questionnaires were used to determine teachers' psychological dispositions and these findings were compared with the effectiveness of their teaching, as recorded in the TFA rankings, based on pupil gains. Duckworth et al. (2009) found that 'grit' and 'life satisfaction', which have strong similarities to categories of commitment and resilience (Day et al. 2006; Day 2008), were statistically significant predictors of teacher performance, although these qualities did diminish after a year of teaching in a challenging environment. However, it is important to note the recent debate about the use and misuse of grit, commitment or resilience in education research. Johnson and Down (2013) argued that the focus on resilience, as a testable aspect of new teachers' psychology, was culturally constructed and misleading. They viewed research into resilience as an attempt to shift responsibility for teacher well-being from social organisations onto the individuals themselves. They also suggested that observed behaviour which might have previously been categorised as resilient, such as seeking help from other staff members, could in some circumstances be negative and lead to a decline in new teachers' independence and self-esteem. Leading researchers in this field

in the UK (Gu and Day 2013; Day and Gu 2014) pointed out that resilience is not a single, personal characteristic but a fluctuating part of professional life which is influenced by school leadership, relationships with colleagues and connections with pupils at different points in a teacher's career. The available research suggests that there is a link between teacher commitment and resilience and pupil progress, whether as a result of innate character traits or as a function of the sociocultural context in which they work. The widespread agreement about the presence of these shared characteristics in effective teachers indicates that these elements should be considered when investigating how students become teachers of early reading and, in particular, how these dispositions are affected by their learning experiences.

The ability to create respect and rapport with both pupils and other colleagues was found to be another important quality of effective teachers (Pressley et al. 1996, 2001, 2006; Wharton-McDonald 1997; Wharton-McDonald et al. 1998; Hay McBer 2000; Louden et al. 2005; Coe et al. 2014). Teachers who created respect and rapport combined intangible qualities, such as warmth, with more easily observable behaviours, such as teamwork, being fair and consistent, and inspiring and motivating children. Other attributes noted in the practice of effective teachers included acting on initiative (Hay McBer 2000) and reflecting on their teaching (Korthagen and Wubbels 2008b). The notion of the importance of reflective practice was more noticeable in reviews of the literature (Leu 2005; Hunt 2009) than in recent classroom research. However, some of the observed classroom behaviours of effective teachers relied on the use of both reflection 'in action' and 'on action' as defined by Schön (1983). For example, in order to adapt and change practice to meet the needs of pupils, effective teachers of early literacy were responsive and used reflection and evaluation to guide their teaching decisions (Wray et al. 2000; Louden et al. 2005; Topping and Ferguson 2005).

Ripski et al. (2011) explored the nature of teacher qualities, dispositions and attitudes further by using psychological and psychometric tests with 67 pre-service teachers at different points during their five-year teaching course in the USA. They found that the majority of student teachers involved in the study were 'less neurotic, more extroverted, more open, more agreeable and more conscientious' than 'normative' data (Ripski et al. 2011: 89) although, as this study was based on pre-service teachers, it was not clear whether their dispositions enabled them to be effective or whether they simply indicated that certain personality types were more likely to be attracted to the teaching profession.

Other literature suggests that, unsurprisingly, teacher beliefs about teaching and learning (Section 2.6.2) as well as their self-efficacy, as defined by Bandura (1977), have the potential to make a difference to the outcomes of their pupils (Dweck 2000; Bray-Clark and Bates 2003; Bates et al. 2011; Muijs and Reynolds 2011; Guo et al. 2012). However, it is misleading to view self-efficacy as a fixed personal characteristic to be measured in the pursuit of effective teaching. For example, two studies with student primary teachers in the USA found that their self-efficacy for teaching was positively influenced by content knowledge but also affected by school experiences and sometimes diminished by the real-life demands of class teaching (Newton et al. 2012; Leader-Janssen and Rankin-Erickson 2013).

The hidden attributes of commitment, resilience, reflection, warmth and self-efficacy can be difficult to measure and often rely on self-report from teachers. Although qualities, dispositions and attitudes seem to play an important part in the teacher's role and relationships with their class, the reason that they are significant may be the way in which they shape the teacher's actions and behaviour in the classroom (Thornton 2006). The literature suggests that they can be developed or diminished by the individual's experience of working life and teacher education (Schepens at al. 2009; Newton et al. 2012; Gu and Day 2013; Leader-Janssen and Rankin-Erickson 2013; Day and Gu 2014) and are part of the complex process that shapes effective teaching in any discipline. Another key influence on the development of teachers of early reading is the debated concept of teacher knowledge.

2.2.2 Teacher knowledge and understanding

Research into teacher knowledge became prominent in the 1980s with the recognition of the importance of the teacher's role in education and growth in cognitive psychology (Calderhead 1996). Shulman (1986, 1987) proposed that teacher knowledge included subject knowledge, curriculum knowledge, pedagogical content knowledge (PCK) and knowledge of learners, educational contexts and educational ends (Shulman 1987: 8). PCK, in particular, provided a way of conceptualising the unique combination of content and pedagogy which teachers develop through practice. Later research focused on PCK and developed linked concepts such as 'craft knowledge' and 'professional knowledge' which were used to explain how PCK informed teaching decisions in the classroom (Zeichner et al. 1987; Grossman 1990; Eraut 2000; Hagger and McIntyre

2006). Both empirical research and syntheses of the literature identify some form of combined pedagogical and subject knowledge as having an impact on teacher effectiveness in general (Schwab 1973; OECD 2005; Lunenberg and Korthagen 2009; Fielding-Barnsley 2010; Coe et al. 2014) but exactly what this constitutes and how it is used in teaching is still a matter of some debate.

Some authors have challenged the concepts of PCK and craft knowledge as resting on a view of cognition which considers knowledge to be individually constructed and held. They emphasise a situated view of learning which acknowledges that cognition is distributed (Lave and Wenger 1991; Cole and Engeström 1993; Borko and Putnam 1996; Greeno et al. 1996; Banks et al. 1999; Putnam and Borko 2000; Ellis 2007a, b). PCK and craft knowledge might suggest that teacher knowledge is personal and tacit (Zeichner et al. 1987; Calderhead and Shorrock 1997), subject to change and unlikely to be consistent with other teachers, even in the same workplace (Zeichner et al. 1987). However, from a situated perspective, teacher knowledge can be interactive and collective, and can both influence and be influenced by the teachers' surrounding environment (Zeichner and Gore 1989; Borko and Putnam 1996; Cochran-Smith and Lytle 1999; Ellis 2007a, b). Compartmentalising teacher knowledge may promote a false division between subject knowledge as a measurable entity and subject knowledge in use (Ellis 2007b) and could overlook the 'central role [of knowledge] in thinking, acting and learning' (Borko and Putnam 1996: 674).

An important example of the connected nature of subject knowledge, content knowledge and pedagogy for the effective teaching of early literacy and reading comes from research with student teachers learning to teach literacy to primary pupils (Twiselton 2004, 2006). Twiselton found that some student teachers viewed knowledge of literacy as a collection of specific fixed and separate elements and that this had a detrimental effect on their teaching. She argued that more effective literacy teaching relied on the teacher understanding and making connections between different knowledge and skills in literacy and between the learner and the context where learning took place. In addition, Phelps and Schilling (2004) argued that the content knowledge needed for teaching mathematics and science was much more clearly defined and understood than that of reading as there was an assumption that teachers who could read would be able to teach reading. In research, they found that teachers needed to understand reading in a different way for their own teaching purposes, such as by being

able to discriminate between subtle differences in phonemes. The research participants then had to be able to relate this knowledge to their teaching, for example when assessing the choices a pupil might make in decoding unknown words. However, Phelps and Schilling (2004) did not consider how such teacher knowledge was constructed.

Following research with secondary teachers, Banks et al. (1999) argued that teacher knowledge was more complex and intertwined than the categories of subject knowledge and PCK would suggest. They created a model of English teacher knowledge (Fig. 2.1) including school, subject and pedagogic knowledge categories. 'School' knowledge for teaching English differed from university concepts of subject knowledge as it encompassed curricular foci and broader organisational and cognitive processes needed by pupils. They proposed that the categories were dynamically linked:

> It is the interactive action of subject knowledge, school knowledge and pedagogical understanding and experiences that brings professional knowledge into being. (Banks et al. 1999: 95)

However, Ellis (2007a, b) highlighted that the personal elements of this model still appeared to emphasise individual knowledge growth whereas he, building on Gibson's concept of affordances and ecological psychology (Greeno 1994; Greeno et al. 1996), argued that teacher knowledge is developed and accessed collectively through a dynamic interaction of culture, agents and practice (Fig. 2.2), so much so that the system itself is in motion (as denoted by the outward-facing arrows in Fig. 2.2). Importantly for the study presented here, Ellis (2007a) went on to offer a model which reflected how one student teacher might develop according to these principles. In this, he made clear that each teacher followed a personal trajectory of participation and identity formation through the multiple settings which they experienced as student teachers.

School knowledge English

Related to the way subject knowledge is specific to schools e.g.:

- Knowledge about language (KAL)
- The school 'canon of literature' including children's teenage literature
- The writing 'repertoire' (argument/narrative/personal/ information writing)
- The reading process
- The status/nature of the English 'coursework folder'

Subject knowledge English

For example, might include some or all of the following including associated concepts, frameworks, theories, discourse:

- Study of English language
- Literary theory
- Literary criticism
- Focus on literary periods, e.g. Victorian literature, postcolonial literature
- Literary genres, e.g. tragedy, woman writers
- Media/cultural studies
- Creative writing
- Linguistics

Personal subject construct

- View of English, e.g. adult needs/personal growth/cultural heritage/critical literacy
- Personal biography including gender/'race'
- Experience of own education/past employment

Pedagogic knowledge

For example knowledge of:

- DARTS techniques for approaching texts
- Pupils as author, playwright, journalist, film director
- Drama techniques such as hot seating, freeze framing
- Knowledge of popular published 'English' material, e.g. NATE texts

Fig. 2.1: English teachers' professional knowledge (Banks et al. 1999: 96)

CULTURE
Cultural identity
English teaching in
secondary schools
Subject politics and policies
Cultural resources, e.g.
metaphor syntax narrative

AGENTS
Individual knowing
English autobiography
Conceptions of purpose
for teaching English and
'epistemological stance'
Conceptual tools for
teaching English

PRACTICE
Collective knowledge
A particular English
department setting
Subject paradigms and
pedagogies (goals)
Relationships between
English teachers

**SUBJECT
KNOWLEDGE
ENGLISH**

Fig. 2.2: Diagrammatic representation of the complex and dynamic social systems within which teachers' subject knowledge is accessed and developed (Ellis 2007b: 456)

The connectedness and collectiveness of teacher knowledge emphasised by Ellis (2007b) is important to student teacher development because some of the differences between expert and novice teachers have been attributed to the integrated links they have made across knowledge domains (Tochon and Munby 1993; Sternberg and Horvath 1995; Twiselton 2004, 2006). 'Expert' teachers have been seen to use teacher knowledge in a range of disciplines to problem-solve more effectively and in less time than their novice counterparts (Sternberg and Horvath 1995: 10). 'Experts' are able to draw on a 'diachronic' time epistemology where their knowledge is used to plan and organise class work whilst also enacting this 'synchronically' or flexibly in response to pupils' needs and circumstances in the moment (Tochon and Munby 1993: 207). If, as Ellis asserts, 'subject knowledge exists as much among participants in a field…as it does within them' (2007b: 458) and the culture of English teaching is formed by

practice as well as policy, there are questions to be answered about how student teachers of early reading participate in this process. The responsive and flexible pedagogy displayed by 'experts' seems likely to rest on teacher knowledge and teacher agency (Edwards et al. 2002). However, individual teacher agency, or the ability to act responsibly and in line with one's convictions in a given situation (Edwards 2015), is also shaped by context and may well be diminished by demands of policy and curriculum which are clearly visible in the teaching of early reading. For the purpose of this study, the multiple and collective elements of student teacher subject and pedagogical knowledge and the ways in which these shape their teaching decisions and behaviours are sometimes referred to as knowledge, understanding and practice. One aspect of this complex combination is content knowledge.

2.2.3 Content knowledge for teaching early reading

Many authors agree that teachers of early reading must understand basic reading skills and language elements, in particular phonic knowledge. Teachers must be able to use phonics correctly to decode unfamiliar words (Malatesha-Joshi et al. 2009; Phelps 2009; Fielding-Barnsley 2010; IRA 2010; Binks-Cantrell et al. 2012), but studies have attempted to delineate the more complex range of knowledge drawn upon when teaching early reading. Phelps and Schilling (2004) used a multiple-choice questionnaire with 1,542 elementary teachers. The participants were presented with classroom reading scenarios and had to identify language elements as well as pupils' reading strategies and misconceptions. The study found that there were specific areas of teaching content knowledge which teachers drew upon related to 'comprehension' and 'word analysis' when deciding how best to support pupils. Their 'comprehension' content knowledge encompassed morphology, vocabulary, comprehension strategies, questions, genre and fluency, whilst 'word analysis' included phonemic awareness, letter-sound relationships, word frequency and decoding. Phelps and Schilling (2004) also recognised that teachers were likely to use knowledge of children's literature and linguistic terminology to support their teaching, although these were not tested in their study. In England, a survey of 1,200 primary teachers indicated that their knowledge of children's literature included a very narrow and limited range of authors (Cremin et al. 2008) but it was unclear how this lack of knowledge affected the quality of their teaching.

Teacher knowledge of individuals, such as having an awareness of pupils' reading preferences, and knowledge of pupils in general, such as knowing common errors that children make when reading, has also been suggested to be important (Phelps and Schilling 2004). However, whilst this hypothesis seems reasonable, in research it proved difficult to separate these types of teacher knowledge from the other aspects of knowledge used in the classroom. In a later study of 50 teachers in the USA, using a scenario-based test of 'content knowledge for teaching reading', results indicated that the teachers used content and pedagogical knowledge for teaching reading to set tasks, to intervene spontaneously to support individual needs, to model reading processes and to assess children's progress (Phelps 2009). These knowledge-based actions correspond with the behaviours observed in the effective literacy teacher research (Riley 1996; Medwell et al. 1998; Wray et al. 2000; Fisher 2001; Topping and Ferguson 2005) where teachers understood both the processes of early reading and the needs of their pupils and so adapted teaching accordingly.

Teacher knowledge for early reading is difficult to investigate as it is often tacit and the relationship between teacher content knowledge and pupil outcomes in reading is unclear. In studies involving observation and interview, effective primary literacy teachers in the UK were unaware of the way in which they drew on knowledge about language to teach reading (Medwell et al. 1999; Fisher 2001; Topping and Ferguson 2005). In a large-scale study of over 800 first, second and third grade teachers in elementary schools in the USA (Carlisle et al. 2011), the impact on pupil outcomes in reading when taught by teachers with higher content knowledge of early reading was limited. Pupils in these teachers' classes showed an improvement in comprehension, but not word analysis, at the end of the first grade and no statistically significant improvements in reading at the end of the second or third grade. Evidence from a smaller-scale study in the USA (Leader-Janssen and Rankin-Erickson 2013) agreed that content knowledge of the components of early reading was not enough to ensure that student teachers became confident and competent when teaching early reading.

Some studies of knowledge for teaching early reading, therefore, highlight that content knowledge about reading is necessary but not sufficient to support pupil progress. This suggestion gains further credibility when compared to research in other subjects where

high levels of subject-specific content knowledge have been found to inform but not guarantee effective teaching. For example, elementary and middle school mathematics teachers with higher levels of content knowledge, identified through a multiple-choice assessment, were more likely to demonstrate the most effective teaching (Hill et al. 2012). However, their teaching methods were strongly influenced by the pedagogy of the schools in which they were teaching and these environments had both positive and negative impacts on their practice. Research with middle school science teachers highlighted the important distinction between high levels of content knowledge and effective use of content knowledge for teaching. The teachers who were able to identify their pupils' misconceptions in science tests had much larger gains for their pupils than those teachers who knew the correct answers (Sadler et al. 2013). The available research suggests that the relevance of content knowledge for teaching reading is reliant on how it is applied in teaching situations and appears to support a situated and interactive view of teacher knowledge (Banks et al. 1999; Ellis 2007a, b). This highlights the importance of context, environment and practice in future research with student teachers.

2.3 Effective teaching behaviours for early literacy and reading

There is some agreement that observation of teacher behaviours is one way to understand teacher effectiveness (Coe et al. 2014; Muijs et al. 2014) but there is a noticeable lack of recent research into teacher behaviours when teaching early reading and literacy. This may be because of the consensus about general features of teacher effectiveness from reviews of existing research (James and Pollard 2011; Ko et al. 2013; Mincu 2013; Coe et al. 2014; Muijs et al. 2014), or a move towards targeted education research which is more large scale and focused on policy and organisation in teacher education (Cochran-Smith and Zeichner 2005; Risko et al. 2008; Grossman et al. 2009). It is also possible that the prescriptive policy and curriculum for early reading has created a culture in which research in this specific area is stifled (Ellis and Moss 2014). Nonetheless, previous studies from the UK, USA and Australia, with a focus on primary English teaching, provide detail of the knowledge, understanding, practices and attitudes of effective teachers of literacy and early reading including analysis of teacher behaviour. In these studies, 'effective teachers' were selected using reports from senior managers and external observers such as Ofsted and local authority advisory teachers, as well as test results and value-added scores of their pupils using more than one

assessment (Medwell et al. 1998, 1999; Wray et al. 2000; Poulson and Avramidis 2003; Louden et al. 2005; Topping and Ferguson 2005; Pressley 2006). The research methods employed included observing teachers in the classroom, comparing their classroom practice with that of other colleagues and interviewing teachers about knowledge, understanding and practices in action. Throughout the research, common features were observed in the teaching behaviours of effective teachers of early literacy in general and early reading specifically. A wide range of studies (Pressley et al. 1996, 2001; Riley 1996; Wharton-McDonald 1997; Wharton-McDonald et al. 1998; Medwell et al. 1998, 1999; Wray et al. 2000; Fisher 2001; Bogner et al. 2002; Louden et al. 2005; Topping and Ferguson 2005; Pressley 2006; Flynn 2007; Mohan et al. 2008) found that effective teachers of early literacy and reading demonstrated the teaching behaviours summarised below:

- provided skills and strategies instruction
- set explicit skills teaching in context within a broad and rich language curriculum
- provided clear opportunities for children to practise through purposeful and motivating application of these skills (opportunity to learn)
- used varied, engaging resources and a learning environment which supported and promoted reading
- modelled tasks and processes including decoding and comprehension
- intervened and scaffolded children's learning using spontaneous opportunities to support and extend their knowledge, skills and understanding
- adapted the lesson structure, classroom organisation and the use of teaching strategies to suit the pupils' needs

The agreement demonstrated by this prior research presents a clear picture of teaching behaviours which student teachers might be expected to develop during the process of ITE and induction. These are examined in more detail in the next sections.

2.3.1 Opportunities to learn

For over a decade, Michael Pressley and colleagues in the USA researched the teaching of literacy in the early years of school, comparing teachers in the same school contexts and those teaching in schools in very different social and cultural locations (Wharton-

McDonald 1997; Wharton-McDonald et al. 1998; Pressley et al. 2001, 2006; Mohan et al. 2008). Through observations in 30 elementary classrooms in five different locations in North America, Pressley and his co-researchers compared the practice of effective literacy teachers with their less effective colleagues (as nominated by school leaders). They found that the effective teachers provided a high density of stimulating and challenging instruction and activities compared with their colleagues (Pressley et al. 2001). This notion of effective teachers as individuals who create situations in which learners are highly on-task and engaged was partly described in the literature by the term 'opportunity to learn' (Brophy and Good 1986; Wray et al. 2000; Muijs and Reynolds 2003; Blair et al. 2007; Hunt 2009; Rupley et al. 2009) and is also mentioned in wider research about effective teaching more generally (Coe et al. 2014). However, in the research with teachers of early literacy, 'opportunity to learn' was not just about motivating pupils. Effective teachers of early literacy, in a range of studies, ensured that pupils acquired specific skills through their choices of instruction and organisation. They were then able to follow this up with activities designed to encourage practice and application (Pressley et al. 1996; Wharton-McDonald 1997; Wharton-McDonald et al. 1998; Wray et al. 2000; Fisher 2001; Bogner et al. 2002; Louden et al. 2005; Topping and Ferguson 2005). This often meant making links between aspects of literacy and contextualising the learning of reading or writing in a wider purpose rather than focusing on skills or strategies in isolation (Medwell et al. 1998, 1999; Wray et al. 2000; Flynn 2007).

2.3.2 Pace and balance

The research reviewed showed a consensus that effective teachers of literacy demonstrated 'masterly' management of behaviour and adult support, and well-paced and balanced tasks, as well as capitalising on spontaneous learning opportunities. They 'scaffolded' children's ideas using specific feedback and encouraged self-regulation from the pupils (Pressley et al. 2001). Whilst pace was mentioned in many of the studies of effective teaching generally (Hay McBer 2000; Darling-Hammond 2009), the most effective teachers of literacy maintained a brisk pace, gave time expectations and drew children's attention back to the task (Wray et al. 1999), but they also allowed time for deeper discussion around the lesson focus without moving on too quickly or trying to achieve too many tasks in one lesson (Flynn 2007). This finding was supported by more recent Ofsted observations of English lessons in 133 primary schools, 128

secondary schools and four special schools between 2008 and 2011 in the UK. In just under one third of the observed lessons, Ofsted judged that teachers focused on a brisk pace and variety of activities to the detriment of learning (Ofsted 2012c). They were reported to allow pupils insufficient time to really engage with tasks. In contrast, in the classrooms of the most effective teachers of literacy in one Australian study (as identified by a range of value-added outcome measures of pupil progress in their classes), the children were engaged and attentive for up to four times as much of their lessons as pupils in the classes of less effective teachers (Louden et al. 2005). This was achieved through the choice of activities and balance of approaches which the teachers employed.

Effective teachers of literacy, in the research reviewed, were able to select appropriately challenging content, and balance instruction and opportunities for the application of reading and literacy skills in their lessons. One noticeable feature of some effective teachers' lessons was that they used a wide range of strategies to ensure that children were able to recognise words, including morphemic and semantic clues as well as phonemic strategies. Children were also taught a range of effective comprehension strategies which built up progressively to include higher-order comprehension of texts (Pressley et al. 2001). Balance was therefore achieved by employing a variety of teaching approaches and structuring lessons so that links were made across different aspects of literacy (Wray et al. 1999; Pressley et al. 2001; Louden et al. 2005; Topping and Ferguson 2005), as discussed later in Section 2.3.4. As well as offering specific models for reading techniques, and planning and selecting teaching opportunities which focused on specific skills for reading, the teachers used time to scaffold children's learning through interaction. This might suggest very deliberate, planned and focused interventions to support pupils' early literacy and reading skills. However, evidence from observations of effective teachers of early literacy in small-scale studies (Fisher 2001; Flynn 2007) indicated that teachers were more likely to be responsive and spontaneous in their learning interactions with pupils in the synchronic manner explained by Tochon and Munby (1993).

2.3.3 Responsiveness

Spontaneous scaffolding of literacy processes was observed by Fisher (2001) in a small-scale ethnographic study of early years classrooms. The teachers involved planned the

literacy context and focus for the day but then organised specific elements of this in response to their pupils. For example, they spontaneously introduced a label with the word 'leader' on it for pupils as they lined up and then incorporated it in word recognition work later in the day. Through focused discussion about their teaching decisions, Fisher was able to ascertain that the teachers did not have a singular focus on one cognitive aspect of early literacy, such as phonemic awareness, in their minds. Rather, they juggled their knowledge of individual pupils' reading strengths and difficulties alongside an awareness of their developing social needs in the school context and used these elements to adjust and adapt their interactions.

Teacher responsiveness to pupils' ideas and contributions in literacy lessons was also found to be important in a study of 299 primary teachers (Wray et al. 2000) as the most effective teachers frequently checked on and shared children's progress with the class. This focus on reacting and intervening in the learning in a timely fashion was also in evidence in a much smaller-scale study of five effective teachers of literacy in the first two years of primary schooling in Scotland (Topping and Ferguson 2005) and in work with 11 early years literacy teachers in Australia (Louden et al. 2005). During these interactions, the teachers spent most time observing the children and then 'building' (Topping and Ferguson 2005: 132). 'Building' referred to a behaviour or interaction where teachers accepted or used pupils' ideas spontaneously as part of the lesson. This very specific behaviour was also noted in the observations carried out by Louden et al. (2005).

Louden et al. (2005) identified 11 teachers from 200 classes across Australia to represent effective, more effective and less effective teachers of early literacy following an analysis of pupil literacy results over the course of a year. Using computer analysis of videoed lessons, they developed the 'Classroom Literacy Observation Schedule' (CLOS) to compare the amount of time devoted to different teacher behaviours by the different 'levels' of teachers; this could also provide a tool to compare the practice of student teachers. Their findings supported those of Wray et al. (1999), Fisher (2001) and Topping and Ferguson (2005) as the effective teachers spent up to four times as much teaching time on behaviours categorised as responsiveness, explicitness, assessment, feedback and scaffolding than their less effective peers. Although it was difficult to generalise exactly which features of practice within these categories made

the teachers most effective, Flynn (2007) suggested that the quality of interaction in terms of the depth, pitch and clarity of exposition and dialogue with pupils which she observed in literacy lessons set her participants apart. The importance of focused dialogue about how to approach reading and writing tasks was evidenced in other observed practice by pupils' clear understanding of the purpose of their work and warmth, rapport and respect between pupils and teachers (Louden et al. 2005).

2.3.4   Making links and choosing resources

As observed in their classroom management and organisation, the effective teachers of literacy in previous empirical studies were particularly good at making links between all the areas of literacy and finding spontaneous opportunities for pupils to apply reading or writing skills in context (Wray et al. 1999; Pressley et al. 2001; Louden et al. 2005; Flynn 2007). This finding was also supported by a review of earlier studies of effective practice in the teaching of reading which asserted that:

> Providing students with opportunities to apply their reading skills and strategies in meaningful content areas appears to be extremely important.
> (Blair et al. 2007: 436)

Blair also pointed out that, to achieve this, the teachers studied needed to identify reading materials which were at the correct level of difficulty for the pupils whilst being interesting to read. Effective teachers of literacy chose resources for specific purposes and they made good use of the learning environment, display, large texts, reading corners and props to support children's independent progress in literacy (Riley 1996; Wray et al. 2000; Pressley et al. 2001, 2006; Louden et al. 2005). In some previous studies, the most effective teachers taught letter sounds for reading and writing in the context of a shared text, whilst the comparison sample of teachers were more likely to work on sounds through worksheet type activities. The effective teachers favoured a whole language approach and emphasised reading and writing for a purpose (Wray et al. 2000; Poulson et al. 2001). However, in later research in Australia, Louden et al. (2005) found only a weak relationship between teaching activities and teacher effectiveness. This contrast may be because the practice of all teachers in the teaching of literacy and reading had become more standardised as a result of the influence of curriculum and policy.

2.3.5 Modelling, questioning and metalanguage

In shared reading sessions observed in previous research, modelling, questioning and metalanguage were found to be particularly important as pupils worked with each other and their teacher to discuss and interpret texts (Louden et al. 2005; Topping and Ferguson 2005). Effective teachers modelled specific approaches to reading and writing by demonstrating tasks and strategies (Medwell et al. 1998, 1999; Wray et al. 2000; Pressley et al. 2001; Louden et al. 2005; Topping and Ferguson 2005). They modelled reading with fluency and expression and, in a small-scale study in the USA, supported struggling readers by coaching them in reading aloud (Rasinski and Hoffman 2003). Rasinski et al. (2009) also advocated the structured use of questioning during shared reading as a means for developing children's reading comprehension skills. In observed lessons, the modelling used was not necessarily pre-planned but was used flexibly with questioning to prompt and probe until the pupils understood (Wray et al. 2000; Fisher 2001; Flynn 2007). One particular feature, which made modelling effective in these instances, was the use of metalanguage which involved teachers talking explicitly about how texts and language worked and giving higher-order explanations to their pupils (Louden et al. 2005). Whilst these studies offered common examples of behaviours of effective teachers of literacy and early reading, they did not explain how the participants became effective or how they were influenced by their contexts for studying to be and working as teachers.

2.4 Historical and psychological perspectives on teaching early reading

2.4.1 The great debate

Teacher knowledge, understanding and practice for teaching reading is influenced by educational policy, cultural expectations of practice and the way these have changed over time. This section outlines what is known about how children learn to read and the ways in which policy and practice for early reading have developed in the context of debate between academics and policy makers. From a sociocultural perspective, the experienced teachers who guide and mentor the teachers of the future, the university courses which they follow and the curriculum guidance which shapes practice in schools have been influenced by this history. There has been much research into effective teaching methods, predictors of early reading success in children and the cognitive processing involved in reading but the findings have not reached a consensus

about the best way to teach early reading (Huey 1915; Bond and Dykstra 1967; Chall 1967; Goodman 1967; Clay 1972; Clark 1976; Perfetti and Roth 1980; Smith 1988; Adams 1990; Goswami and Bryant 1990; Stanovich 1992; Riley 1996; Ehri 1998; Harrison 1999; NICHHD 2000; Johnston and Watson 2005; Pressley 2006; Rose 2006; Torgerson et al. 2006; Wyse and Styles 2007; Davis 2012). Two main arguments about the way in which children learn to read have emerged and re-emerged over the last 100 years. These can be summarised as an argument between a 'skills first' approach and a 'whole language' approach (Chall 1967; Clay 1972; Smith 1988; Adams 1990; Riley 1996; Pressley 2006; Rose 2006; Davis 2012). Advocates of a 'skills first' approach have, at different times, emphasised the role of decoding words using phoneme-grapheme correspondence or memorising and recognising key words on sight (Schonell 1945; Chall 1967; Clay 1972; Adams 1990; McGuinness 2004; Sadowski 2004; Rose 2006; DfE 2014). Conversely, 'whole language' approaches have focused on motivating children to read and working out words through context and comprehension (Goodman 1967; Bennett 1985; Moon 1985; Meek 1988; Smith 1988; Waterland 1988).

The 'skills first' argument for teaching reading was the dominant view of teaching reading for the first half of the twentieth century in England. During this period, the teaching of reading mostly relied on memorising key words and pictures rather than breaking them down using phonics (Schonell 1945; Adams 1990; Sadowski 2004). Although there were some attempts to introduce phonic approaches to reading, such as the *Initial Teaching Alphabet* in the 1960s, these generally made little impression on practice in English schools and were mostly seen as a way of introducing spelling by analysing patterns of letters in text (Schonell 1945; Goodacre 1967; Adams 1990; Sadowski 2004). In the late 1960s, Jean Chall (1967) conducted a landmark meta-analysis of reading research from 1912 to 1964 and became one of the first to argue for a more specific phonics-based approach to teaching early reading. She concluded that the explicit teaching of phonemes and graphemes at an early stage of school was what made the most difference to children's progress in both word recognition and reading comprehension in the longer term. Marie Clay's (1972, 1991) longitudinal studies of children's literacy development in New Zealand acknowledged that phonic knowledge played a part in children's reading development but suggested that this could be learned through analysing writing rather than through specific teaching sessions. She added that visual processing, orientation, letter and word recognition, and an understanding of

spacing were all an important part of the reading process. She found that a focus on gaining meaning from text without an awareness of these other aspects was not enough to support struggling readers. Like Chall, she concluded from her research that reading skill and phonological awareness (the ability to identify and manipulate sounds, rhymes and syllables) might at least work interactively.

In contrast, the 'whole language' argument emerged from research conducted in a similar time period by Goodman (1967) and Smith (1973, 1976, 1988) who used their own analysis of children's errors in reading to propose an entirely new model for the reading process. The 'miscues' that the children used when they read words incorrectly offered the researchers an opportunity to notice patterns in self-corrections and substitutions. From this, Goodman developed a psycholinguistic model of processing reading in which children used semantic and syntactic information as well as graphic clues to read. Smith (1976, 1988) built on Goodman's work by linking his ideas to schema theory and suggesting that reading was primarily based on prediction which stemmed from children's previous knowledge of how certain texts worked and the context which they were reading about. The view that learning to read was a social phenomenon drawn from experiences with text was also supported by research which focused on children who entered school able to read; the research mostly cited the importance of informal reading activities in the home (Clark 1976). In addition, the 'Bullock Report' (1975), on English teaching in 1,415 primary schools in the UK, recommended that children were taught to use as much contextual information as possible to support reading and that phonics should be introduced, after children were able to read, as a spelling strategy.

'Whole language' approaches continued to be advocated by some educators and academics in the 1980s. Meek (1982, 1988), Waterland (1988) and Bennett (1985) shared the belief that learning to read was a natural process, like learning to talk, which could be supported by adult involvement and interaction with children and texts without the need for isolated, skills-focused teaching. Criticism of the narrow language models offered by reading schemes encouraged teachers to use 'real books' as these included more varied and interesting language structures and stories (Meek, 1982, 1988; Bennett 1985; Moon 1985; Waterland 1988). However, the reality of pedagogy in the classroom was still variable, with only a small proportion of teachers using a 'whole language experience' because of their previous training in other methods (Moon 1985).

2.4.2 Perspectives from cognitive psychology

Beginning in the 1980s, cognitive psychologists proposed new models of information processing and learning based on tests of memory, word and letter identification, and comprehension in both skilled and early readers (Gough and Hillinger 1980; Ehri 1982; Rayner and Pollatsek 1989; Seidenberg 1993). Current thinking suggests that skilled readers do not need to access the phoneme for each letter in order to recognise known words (Rayner and Pollatsek 1989; Rayner et al. 2001) but early readers might access unfamiliar words in a number of different ways. One perspective is the 'dual route model' which suggests that sometimes readers read a new word by working out the phonemes within the word and therefore connecting it with their spoken vocabulary, or they retrieve known words directly using lexical knowledge of the word (Rayner and Pollatsek 1989; Stanovich 1992; Rayner et al. 2001). Studies show that children's sensitivity to rhyme and awareness of grapheme phoneme correspondences helps them to access unfamiliar words (Adams 1990; Goswami and Bryant 1990; Stanovich 1992; Ehri 1998) but there is still uncertainty about how this works. Ehri (1982, 1998, 2005) argued that the lexicon, a virtual area of the brain which holds known words and their meanings, stores the pronunciation of words which the reader accesses from visual stimulus. In addition to these ideas, Goswami's work (Goswami and Bryant 1990; Goswami 1999, 2008) suggests that early readers might use analogy of words containing similar letter and sound patterns to generalise these patterns to new words.

General agreement about stages of reading development confirms that children use some phonic knowledge to progress in their reading, although it is not the only strategy employed by early readers. Children initially use visual recognition to gain meaning from words without the use of letter-sound knowledge, for instance recognising brand names or print in the environment (Frith 1980; Ehri 1999, 2005; Morris et al. 2003). This is known as the logo-graphic or pre-alphabetic stage, but this early stage of print matching does not use the skills which will later be needed for independent reading (Stanovich and Stanovich 1999). After this, children begin to use some knowledge of letters and sounds as triggers for word identification but combine these with visual cues such as the shape or length of a word (Rayner and Pollatsek 1989; Ehri 1999, 2005; Morris et al. 2003). Later, they use knowledge of grapheme-phoneme correspondence for blending new words (Rayner and Pollatsek 1989; Ehri 1999, 2005) but may not process each grapheme in sequence; instead, children look at beginnings and endings of

words and groups of letters depending on their experiences of instruction (Juel and Minden-Cupp 2000; Morris et al. 2003). They also recognise words on sight until a store of lexical representations and meanings of words is achieved and reading becomes automatic. Efficient phonological processing has been seen to increase fluency and comprehension in reading (Adams 1990; Perfetti 1999; Stanovich and Stanovich 1999; McGuinness 2004) although other factors such as vocabulary development also influence comprehension (Rayner et al. 2001; Perfetti 2007; Veerhoeven and Perfetti 2011). These varied studies show that early readers draw on a range of cognitive processes which can be supported through teaching practices. However, competing perspectives about learning to read have most influenced teachers through their impact on policy and the curriculum in schools and ITE.

2.5 Policy and curriculum change

2.5.1 Reading in the National Curriculum and the National Literacy Strategy

Since 1989 there have been frequent changes to policy, the curriculum and ITE for teaching early reading. These changes have a direct influence on the knowledge, understanding and practice of teachers and are linked to, but not always in agreement with, academic research. A primary National Curriculum was introduced in England in 1989 (CSFC 2009). Guidelines for teaching English in this first National Curriculum were based on the view that there was no one way to teach reading. The document emphasised reading for meaning and pleasure and reflected recommendations from the 'Cox Report', which stated:

> Teachers should recognise that reading is a complex but unitary process and not a set of discrete skills which can be taught separately in turn and, ultimately, bolted together. (Cox 1989: 21)

A multifaceted approach to the teaching of reading continued to be part of the curriculum in England from 1998 to 2006 as the *National Literacy Strategy* (NLS) curriculum guidance (DfES 2001: 4) recommended the 'searchlights model' for reading. This model encouraged teachers to support children to employ phonic, graphic, semantic, grammatical and contextual cues when reading and gave equal weight to each of these (DfES 2001). However, during the 1990s, a renewed interest in the importance of phonics in the early reading process emerged with a seminal review of earlier research (Adams 1990). Adams considered what had been established in previous research about predictors of early reading success and concluded that focused early

instruction in phoneme-grapheme correspondence was most beneficial for children's reading outcomes. Other academics argued for an analytic approach to phonics teaching, where children were encouraged to learn to read and spell through analogy and sensitivity to onset and rime in words (Goswami and Bryant 1990; Dombey 1998; Moustafa 1998; Goswami 1999). These ideas came to a head as concerns were raised about the limitations of the NLS and different practices within it (Beard 2000a, b; Wyse 2000, 2003). Critics of the NLS suggested that too much importance had been paid to Ofsted reports preceding the development of the strategy and that these had been influenced by political priorities and convictions at the time. There was concern that the pedagogical practices contained within the guidance did not relate well to the empirical evidence on which they were supposed to draw (Wyse 2003). In a specific critique of the way that phonics was treated in the NLS, Wyse (2000) argued that phonics teaching should be sensitive to the needs of individuals and part of a balanced approach to reading but focused on a differentiated programme in the first years of school. This foreshadowed the next significant change in curriculum guidance for teachers which emerged from the 'Rose Review' of best practice in the teaching of early reading (Rose 2006), a review commissioned by the Department for Education and Skills to inform changes to the NLS and identify effective practice in phonics teaching.

2.5.2 From Rose to the present day

Guidance and expectations for teaching reading in England using a synthetic phonics approach began with the publication of the *Independent Review of the Teaching of Early Reading* (Rose 2006). Rose (2006: 4) acknowledged that there were 'uncertainties in research findings' and yet concluded that teachers should use a systematic synthetic phonic approach to the teaching of reading. The review highlighted the 'simple view of reading', which identified the two main processes involved in reading as word recognition and language comprehension (Rose 2006: 38), in contrast to the previous 'searchlights' model (DfES 2001: 4), which included phonic knowledge as just one of several elements used in the reading process. Rose argued that the 'searchlights' model, advocated in the NLS, gave insufficient emphasis to the importance of phonic decoding strategies as a starting point for reading. This review sparked new debate about the teaching of early reading as opponents felt it over-emphasised the place of phonic strategies and prescribed one particular method of phonics teaching without supporting evidence (UKLA 2005; Wyse and Styles 2007; Dombey et al. 2010). Rose outlined key

recommendations for teaching early reading which still underpin policy and practice in England today. The main recommendations relating to teaching were:

- High-quality systematic synthetic phonics teaching should occur discretely from the age of five.
- Phonics teaching should be exciting and multisensory.
- The teaching of early reading should be set in a broad and rich language curriculum.
- The teaching of early reading should be supported by robust assessment and progression and literacy across the curriculum. (Rose 2006: 70)

The argument for systematic synthetic phonics from the 'Rose Review' and subsequent government publications was strongly influenced by a seven-year research study of a phonics intervention programme carried out in Clackmannanshire, Scotland (Johnston and Watson 2005). This study compared 300 children's attainment in spelling, word reading and comprehension after they had followed either a synthetic or analytic phonics programme and concluded that, at the end of primary education, the group who had received synthetic phonic teaching were three years and six months ahead of their chronological age in word reading. Critics of this study, and the importance attached to it, focused on the fact that improvements in these children's reading comprehension were much less marked; the children were only three and a half months ahead of their chronological age at the end of primary school. They also pointed out that these data relied on standardised testing of comprehension and word reading and were not necessarily an accurate representation of the children's ability or willingness to apply their reading skills (Dombey et al. 2010, Dombey 2014).

A comprehensive meta-analysis of other research studies, commissioned by the Department for Children, Schools and Families (Torgerson et al. 2006), was unable to find conclusive evidence in the available literature that synthetic phonics was more effective than analytic phonics teaching (Torgerson et al. 2006; Dombey 2014). However, the accuracy and relevance of this meta-analysis has been contested as several of the studies included focused on withdrawal and intervention programmes for struggling readers rather than synthetic phonics approaches for all children from the start of school (McGuinness 2004). Further evidence that discrete synthetic phonics

teaching might not improve reading outcomes came from the high-profile 'Reading First' and 'Early Reading First' programmes in the USA. After three years, the evaluation of these initiatives showed that implementation of professional development for teachers and new resources for synthetics phonics teaching had a limited impact on pupil reading outcomes overall and no statistically significant impact in over half the states involved (Russell et al. 2007; Moss et al. 2008).

Despite the gaps in knowledge, contradictions in research and the apparent failure to improve reading outcomes using systematic synthetic phonics in the USA (Russell et al. 2007; Moss et al. 2008), the Department for Education (DfE), from 2012, required that every primary school adopted a programme of systematic synthetic phonics and a reading scheme including phonetically decodable texts in all maintained schools in England. The DfE prescribed particular schemes as suitable for teaching phonics and introduced a decoding test or 'phonics screening' for all children at the end of Year 1 (DfE 2013b) which was used as an external measure of school effectiveness in the teaching of early reading skills. Criticism of this approach continued, in particular the impact of the introduction of the phonics screening which placed some emphasis on decoding non-words (Clark 2013, 2014; Dombey 2014).

More recent research, whether carried out from a pedagogical or psychological perspective, also disputed the one-size-fits-all approach to teaching reading. A small-scale study of eight pupils in Year 1 of an English primary school (Watts and Gardner 2013) used a sentence reading test, a high frequency word audit, a phoneme skills test and a miscue analysis to investigate the impact of teaching whole word recognition through an intensive five-week 'look and say' approach after the children had previously received only synthetic phonics instruction. All pupils demonstrated improvements in all the tests but for those previously deemed less successful in reading, the improvements were most marked, indicating that teaching synthetic phonics alone might be insufficient for some pupils. On a much larger scale, a review of over 100 scientific studies of brain activity in readers under different conditions, most carried out between 2005 and 2010 (Hruby and Goswami 2011), concluded that, although some common areas of the brain are active during reading, brain function in reading is unique and varied, and processes are interrelated. Therefore, stressing one aspect of processing over others 'may fail to address the needs of developing or struggling readers' (Hruby and Goswami 2011: 58). Hruby and Goswami argued that social science research into

effective pedagogy was equally important when attempting to understand how best to support early readers. Nonetheless, during the period of the research study presented here, a new National Curriculum for English schools came into being (DfE 2014) which enshrined the focus on systematic synthetic phonics in the curriculum for reading. In this climate of frequent curriculum change and conflicting messages from research and policy, student teachers may find it particularly challenging to develop the kinds of flexible pedagogy for teaching reading identified in the effective teacher research.

2.6 Learning to teach: student teacher development and ITE

2.6.1 Trajectory of student teacher development

Whilst features of effective teaching in early literacy and reading have been identified in previous research, little is known about the specific development of student teacher knowledge, understanding and practice or how this is influenced by experiences of ITE and induction. Loughran (2006: 5) suggested that becoming a teacher includes:

> Learning about the specific content being taught, learning about learning and learning about teaching.

Research across subject disciplines offers some tentative proposals about the trajectory that this might take. Initially, student teachers may focus on establishing their use of teacher talk and gaining confidence in classroom organisation. They may measure the success of their teaching by their pupils' enjoyment and behaviour rather than their learning (Kagan 1992; Singer-Gabella and Tiedemann 2008). As the student teachers' understanding develops, they may be able to focus less on the 'surface' elements of teaching and make more specific choices about both what happens in lessons and the way in which they interact with their pupils (Kagan 1992; Singer-Gabella and Tiedemann 2008; Anspal et al. 2012). Although there is little research which focuses specifically on the progress of students learning to teach primary literacy, one study of student teachers learning to teach mathematics suggested a progression of developing student understanding and behaviour which might be similar for those learning to teach early reading. In maths, student teachers made increasing use of subject-specific terminology and mathematical pedagogy as they progressed through their course (Singer-Gabella and Tiedemann 2008). The pre-service teachers also became more effective at identifying what they needed to change or improve in their teaching. As the participants in the study neared the end of their ITE, the student teachers required less

support and were able to use their knowledge of subject-specific content, language and pedagogy in more complex circumstances. Finally, they were able to make independent teaching decisions which combined their pedagogical content knowledge and awareness of individual learning needs. This was evident in their use of questioning and planning for specific pupils. It is possible that student teachers of early reading may follow a similar broad trajectory but this is likely to be shaped by a range of factors including their beliefs about teaching and learning, acquired through previous life experience and potentially during ITE (Zeichner and Gore 1989; Calderhead 1996; Cochran-Smyth and Lytle 1999; Florian and Pantić 2013).

2.6.2 Student teacher beliefs about learning

Across subject disciplines, teacher beliefs about practice and pupils have been seen to influence pupil outcomes (Section 2.2.1). Student teacher beliefs about the learning process are highly likely to influence their experiences of ITE and induction. However, there is limited research into student teacher beliefs and teaching reading. Therefore, literature was reviewed which investigated the influences of student teacher beliefs more generally (Kagan 1992; Oosterheert et al. 2002; Oosterheert and Vermunt 2003; Moore 2004; Loughran 2006; Bannink and Van Dam 2007; Bondy et al. 2007; Ellis 2007a; Lunenberg and Korthagen 2009; Mutton et al. 2010; Anspal et al. 2012) and that which researched the links between the beliefs of experienced teachers and their teaching of reading (Poulson et al. 2001; Brooks 2007; Bingham and Hall-Kenyon 2013). As a typical teacher education journey requires individuals to reflect upon their beliefs about teaching and learning, the personal qualities and characteristics of each learner contribute to the process and shape what learning takes place (Dweck 2000; Loughran 2006; Ellis 2007a; Lunenberg and Korthagen 2009; Mutton et al. 2010). Equally important are the powerfully held beliefs and stereotypes about teaching and teachers, and prior experience as learners in school which students bring to their ITE (Kagan 1992; Flores 2001; Moore 2004; Loughran 2006; Bannink and Van Dam 2007; Bondy et al. 2007; Mutton et al. 2010; Anspal et al. 2012). Observing and analysing individual children's learning may enable students to challenge their personal beliefs about teaching and, as their ideas are challenged, student teachers may well be confronted with new dilemmas and self-awareness (Kagan 1992; Oosterheert and Vermunt 2003; Cooper and He 2012). Consequently, rather than simply acquiring set knowledge and practices for teaching, the student teachers may experience ITE as a

process of personal and professional growth during which they 'become' teachers (Fleer 2012), but they may also use prior belief systems as a filter for their experiences (Zeichner and Gore 1989; Bondy et al. 2007; Mutton et al. 2010). In a study of 14 student teachers enrolled on an elementary and special education programme in the USA, Bondy et al. (2007: 68) identified three types of beliefs which influenced their behaviour:

- beliefs about self
- beliefs about others
- beliefs about knowledge

These belief systems influenced the way in which the student teachers engaged with course content and university-based sessions, as well as their choices of teaching behaviour in the classroom. Most notably, students who believed that knowledge was 'uncertain and integrated' (Bondy et al. 2007: 71) tried to make connections between theory and practice and considered ways in which the course content might help them in different situations, looking for opportunities to apply university-based learning in school or to critique ideas offered in each context. Those who expected knowledge to be 'fixed and specific' (Bondy et al. 2007: 73) wanted to watch and replicate practice in school. They believed that they could simply take on techniques for teaching and often did not make links between university sessions and school-based learning. Those who believed that learning was 'certain and dichotomous' (Bondy et al. 2007: 76) quickly categorised and either accepted or discarded content during the course based on whether it matched their own established belief system about what was important in teaching.

A longitudinal case study with 25 student secondary teachers in England also identified three student approaches to their ITE which were influenced by their beliefs about learning (Mutton at al. 2010). Mutton et al. (2010) found those who became the most effective teachers were proactive and directed their own learning as they believed in taking personal responsibility for finding ways to help pupils to learn, whilst those who believed they could only learn through experience were reliant on the school context and mentor support to succeed. The third student approach was one where students were so confident in their teaching abilities that they did not feel the need to reflect upon or improve their practice. This led to the students concerned failing to refine their teaching skills or provide optimum learning opportunities for pupils. In contrast, case

studies of secondary English student teachers found that their epistemologies influenced the development of their ITE but were not fixed determinants of the outcomes for the students as teachers (Ellis 2007a). Ellis (2007a: 150, 2007b: 456) concluded that any 'individual knowing' of the students was developed through their participation in different cultural environments. The very different studies suggest that beliefs, whether long-held or developed through participation in new environments, influence how student teachers engage with ITE and the choices that they make when working with pupils. Other important elements in this complex combination of influences are those of emotion and self-esteem.

2.6.3 Emotion and self-esteem

Prior research indicates that the emotional responses of student teachers may combine with their epistemological starting points to influence their learning experience in ITE. Students showed different levels of openness to outside support and different levels of ability to direct their own learning (Oosterheert et al. 2002; Mutton et al. 2010). Students who were reflective and proactive but also willing to learn from mentor support were the most likely to complete their ITE successfully (Oosterheert et al. 2002; Mutton et al. 2010). However, some students became overwhelmed by unsuccessful teaching experiences. Instead of addressing the issues in practice, they adopted a strategy of avoidance which was likely to impede their professional development (Oosterheert et al. 2002). Oosterheert and Vermunt (2003) later went on to theorise that student teachers' self-esteem had an impact on their ability to gain the most from their ITE experiences. Using research from cognitive psychology, they proposed that student teachers would need to be open-minded enough to learn 'dynamically' through responding to situations in practice and combining this with 'active' intentional learning about a subject or pedagogy. They argued that this process would be needed for student teachers to reconceptualise their understanding of teaching and learning but that students with lower self-esteem would not be able to adjust their understanding if it challenged prior beliefs and knowledge about learning. Whilst others have suggested that 'critical incidents' in teaching may prompt reflective thought by posing a problem (Dewey 1938; Schön 1983), it seems clear that the impact of practical experiences in ITE and induction on student teacher development may depend on individual students' dispositions and beliefs. This could present a particular challenge to school-based ITE

and suggests that a necessary element of ITE might be to shape student teacher dispositions to learning and beliefs about reading.

2.6.4 Influence of ITE programmes

The influence of the ITE programme is a potentially important factor in the development of student teachers of early reading. However, the link between teacher education programmes and outcomes for student teachers in general is not straightforward or always positive. The 'McKinsey Review' of previous research into 'high-performing' school systems (Barber and Mourshed 2007) suggested that many US teacher education programmes had little impact on teacher effectiveness in any subject, and small-scale European studies such as Flores (2001) reported that secondary NQTs felt that their preparation to teach was inadequate.

Despite the long history of research into teacher socialisation as students and NQTs (Zeichner and Gore 1989), the policy focus on the teaching of early reading and the responsibility of ITE in this area, there are very few studies which investigate the impact of ITE on the teaching of early reading. The most notable and recent study in the UK was carried out by Ofsted with 44 student teachers in the final term of their ITE and their first term as NQTs (Ofsted 2012a, b). According to Ofsted, new teachers had received inconsistent standards of ITE and induction with only 14 receiving 'at least good' education relating to language development and early reading throughout this period (Ofsted 2012a: 5). Ofsted concluded that the impact of poor ITE could be ameliorated by successful induction and vice versa. However, in some cases, the participating NQTs in the Ofsted study had an insufficient grasp of teaching early reading to support pupils with additional needs.

Some research suggests that ITE may be able to shape student teachers' theoretical orientations, or beliefs about effective pedagogy, for teaching reading. In an English study of effective teachers of primary reading and writing, Poulson et al. (2001) noted specific differences in teachers' theoretical orientations for teaching reading which were linked to how long they had been teaching and the period in which they trained to teach. Teachers had formed a view about teaching reading, based on the approaches favoured during their ITE, and this had remained throughout their careers. However, a more recent study in the USA, using the same ratings measure of theoretical orientations, indicated that changes to practice in schools and prescriptive external expectations had

made reported teacher beliefs about reading more uniform in the decade between the studies (Bingham and Hall-Kenyon 2013). 581 teachers from a range of age groups and schools reported that they believed skills-based components of teaching reading, for example phonics, fluency and comprehension, to be most important and that they combined skills-based teaching with independent practice in activities such as shared, guided and independent reading. The only differences between participant responses were in the emphasis given to different reading skills according to age group (Bingham and Hall-Kenyon 2013). This contrasts with earlier international research which found that the choices and teaching methods of effective teachers of literacy were varied and few common activities or methods were adopted by the effective teachers. In previous research, effective teachers also prioritised reading and writing for a purpose rather than isolated skills teaching (Wray et al. 2000; Poulson et al. 2001; Louden et al. 2005). It seems that the theoretical orientations to reading of mentors in schools and those espoused by university-based ITE content may influence the views of student teachers but that these could, in turn, be shaped by policy.

Other research indicates that potential issues with NQT preparation may be addressed by the design of specific experiences within ITE courses (Darling-Hammond 2009; Dillon et al. 2011). Darling-Hammond (2009) argued that the teacher qualification routes in higher education in the USA made a difference to student outcomes when they offered effective support (high-quality expert coaching) during ITE and the NQT year. In an attempt to make a clearer link between types of pre-service teacher preparation courses and pupil outcomes, Boyd et al. (2009) used records of pupil performance and their teachers' ITE programmes to estimate the effects of teachers' preparation routes on their pupils' test score performances. Although it was difficult to separate other influential factors, such as the calibre of students attracted to different institutions, it appeared that some ITE courses produced more effective teachers than others.

2.6.5 Effective models of ITE: balancing theory and practice

There is some research which identifies effective models of ITE in general but gives limited evidence about preparation to teach early reading. Recent reviews in England have called for a 'research-informed, clinical practice' approach to teacher education (Burn and Mutton 2013; Carter 2015) where student teachers are introduced to carefully planned, graduated tasks in school, which are tightly linked to research-informed

university work, and which encourage them to evaluate the outcomes of their teaching. Research from ITE with a mathematics focus (Singer-Gabella and Tiedemann 2008) and a review of research into teacher preparation for early reading in the USA (Dillon et al. 2011) also suggested that involving students in a sequence of focused school-based tasks and analysis of next steps for specific pupils was a useful way of revealing the stage of student teacher understanding and shaping their thinking. Similar suggestions were made by Grossman et al. (2009) who argued that ITE should be restructured around core tasks and pedagogical understanding, not subjects. In the USA, ITE programmes with a strong reading focus produced teachers who felt more confident and prepared for their role as teachers of reading than those where specific reading modules were not part of the course (Dillon et al. 2011).

Other more general studies of teacher education suggested that, in addition to the school-based elements of ITE, university-based experiences with a focus on early reading could have an important role to play in linking theory and practice and encouraging reflection and research-informed teaching (Koster et al. 1998; Loughran 2006; Pimentel 2007; Burn and Mutton 2013; Carter 2015). A synthesis of research into ITE provision for learning to teach reading in the USA highlighted the university tutor role as an important influence and found that the best tutors modelled teaching approaches to reading using case studies and a range of texts and multimedia resources (Pimentel 2007). However, research with 30 different universities and community colleges in south-western United States raised the concern that some university tutors did not have adequate knowledge of language elements needed to teach reading (Malatesha-Joshi et al. 2009). The tutors, on average, selected the correct answer for only 56% of the questionnaire items relating to phonics and 34% of questions relating to morphology. This is of particular concern as other US research, with 114 teacher educators and their students, showed that the student teachers demonstrated similar knowledge of language constructs to their tutors (Binks-Cantrell et al. 2012). Whilst comparable research in England is not available, the limited research base suggests that university-based content for teaching early reading, the links with school, the knowledge of the tutors, and the ITE curriculum warrant further scrutiny as part of the socialising influence on new and student teachers.

Further reported problems in the organisation and delivery of ITE include achieving a balance between the expectations of universities and schools involved in ITE partnerships (Edwards and Protheroe 2004; Lunenberg and Korthagen 2009; Spendlove et al. 2010; Hutchinson 2011) and enabling students to link theory and practice (Shulman 1998; Loughran 2006; Eilam and Poyas 2009; Grossman et al. 2009; McArdle 2010). Other research identifies tensions caused by an increasing focus on the practical and technical aspects of teaching as a result of government prescription for the work of ITE in England (Ellis 2010a; Spendlove et al. 2010; Douglas 2011a). In the USA, such attention has been focused on the preparation of pre-service teachers to teach early reading following the report of the National Reading Panel (NICHHD 2000) that some suggest this has created an imbalance of time given over to different aspects of literacy during ITE courses (Gribble-Mathers et al. 2009; Bingham and Hall-Kenyon, 2013). A similar impact could be visible in ITE in England following the 'Rose Review' (2006) and the monitoring of ITE provision for teaching reading (Ofsted 2015).

In this climate, balancing theory and practice is potentially an organisational and cognitive challenge for student teachers. One study of secondary student teachers found that students struggled with the school-based activities set by the university (Mutton et al. 2010). Early in the PGCE course, school-based tasks were perceived by the student teachers to disrupt pupil learning and later in the year, students felt overwhelmed with the school-based tasks, planning and assignments. Another difficulty which may limit the effectiveness of course content is that students' ability to understand the content taught in university sessions or by school-based mentors during placements, will be determined by their previous experiences and individual perceptions. It is likely that if the information discussed precedes student teachers' real-life experiences, they may not be able to fully comprehend pedagogical possibilities or identify any issues arising from children's learning (Loughran 2006). The timing of theoretical and practical learning experiences in ITE may, therefore, be significant.

Whilst university-based ITE presents limitations, relying on an apprenticeship model of learning to teach in schools is also problematic. As outlined in Section 2.2.2, learning to teach is generally agreed to take place through an interaction between the individual and their sociocultural environment (Dewey 1938; Lortie 1975; Schön 1983; Lave and

Wenger 1991; Maynard 2000; Loughran 2006; Ellis 2007a, b, 2010a; Gudjonsson 2007), but international research into teacher education shows clearly that a focus on learning through experience alone is insufficient (Shulman 1998; Grossman et al. 2009; Lunenberg and Korthagen 2009; McArdle 2010; Hutchinson 2011; Burn and Mutton 2013; Kleickmann et al. 2013). Hutchinson (2011) argued that ITE should present students with different perspectives and use dissonance to encourage learning about practice. He suggested that, in school-based learning, too much emphasis is placed on a trial-and-error approach and prioritising what works in given settings rather than really debating how children learn. Lunenberg and Korthagen (2009) agreed that to develop student teachers' practice beyond a formula for what has worked in the past, it was not sufficient to assume that student teachers could analyse their experiences in order to improve. Instead, they suggested that strong theoretical knowledge and supported analysis of practice was also needed to guide 'practical wisdom' in teachers and student teachers (Lunenberg and Korthagen 2009: 227). Secondary English PGCE students shared this view of their university course as an opportunity to learn with peers and to integrate theory and practice (Coles and Pitfield 2006). Similarly, in a German study of pre-service mathematics teachers, their pedagogical content knowledge was found to develop during ITE more than in the induction year and it was most well supported by learning opportunities structured by the university rather than via informal learning through school experience (Kleickmann et al. 2013). Evidently, this balance is an important element of any student teacher's experience.

In research from eight 'excellent' American teacher education programmes, successful ITE for the teaching of reading used strong theoretical underpinning to challenge possible beliefs that the student teachers held about the role of the teacher (Pimentel 2007). Alternatively, some academics found that learning through experience was most effective when the student teacher took on the role of researcher and 'discovered' the theory through their own classroom interactions (Stenhouse 1975; Frager 2010). This enabled students to make sense of the available research into the teaching of reading and take ownership of the implications for their own teaching (Frager 2010). Such experiences may also move the student teacher focus away from classroom and behaviour management (Lunenberg and Korthagen 2009). Whilst the most effective teacher education programmes for reading provided student teachers with opportunities to apply strategies for teaching reading in university and school (Pimentel 2007),

practice in school was found to be most effective when student teachers had opportunities to debrief and question their experience in a 'safe' environment at university (Loughran 2006; Pimentel 2007). Whether providing opportunities to focus on specific research questions in school or setting tasks which encourage students to implement particular strategies for teaching reading, the success of school-based learning also relies on the important and difficult role of the coach or mentor in school (Koster et al. 1998; Mutton et al. 2010).

2.6.6 The mentor role and school-based experiences

There is generally clear agreement in the literature that the role of the school-based mentor in the process of learning to teach is a crucial one (Koster et al. 1998; Mutton et al. 2010; Cuenca 2011; Caires et al. 2012; Hobson and Malderez 2013; Izadinia 2015). As the model of teacher education has moved towards pre-service teachers spending more time in school, the role of the classroom mentor has become even more important in creating effective teachers of the future (Davies and Ferguson 1998; Koster et al. 1998; Maynard 2000; Mutton et al. 2010; Cuenca 2011; Caires et al. 2012; Hobson and Malderez 2013). The experience of school placements for student teachers is particularly demanding and a positive opportunity to learn is influenced by the relationships they form in the school setting, the most powerful of these being the relationship with their mentor (Maynard 2000; Caires et al. 2012; Ambrosetti et al. 2014; Izadinia 2015). The role of the school-based mentor in ITE partnerships in the UK has been recognised since the 1980s (Maynard 2000; Hobson and Malderez 2013), but with no accepted framework for mentoring or consistent support for their role, the everyday practice of mentors varies considerably (Hobson and Malderez 2013; Ambrosetti et al. 2014).

Analysis of interview data from two previous longitudinal studies of pre-service and early career teachers across the primary and secondary sector in England found that many mentors did not create supportive relationships with student teachers and focused on 'judgementoring', which involved concentrating on giving, often negative, feedback to their students (Hobson and Malderez 2013: 12). In previous research with student teachers in a range of different subjects and locations, a simple loop of observation and feedback was also found to be inadequate to support developing practice (Edwards and Protheroe 2003, 2004; Ambrosetti 2010; Cuenca 2011). In research with 36 student

teachers and NQTs, participants valued the questions raised by their mentors during post-observation dialogue equally or more than solutions which their mentors offered (Mutton et al. 2010). A smaller-scale study of 17 PGCE student teachers in Wales also revealed that students found it helpful when they had clear expectations from their mentors and advice was given before the lesson as well as constructive feedback on their practice. In the students' opinions, commentary from mentor observations varied widely between being too critical and not critical enough to improve upon (Maynard 2000).

Observations of experienced teachers may also not be enough to enable student teachers to identify, emulate or understand good practice (Orland-Barak and Leshem 2009; Mutton et al. 2010). Student teachers expected their mentor to provide opportunities for them to work on specific aspects of teaching (Ambrosetti 2010; Mutton et al. 2010) and benefitted from prompts and supported discussion to draw out the key aspects of effective practice in observed teaching (Orland-Barak and Leshem 2009). In a review of research with student teachers in the USA, mentors contributed to successful student teacher preparation through modelling classroom practice for teaching early reading (Pimentel 2007). Following research with secondary PGCE student teachers, Mutton et al. (2010) suggested that specific opportunities for students to learn through different teaching situations, tasks and responsibilities during school practice may need to be tailored to the individual needs of student teachers. Additionally, evidence from interviews showed that student teachers wanted to construct their own teaching strategies with guidance rather than follow another's approach. Students needed opportunities to feel 'legitimate' and move beyond their mentor's practice so that they were able to establish their own teaching identity within the classroom (Maynard 2000; Mutton et al. 2010; Rajuan et al. 2010; Cuenca 2011; Izadinia 2015).

One successful mentoring strategy used in lessons across subjects was to give student teachers the opportunity to team teach with their mentors and construct teaching solutions through dialogue, sometimes during lessons (Maynard 2000; Edwards and Protheroe 2003; Cuenca 2011). Using this 'tethered learning' approach (Cuenca 2011: 123) in the teaching of early reading might allow the mentor to guide student teachers and enable them to respond appropriately to individual pupils' needs as they arise. Furthermore, Rajuan et al. (2010) examined 20 pairs of Israeli mentor and mentee beliefs and expectations of their roles at different points in an ITE course. They found

that student teachers were able to make the most progress when their views on teaching contrasted with those of their mentor just enough to cause challenge and debate about teaching choices without confrontation between the mentor and mentee. In other research, unsuccessful mentor–mentee relationships resulted in some students becoming isolated from the school community and even doubting their future as teachers (Cuenca 2011). This suggests that successful mentoring draws on a range of different strategies beyond observation and feedback. Mentors can provoke student teacher thinking and help share teaching knowledge in a way that is sensitive to individual student needs but the long-term impact of student teacher mentoring and ITE may be dependent on experiences during induction.

2.7 Induction

2.7.1 School culture

There is limited research into the induction experience of NQTs with a focus on teaching early reading. One previous study found that many NQTs were not offered targeted support with teaching early reading during induction (Ofsted 2012a, b), although the report gives limited detail of the evidence base or the individual trajectories of the participants. In other research, the wider literature is in agreement that as students enter their induction year, they experience something described as 'praxis shock' (Koetsier and Wubbels 1995; Findlay 2006; Korthagen and Wubbels 2008a; Newman 2010; Haggarty et al. 2011; Haggarty and Postlethwaite 2012). This shock is, in part, a result of the change from partial teaching responsibility over short periods of the school year to becoming solely responsible for a class during the whole year. A longitudinal study of over 3,000 primary and secondary NQTs in England reported that 40% also felt inadequately prepared to cope with discipline and this limited their ability to develop other aspects of effective teaching (Owen et al. 2009). However, it may be more than responsibility, behaviour management and workload that leaves NQTs struggling. Smagorinsky et al. (2004) suggested that the belief systems of new teachers were challenged as they became school employees because their view of teaching was still idealistic.

Other literature indicated that individual students' identities were not always compatible with the expectations of their new school culture. Whilst some students were unable to cope with this and therefore left the teaching profession (Braun 2012), others became

subsumed into the culture of the school, leaving behind their individual strengths and previous learning (Keay 2009; Haggarty et al. 2011; Haggarty and Postlethwaite 2012). The way that each new teacher coped with this transition seemed to be strongly influenced by the culture of their new school. This varied from a restrictive learning culture, where new teachers were expected to replicate existing practice in a school, to an expansive learning culture, where new teachers were supported to develop their own practice (Keay 2009; Piggot-Irvine et al. 2009; Haggarty et al. 2011). Evidence suggested that when student teachers took on their first post, although they retained their previous subject knowledge, they were more likely to discard aspects of pedagogy from their ITE and adopt practice used in school (Flores 2005; Keay 2009; Piggot-Irvine et al. 2009; Haggarty et al. 2011; Kane and Francis 2013). Career changers, with an already established previous professional identity, in some cases found the gap between their expectations and the reality of the teaching role even more pronounced. Newman (2010) investigated the experiences of three newly qualified primary teacher career changers and found that they expected teaching to offer freedom and creativity which were lacking in their previous roles. In contrast to their expectations, the real world of teaching was restrictive and they were conscious of the public scrutiny and responsibility of the teaching role which was new to them. The relentless nature of the teaching workload was also a particular frustration as they felt that there had been more time available to think and plan ahead in their previous careers.

In two different studies of secondary teachers in the UK, new teachers often found themselves in schools where the teaching strategies advocated and used during their ITE were not in line with the expectations of their new school (Brown 2001; Haggarty et al. 2011; Haggarty and Postlethwaite 2012). This issue was identified by others as particularly difficult when curriculum expectations had changed and schools had not kept pace with the changes at the speed of ITE (Brown 2001; Findlay 2006). Although these two research studies involved secondary teachers, they suggested a possible avenue for new research with primary teachers, particularly as early reading has been the focus of a relatively recent pedagogical shift and ITE has become more focused on school-based teacher education.

2.7.2 Mentor support for NQTs

Existing research suggested that mentor support for NQTs was variable at best (Brown 2001; Bubb and Earley 2006; Findlay 2006; Piggot-Irvine et al. 2009; Newman 2010; Haggarty et al. 2011; Braun 2012; Haggarty and Postlethwaite 2012). Some new teachers did not have regular contact with a mentor, their mentor changed or their meetings were frequently disrupted (Brown 2001; Findlay 2006). Commonly, mentors had not received any training specific to their role and, as a result, NQTs did not get opportunities to develop their practice (Bubb and Earley 2006; Haggarty et al. 2011). In some schools, the mentors believed that new teachers needed to focus on their strategies for managing behaviour in the classroom (Haggarty and Postlethwaite 2012). Several mentors focused only on this aspect of practice and so the new teachers did not have opportunities for subject-focused feedback and support (Haggarty and Postlethwaite 2012).

In studies of the NQT experience in England, the USA and Canada, the withdrawal of mentor support during the induction year, in comparison to that available during ITE, was highlighted (Keay 2009; Kane and Francis 2013; Gut et al. 2014). Mentoring in the NQT year focused on limited emotional reassurance and, to some extent, encouraging the new teachers to replicate practice in their new school contexts (Flores 2005; Keay 2009; Kane and Francis 2013). However, in schools where NQTs felt more supported, they were effectively protected from additional workload and external pressures (Piggot-Irvine et al. 2009; Newman 2010). New teachers who were positive about their induction year particularly valued opportunities for observation and feedback and also gained support from the wider school community (Brown 2001; Piggot-Irvine et al. 2009; Kane and Francis 2013). However, several studies reported that NQTs had few opportunities to observe other teachers and limited direction and guidance (Jones 2002; Kane and Francis 2013; Gut et al. 2014). Instead, they suggested that mentors should be supporting new teachers through questioning, dialogue and classroom inquiry which would enable them to think critically about their practice (Harrison et al. 2005; Kane and Francis 2013; Gut et al. 2014). Some mentors and NQTs believed that the mentors should only respond when they were asked for help but some new teachers did not want to admit to their mentor when they were unsure about teaching (Jones 2002; Haggarty et al. 2011). The dual mentor role of assessment and support appeared to prevent some NQTs from seeking help (Haggarty et al. 2011). Nonetheless, the importance of

personal and professional dialogue was so significant to many new teachers that, in schools where mentoring was limited, NQTs would seek out advice and support from other colleagues (Brown 2001; Marable and Raimondi 2009). The studies, therefore, agree that the success of NQTs is strongly influenced by their experiences during ITE and induction which are shaped by the social and environmental constraints and affordances of their contexts. In order to find a way to conceptualise and examine these complex and interrelated influences, research using activity theory to explore ITE and induction was reviewed.

2.8 Using activity theory to examine ITE and induction

With little recent research focusing on the experience of student teachers learning to teach early reading as they progress through ITE and induction into schools, the literature does not provide an obvious methodological or theoretical route for this study. Previous studies have indicated that school culture plays an important part in the transition from student teacher to NQT but exactly what features of school organisation and practice contribute to becoming a teacher of early reading have not been examined. Schools could certainly be viewed as communities of practice (Lave and Wenger 1991; Wenger 1998) in which learners take on the roles and expectations of a community through supported interaction and experience as 'legitimate peripheral participants'. However, a broader review of research in ITE and professional development presents activity theory as a relevant conceptual framework and potential methodological tool (Edwards et al. 2002; Wilson 2004; Ellis 2007a, b; Hardman 2007; Saka et al. 2009; Jahreie and Ottesen 2010; Douglas 2011a, b, 2012a, b; Douglas and Ellis 2011; Feryok 2012; McNicholl and Blake 2013). This is possible because it offers:

> (1) an analysis of how actions are mediated by cultural tools to produce outcomes that are culturally acceptable with (2) a framework for understanding how actions and tools have been shaped by the socio-cultural-historical forces within and outside the system in which the action occurs. (Edwards et al. 2002: 117)

Edwards et al. (2002) explained that if a school was viewed as an activity system, the elements of the system (subject, object, rules, mediating artefacts, community, and division of labour) could be analysed to understand the way in which they work together to shape ITE. Mentor behaviour, for example, could be explained by the roles and rules developed for mentoring by one particular school community as a result of

their history. These elements would then dictate the division of labour and expectations of the student teacher in the classroom.

However, there is no one way of using activity theory or investigating the activity system elements in teacher education research with it being described by some as a 'general schema' rather than a theory (McNicholl and Blake 2013: 287). In some research, activity theory has been used to examine how teachers and student teachers' knowledge, understanding and practice is changed by the introduction of new tools for planning and assessment (Wilson 2004; Beatty 2012). With more relevance to this study, research with secondary teachers has used activity theory to analyse the way in which activity system elements differ in secondary school departments and the impact that these unique systems have on student teacher learning (Douglas 2011a, b). Douglas achieved this by analysing and comparing the different activity systems of departments within one school and gathering data about each element to build a complex picture. Douglas and Ellis (2011) analysed how different histories, goals and practices of departments influenced the use of the university materials for student teachers (the 'tools') and found that, in some cases, guiding documentation became the 'rules' which the students had to follow. This phenomenon was also visible in the work of teacher educators in different universities whose agency and practice during school visits became constrained by the form-filling required in their role (McNicholl and Blake 2013).

Ellis (2007a, b), although informed by activity theory and a sociocultural, situated perspective on student teacher learning, did not make the influence of activity system elements explicit in his longitudinal case study of secondary English student teachers. However, he highlighted the important concept of 'personal trajectories of participation' (2007a: 152), based on Dreier (1999), where each student demonstrated changes in knowledge, understanding and practice unevenly developed in context rather than a straightforward developmental trajectory. Jahreie and Ottesen (2010) also emphasised the importance of these participation trajectories and focused on analysing student interaction in different contexts during their ITE year as a way of studying participation across spheres. There are few studies which apply activity theory to the education of primary teachers. However, Twiselton (2004, 2006) provided one of the most relevant uses of activity theory for this study as she focused on student primary teachers learning to teach English. She analysed the interplay between student teachers'

underlying motives for their practice and the other elements of each school activity system. This enabled her to examine the interaction between a highly prescriptive literacy curriculum and student teacher goals and practices. This work demonstrated how activity theory could be applied to analyse student teachers' constructs of teaching and learning in different contexts and raised further questions about the ways in which these might be changed during the course of teacher education and through transitions between different systems. Saka et al. (2009) made more visible use of activity system elements within a case study approach to analyse and compare the experiences of two newly qualified science teachers during their induction year, thus combining a longitudinal perspective with activity theory to explore how student teacher goals or 'objects' and practices changed in response to the activity system. The literature reviewed provides a number of possible ways to employ activity theory concepts in research with student teachers. It indicates that activity theory offers a relevant, if underutilised, framework with which to examine the education of teachers of early reading. Activity system elements, therefore, provide a framework for longitudinal comparison and analysis of the impact of the university and schools on student teacher and NQT knowledge, understanding and practice for teaching reading which is explored in this study.

2.9 Summary

The literature reviewed here suggests strongly that effective teachers make a difference to pupil outcomes but identifying who will be an effective teacher is more problematic and cannot be predicted by earlier qualifications. Key personal characteristics found in effective teachers were resilience, commitment and the ability to work proactively on their mistakes without becoming emotionally overwhelmed; which may apply to student teachers of early reading. However, these qualities are not fixed but constructed through interaction with teaching environments during ITE and work as a teacher. In addition, effective teachers are not defined by their personal characteristics alone but must draw on a complex web of teacher knowledge which is likely to combine subject knowledge with knowledge of pupils and pedagogy. Such knowledge may be dynamically created through practice as well as informing practice. Teachers of early reading utilise specific knowledge of language elements and processes such as phonics and decoding; however, teachers with high levels of content knowledge in other subjects have not been shown to be more effective than their peers. Effective teachers

must be able to make deep connections between parts of English so that teaching does not become compartmentalised but curriculum prescription might hamper some new teachers from making these connections. How student teachers develop knowledge for teaching reading in the current context of curriculum prescription in England is therefore an area for further investigation.

In previous research, common features of practice were observed in the effective teaching of early literacy. Reading skills were taught explicitly using a wide range of methods and linking literacy concepts. One important feature was the ability to respond spontaneously and adapt teaching to suit the needs of pupils. 'Expert' teachers of reading modelled reading processes and capitalised on learning opportunities across the curriculum and between different aspects of literacy. However, it is unclear in what way such a complex range of behaviours might be visible in student teachers, differ between individuals or change over time. The development of these behaviours during ITE and induction into the NQT year and how they might be influenced by the affordances and constraints offered in different school environments therefore present an area for new research. The Classroom Literacy Observation Schedule (Louden et al. 2005) developed from observations of effective early literacy teaching is identified as a useful tool to analyse student teacher practice.

The review of the literature showed that methods for teaching early reading have been the subject of historical and theoretical change and debate, in policy, research and the curriculum. These changes may have led to different theoretical orientations to reading being held by individual tutors and mentors. The debate has centred on teaching skills for early reading or using a whole language approach. Cognitive psychology now shows that a range of processes are at work as children learn to read, including phonology and vocabulary development, but these do not function in isolation. In contrast to the psychological research, the curriculum and policy for teaching early reading in England has moved from a focus on multiple strategies, the print environment and reading for pleasure in the first primary National Curriculum (DfEE 1989) to the prescribed teaching of systematic synthetic phonics as a first strategy for reading following the 'Rose Review' (Rose 2006). What is not clear in the literature is how this history has influenced student teachers' experiences of becoming teachers of early reading.

The research base suggests that, during ITE, student teachers gradually become more confident and flexible in their use of questioning, planning and differentiation until they are able to respond to pupils' individual needs. Little is known about the detail of the process for teaching early reading as previous research with this focus either emphasised outcomes for students at the end of their ITE or took place in a different historical context. Student teacher beliefs about teaching and learning may be changed by ITE but can also restrict its influence as students filter their new learning through existing mindsets. The content and organisation of university programmes may best support student teachers through linking practice and theory by allowing opportunities to discuss classroom experiences in the 'safe haven' of the university. In studies of ITE programmes for early reading, students were particularly supported by observing their mentor modelling reading teaching and by completing tasks which involved applying ideas from theory to teaching with pupils. Mentor support for student teachers has been seen to be variable but crucial. In general studies of mentoring, achieving a relationship which allowed for tailored support and student independence, coupled with clear expectations and constructive feedback, seemed most important for the student teachers but how this is achieved in English classrooms with the high-stakes focus on early reading is not known.

The literature reviewed also suggests strongly that the induction period for new teachers is characterised by shock and withdrawal of focused support and that many students feel poorly prepared by their ITE. The experiences of NQTs may be determined by the culture of their school which, in some cases, may not match their expectations about teaching or may be in contrast with teaching strategies they have gained during ITE. This could lead new teachers to discard appropriate pedagogy. Mentoring for NQTs was often limited to general emotional support which meant that NQTs did not gain further opportunities to observe colleagues or receive feedback on their own teaching. They particularly wanted additional dialogue and advice and sometimes sought this from other members of school staff. One way of investigating student teacher learning arising from the literature was using activity theory concepts to analyse the social, cultural and historical influences on this process. Activity theory provides a way to examine the impact of different school and university systems on student teachers' trajectories of participation as they move through the different environments of their ITE and induction.

The literature reviewed, therefore, highlights the strengths, weaknesses and limitations of the research base available with a focus on learning to teach early reading in the UK. Specifically, no studies were found which considered the changes in student teacher knowledge, understanding and practice throughout their PGCE year and as they began the NQT year. Previous research indicated that becoming a teacher of early reading is a complex process which draws on personal characteristics and beliefs, subject and content knowledge, and pedagogy, but how these elements work together and are influenced by the experience of ITE is poorly documented and understood. This study was therefore designed to delineate changes to student teacher knowledge, understanding and practice over time and to begin to identify similarities and differences in the learning trajectories of students in the current context. In particular, the study aimed to examine social, historical and cultural influences on this process with a focus on student transitions between the university and their different school placements. After considering the available research literature, the point of departure for the study led to two overarching research questions:

How do student teachers develop knowledge, understanding and practice for teaching early reading during a PGCE course and through the transition into the NQT year?

What is the nature and influence of the multiple activity systems involved in ITE and induction on the process of becoming a teacher of early reading?

The study was designed as a longitudinal, collective case study using a conceptual and analytical framework derived from activity theory to shape the methods and analysis in order to interpret the multiple factors involved in becoming a teacher of early reading. The methodology for the study is justified in Chapter 3, including the nature and design of the case study research, the use of activity theory to shape the study, the ethical considerations and implications of insider research, and the selection and design of methods of data collection and analysis.

Chapter 3 Methodology

3.1 Introduction

This chapter presents justification and offers a critique of the methodological stance developed for the study. The use of a longitudinal collective case study approach, employing a conceptual and analytical framework derived from activity theory to shape the methodology, is explained and defended. Ethical considerations, including the potential challenges of insider research, are critically discussed. The organisation of the study and design of multiple methods for data collection are explicated, including the use of the 'Classroom Literacy Observation Schedule' (Louden et al. 2005) as a comparative measure of students' practice. Finally, the application of the analytical framework and development of coding are evaluated and exemplified.

The research was centred on the experiences of student teachers enrolled on a lower primary (3–7 years) PGCE programme at a university, and its partnership schools, in the East Midlands region of England between September 2013 and March 2015. The research was designed to provide an in-depth, primarily qualitative, picture of student teacher transitions and influential factors as they moved between the university and different school placements with a focus on learning to teach early reading. It aimed to illustrate strengths and challenges within both the university-based and school-based ITE elements of the programme, including the transition to the NQT role.

3.2 Research design

3.2.1 Interpretivist approach

The research design was developed from a largely interpretive sociocultural perspective. An interpretive view of the world presumes that there are multiple realities held in the mind of individuals, shaped through their experiences and existing knowledge, and that knowledge, values and goals are inextricably linked (Radnor 2001; Morehouse 2012; Waring 2012). From this perspective, the student teachers were expected to construct identities and ideas as teachers of early reading through interaction with others and their environment (O'Donoghue 2007; Waring 2012; Creswell 2013). The study therefore set out to identify the participants' individual perceptions of these social learning experiences (Geertz 1973; Martin 1993;

O'Donoghue 2007; Waring 2012; Creswell 2013) and to look for links between their teaching practice and verbal explanations of their understanding and beliefs, as outlined by Morehouse (2012: 78):

> An interpretive inquiry attempts to capture the <u>actions</u> that an agent is involved in as she works with, responds to or changes the environment as well as the <u>thinking</u> used by the agent to reason, solve problems, draw inferences and determine action. [Underlining added]

It was also necessary to find ways to identify possible shared understandings and meanings within school communities and the impact of these on the student teachers by 'understanding relationships among and between actors, and understanding how agents engage with each other and the world' (Morehouse 2012: 26).

The process of interpretive research was described by Geertz (1973: 6) as the gathering of 'thick description'. Although his focus was on ethnographic research, the interpretive approach can be the basis for other methodologies. Interpretive researchers look for the detail of the everyday experience in an attempt to understand thoughts and actions from the perspective of the people involved (Martin 1993). The study presented here focused on how the student teachers explained the experience of becoming a teacher of early reading, which could also lend itself to a phenomenological approach (Ehrich 2003; Titchen and Hobson 2005; Smith et al. 2009; Creswell 2013; Grbich 2013). However, the aim of the study was to do more than capture the essence of this experience. It set out to provide a detailed picture of classroom practice and the participants' explanations of the impact of the different learning contexts.

Notions of validity and evidence can present problems for researchers in this field as interpretivism acknowledges that the researcher must interpret the actors' meanings, in this instance those of the student teachers and mentors, through their own individual construction of the world. Therefore, the researcher inevitably influences what is presented to the reader (Radnor 2001; Altheide and Johnson 2013). Ways to ameliorate some of these difficulties include highlighting isolated findings and providing information about how the researcher has drawn their conclusions, explaining how and why cases have been selected and providing reflexive accounts of the researcher in the process (Stake 1995; Radnor 2001; Yin 2009; Altheide and Johnson 2013). The longitudinal collective case study approach adopted for this research offered a way of employing an interpretive perspective to focus on the specific case of ITE and induction

in one local context whilst providing sufficient comparison and reflexivity to be useful in other instances.

3.2.2 Collective case study

A collective case study was chosen as an effective approach to study student teacher experiences over time. Case studies are generally defined by boundaries of time, location, organisation or context (Stark and Torrance 2005; Stake 2008; Cohen et al. 2011; Day-Ashley 2012; Creswell 2013). However, whilst case studies are characterised by the study of a real-life bounded system through the in-depth collection of data via multiple methods, they are not easily summarised as a single form of research and different theoretical and analytical positions can inform the methodological approach taken (Stark and Torrance 2005). Adopting a case study approach was chosen as it offered the opportunity to answer 'how' and 'why' questions about a contemporary situation over which the researcher had no control (Yin 2009). The use of multiple methods and investigation of context also seemed well suited to providing information about the individual construction of meaning in line with the theoretical framework adopted:

> Case study seeks to engage with and report the complexity of social activity in order to represent the meanings that individual social actors bring to those settings and manufacture in them. (Stark and Torrance 2005: 33)

Types of case study can be broadly categorised into psychological, ethnographic, historical or sociological (Merriam 1988; Cohen et al. 2011) and defined by their size and purpose. Common types of educational case studies are outlined in Table 3.1. These range between a focus on one individual to a programme, such as a university course, or an activity which spans more than one location (Stake 1995; Bassey 1999; Cohen et al. 2011; Creswell 2013). The intentions for case studies can be to illustrate an issue through the use of one or more examples or to study a problem particular to one case in depth and suggest ways forward (Stake 1995; Bassey 1999; Cohen et al. 2011; Day-Ashley 2012; Creswell 2013).

Table 3.1: Possible differences in types of educational case study

Size	Purpose (Stake 1995;Yin 2009; Creswell 2013)	Additional categories within purpose (Bassey 1999)
one individual	*instrumental* one bounded case used to illustrate an issue	*theory-seeking* (exploratory) *theory-testing* (explanatory)
several individuals	*collective* multiple cases used to illustrate an issue	
a group	*intrinsic* the focus is a problem originating from the case	*storytelling:* narrative and analytical with a strong timeline *picture drawing:* descriptive
a programme or activity	*evaluative* to evaluate the worth of a programme or event	

In this study, the process of data collection focused on studying multiple student journeys within the same PGCE course. Hence 'collective case study' was used to reflect the organisation of the research where 'a number of cases may be studied jointly in order to investigate a phenomenon, population or general condition' (Stake 2008: 124). This approach facilitated the theoretically driven nature of this particular case study as creating rich description from the participants' perspectives provided the opportunity for theoretical explanations and analysis which involved 'theorising from the data' and allowed for 'tentative cross-site generalisations' (Stark and Torrance 2005: 38).

The focus on a group of PGCE students during their ITE and induction provided the subject and conditions for a case study as it allowed for sufficient detail to be collected about the experiences of each participant over time. However, the internal validity of the design was enhanced by the development of analysis at the level of both single cases (individual student teachers) and multiple cases (comparing student teachers). The nested case study design took a replication approach (Yin 2009) where each student's learning journey was treated as a separate case and was investigated and analysed over time with each new context treated as a separate stage of analysis. Nesting individual cases within a collective context in this way can allow for a deeper understanding of the multiple conflicts and pressures surrounding each individual case (Stark and Torrance 2005). Data about the collective cases were gathered and analysed in parallel. This sequence of vertical and horizontal comparisons is represented in Fig. 3.1.
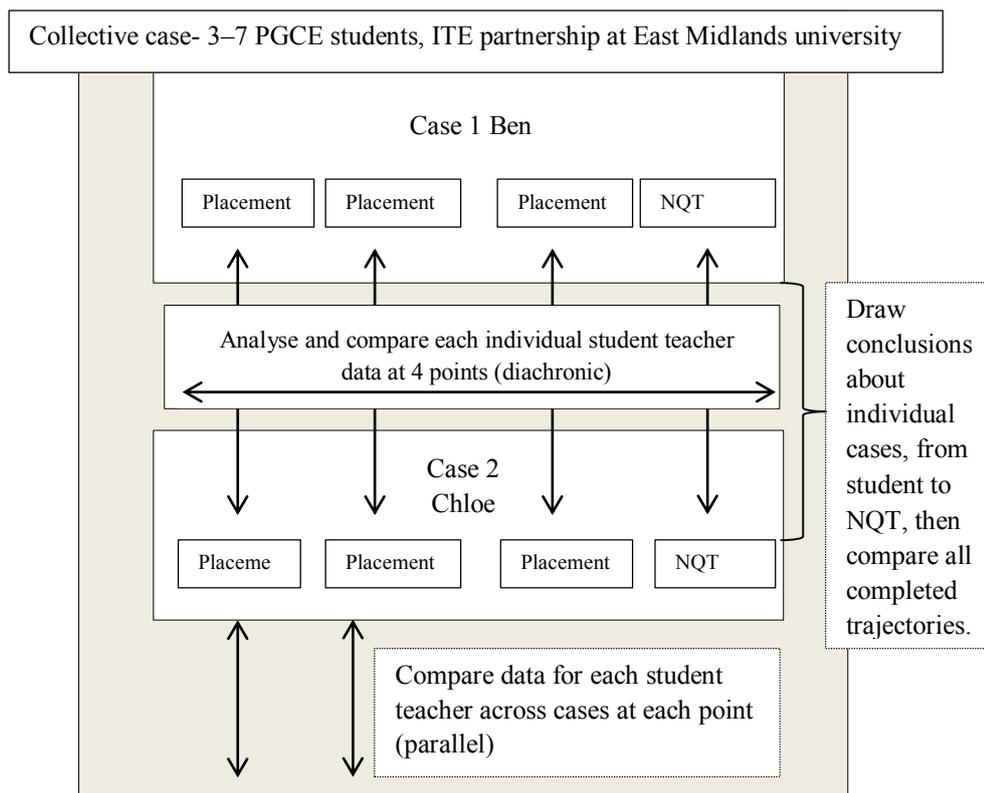
Fig. 3.1: Collective case study design for the research (adapted from Yin 2009)

3.2.3 Possible limitations of a case study approach

Specific limitations of case study analysis lie in managing the amount of data often gathered (Stake 2008; Yin 2009; Cohen et al. 2011; Atkins and Wallace 2012). This may come from developing complicated research instruments in advance which later prove unnecessary (Stake 2008). Careful planning of data collection and early development of an initial analytical framework allowed the researcher to avoid collecting unnecessary data. In this study, high levels of analysis and comparison were achieved through replicating data collection methods consistently in each location and comparing findings across and within cases at each point of collection (Fig. 3.1). It was also appropriate to develop open-ended research tools and to adapt and refine these after pilot work. A further potential difficulty with case study research is that both the researcher and the reader are likely to make naturalistic generalisations based on their previous knowledge and experience of the subject (Stake 1995). In an interpretive case study, the researcher must attempt to avoid and acknowledge potential bias or distortion and explain their interpretations whilst providing enough information for the reader to

draw their own conclusions (Stake 2008; Yin 2009; Cohen et al. 2011; Atkins and Wallace 2012) (Section 3.6).

3.2.4 Activity theory

Activity theory was used to provide a conceptual and analytical framework because of the potential opportunities it offered to investigate the relationship between student teachers' actions and ideas and the cultural-historical systems where their ITE and induction were located (DeVane and Squire 2012). However, Smagorinsky (2010) suggested that activity theory analysis is best suited to considering organisational change and has been used unnecessarily in educational research which takes a more broadly sociocultural perspective. In this case, it provided a useful lens for considering the elements within a system which might impact on the participants, both with and without their conscious awareness. These might include the resources used in school and university work and the participants' mediated actions in these different communities:

> Activity theory is a valuable tool for researchers to incorporate into their repertoire as it enables a means of discovering human activity without the express explication of the tasks by participants. Instead, through the mediated study of the participant's tools, an understanding of activity is revealed which includes tacit and explicit actions. (Hashim and Jones 2007: 5)

Engeström (1987: 7) initially suggested that activity theory could be used empirically by focusing research on collective activity with a specific goal and analysing the process and influences which brought about 'expansive learning' (i.e. a co-constructed change in the system). He intended that such research would be used as part of an interventionist strategy that could enable the participants to co-construct new ways of working or instruments to overcome some of the contradictions in the system and he established methods to apply this through what he called 'developmental work research' (Engeström 1987: 7, 2008: 5; Ellis 2010b: 103). However, with little already known about either the process of becoming a teacher of early reading, or any potential for expansive learning, an interventionist approach was beyond the scope of this study. Instead it was most appropriate to use activity theory concepts heuristically to explore the functions of the activity systems of school and university in this process. This study therefore adopted the approach which Engeström (1987) proposed as the beginning of research into expansive learning:

The first step of expansive developmental research consists of (a) gaining a preliminary phenomenological insight into the nature of its discourse and problems as experienced by those involved in the activity and (b) of delineating the activity system under investigation. (Engeström 1987: 250)

Conducting the first step of developmental research required gaining student teacher and mentor views about the experience of becoming a teacher of early reading, seeking out possible difficulties and gathering details about the nature of the activity systems at work. In addition, this study was inspired by Engeström's later model or third-generation activity theory (Fig. 3.2) to consider the difficulties and possibilities of learning between multiple systems with different historical and cultural practices and ways of communication. For this purpose, the focus of the study became specifically the activity systems of the school and university for each student rather than additional activity systems such as those they experienced in the home or other work places. Although the university and schools are part of one ITE partnership, previous research indicated that system-level differences might also be visible between them (Douglas 2011a, b, 2012a; Hutchinson 2011). Rather than using the interventionist model of developmental work research to attempt to co-create change, this study was designed to gather data about the key elements of each activity system so that they could be compared. In the case of early reading, one specific example was the impact of mediating artefacts (or tools) for teaching reading on the students, such as the planning and schemes in different schools. The benefit of using activity theory tools in this way was that they offered a framework with which to investigate the difference in objects and practices within and between each system in order to analyse the impact of these on students' learning. This highlighted the unique combination of activity system elements which constrained or facilitated student teacher progress. Using activity theory heuristically also allowed the researcher to consider cultural-historical explanations for any tensions in activity systems involved in ITE. This offered the potential to provide insight into the impact of past and present changes to the organisation of ITE, and expectations for teaching early reading, on student teacher learning. For the purpose of this study, the elements of each activity system were defined using categories from Engeström's third-generation model (Fig. 3.2) to reflect the context of ITE and induction.
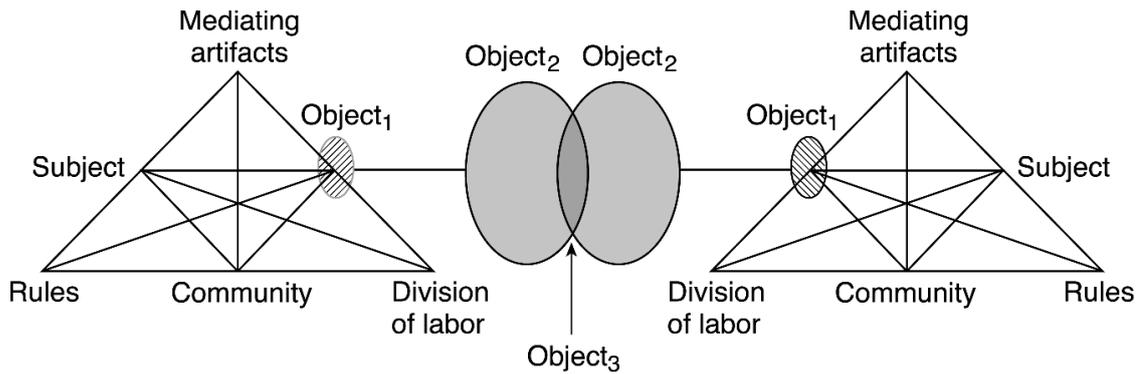
Fig. 3.2: Two interacting activity systems as a minimal model for the third generation of activity theory (Engeström 2001: 136)

3.2.5 Defining the elements of the activity systems

In using activity theory to explore workplace experiences, researchers have developed their own labels for the different aspects of each system which reflect the language of their research context (Hung and Chen 2002; Wearn et al. 2008; Beauchamp et al. 2009). In this study, the elements within the activity systems of university and schools were labelled as shown in the table below (Table 3.2). The new labels chosen reflected the teacher education context of the study, and the examples given for each element were drawn from previous comparable research (Douglas 2010, 2012a, b; Hutchinson 2011). The new labels and examples were created to help the researcher to be aware of likely sources of data but were not intended to be exclusive or exhaustive, therefore leaving some opportunities for these categories to develop during the research. It was important to recognise during analysis that each element interlinked and that activity systems should be viewed as a whole whilst being conscious of the influence of the different elements within them (Engeström 1987; Holt and Morris 1993; Hashim and Jones 2007). Possible subjects and objects of each activity system are presented separately in Table 3.2 as these were elements which could vary and potentially emerge during the research.

Table 3.2: Application of the activity system elements to this study

Activity system elements	Examples for the focus of this study	Activity system elements, relabelled
Community	University: lecturers, group tutor, school placement tutor, other students, other staff. School: teachers, parents, children, other staff, mentor, senior teachers, other students.	University or school community
Rules	*Teachers' Standards* (DfE 2013a), school policies, university guidance. National and school expectations for teaching reading and systematic synthetic phonics. Unwritten and written expectations of professional commitment and conduct.	Expectations
Division of labour	Roles and responsibilities, planning, preparation, teaching, non-teaching organisation. Mentor conversations, team planning, observation and feedback, timetable. Assessment expectations, essays, school-based tasks, gathering evidence towards the *Teachers' Standards* (DfE 2013a).	Roles and responsibilities
Mediating artefacts	Language of university and school, school planning and assessment documents, university tasks and guidance, resources and schemes, National Curriculum, Government guidance, lecture and study materials, observation and feedback notes.	Language, resources and curriculum

The object of the activity systems in this study was crucial to understanding the systems and yet difficult to define as the concept of the object in activity theory has more than one meaning depending on interpretation and the perspective of the research (Kaptelinin 2005). The object is often explained as the motive for activity (Miettinen 1998; Kaptelinin 2005; Engeström 2008) or 'the purpose of the activity in society' Miettinen (1998: 424) and can be individual, as first defined by Leontiev (1977), but in Engeström's original model of expansive learning, the activity system object could be collective and concerned with the process of production and movement towards the outcome of the system (Engeström 1987; Kaptelinin 2005). During the course of the design and implementation of this study, it was therefore necessary to consider the object of individuals and activity systems:

> We need to distinguish between the generalised object of the historically evolving activity system and the specific object as it appears to a particular subject, at a given moment in a given action. (Engeström 2011: 78)

According to Engeström (2008: 89), in a traditional school system the teacher would be the subject and the pupil the object, with the outcome being the pupil's grade. Douglas (2010) proposed an activity system for ITE where the subject was department staff

involved in ITE and the university tutor. The object was student teacher learning with the outcome being NQTs (Fig. 3.3).
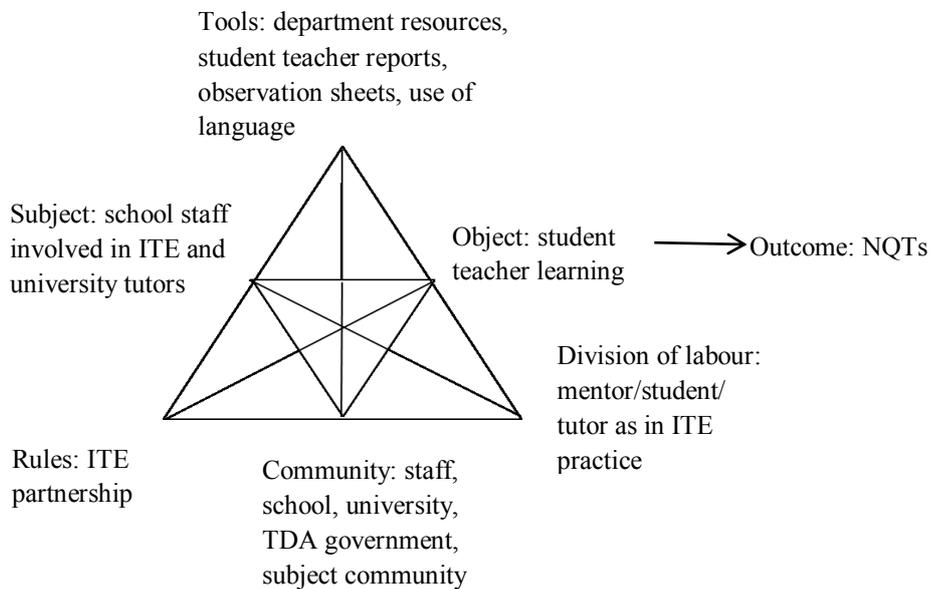
Fig. 3.3: An activity system for school-based ITE (Douglas 2010: 33)

However, in this study, the activity systems involved in ITE and induction were viewed as separate entities potentially contributing to a shared purpose rather than one cohesive system. Therefore, the subjects, objects and outcomes might differ. The decision to investigate schools as separate activity systems arose from the researcher's experiences of primary schools as distinct communities of practice and earlier research which identified differences between university and school objects and in different departments (Douglas 2011a, b, 2012; Douglas and Ellis 2011). This new way of envisaging ITE also allowed for a more in-depth examination of student teachers' experiences as they made transitions through multiple schools during the PGCE and the induction year (Fig. 3.4). In Fig. 3.4, the position of the elements in each activity system has been moved to accommodate the potentially shared object between the multiple activity systems involved.
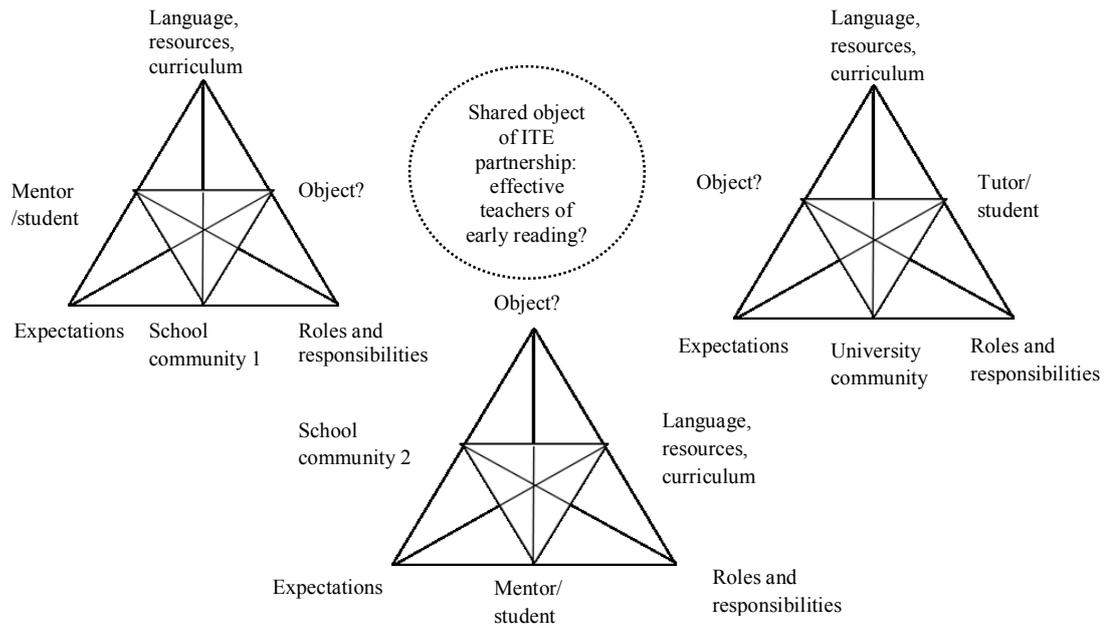
Fig. 3.4: Multiple activity systems involved in the student teacher experience of learning to teach early reading

The concept of multiple activity systems equated well to Engeström's third-generation model (Fig. 3.2) and so indicated that, as well as the individual's own object, there may be three levels of object within and between university and school activity systems: the raw material, in this case the student teacher or pupil; the collective object of an activity system; and a potentially shared object between activity systems (see examples in Table 3.3). Some attempts to label these objects were initially considered as part of the research design but it became clear that one part of the research was to find out more about the objects of the different systems and so these could only be tentatively assigned before the research took place. The subject of each activity system also moved between the mentor, tutor and student depending on the perspective taken. These differences are explored in Chapter 5.

Table 3.3: Possible subjects, objects and outcomes held by the university and schools, with a focus on early reading

Activity system (AS) elements with possible labels in brackets	Possible examples of subjects and objects
Subject	Student teacher/NQT or tutor or mentor.
Object 1 Raw material (individual)	Pupils or student teacher/NQT.
Object 2 Held by the AS (knowledge, understanding and practice)	Pupils meet national expectations in reading. Student teachers/NQTs become confident and effective teachers of early reading.
Outcomes (confidence and effectiveness)	Pupil grades. Schools are judged to be effective. Qualified Teacher Status gained (QTS) and performance as NQTs. University is judged to be effective.
Object 3 Shared between AS	The student, ITE provider and school work together and change practice for teaching early reading/ITE. (N.B. this element was maintained as something that might emerge in analysis but this study aimed to understand the difference in perspectives and practices in each system in order to analyse the impact of these on students' learning. Therefore, this research was not designed to provoke a shared object through problem-solving dialogue as initially proposed by Engeström).

3.2.6 Application of the activity system elements

In case study using activity theory, Langemeyer and Nissen (2005: 193) argued that 'the generation of empirical methods and explanatory theoretical assumptions was intertwined'. In this study, the activity system elements, once defined (Tables 3.2 and 3.3), gave a focus for the types of data that would be needed to provide an in-depth picture of each activity system. They were used as a starting point for the selection and design of data collection methods and tools (Table 3.6) and as initial broad categories with which to analyse a range of data, an approach derived from previous research using activity theory (Jaworski and Potari 2009; Boag-Munroe 2010; Jahreie and Ottesen 2010; Sannino 2010). In addition, the use of activity theory to provide a conceptual and analytical framework highlighted the importance of examining 'contradictions' and 'disturbances' within and between the elements of the activity systems (Engeström 1987, 2001, 2008; Johannsdottir 2010; Nummijoki and Engeström 2010). Disturbances are actions or verbalised ideas that do not conform to the expectations or rules of an activity system:

> Disturbances are unintentional deviations from the script in the observable flow of interaction in the ongoing activity. (Nummijoki and Engeström 2010: 57)

In this study, noticing disturbances in the activity systems through the actions and explanations of students, tutors and mentors could point to larger contradictions at work. Contradictions are caused by the need to respond to changes in outside influences (Engeström 2001; Johannsdottir 2010). They are systemically embedded and arise over time, thus 'historically accumulating' (Engeström 2001: 137). Primary contradictions are present in all elements of the activity system and arise from the 'use value' and 'exchange value' of commodities (Engeström 2011: 77). In education, this may be the contradiction between teaching as a socially motivated activity to help pupils and a financially motivated way of earning a living. An example of a primary contradiction for teachers or student teachers might be spending time word-processing planning to satisfy the requirements of their school organisation when it could be better spent working with pupils. Secondary contradictions occur between components of the activity system where one element changes and others do not. A potential example of this in the field of early reading could be the introduction of new resources for teaching phonics, if the division of labour has not been reconfigured to facilitate their use. Contradictions between elements can create a double bind for members of the system who are faced with competing demands, but contradictions can also act as a catalyst for change. Tertiary contradictions arise between old and new forms of practice as the activity system changes over time, and quaternary contradictions are visible between neighbouring activity systems which might involve the activity system remaining the same whilst the demands on it have changed and require change (Engeström 2008, 2011; Johannsdottir 2010). An example of both tertiary and quaternary contradictions might be seen in the changing role of schools in university ITE partnerships and could result in expansive learning as these systems reconfigure to work together.

Contradictions and disturbances were therefore added as a potential category for analysis. Key areas of interest included the way in which the collective object held by the schools or university might compete with student teacher goals (Smagorinsky et al. 2004; Spendlove et al. 2010; Douglas and Ellis 2011) and the actions expected of the subjects within an activity system which might become disconnected from their individual objects or those of the system as a whole (Kaptelinin 2005; DeVane and Squire 2012). Another important influence of activity theory on the research design was

to include some consideration of the impact of history on the development of the activity system as a whole and its purpose over time, as well as the cultural expectations embodied in practice and artefacts (Langemeyer and Nissen 2005). In the case of this study, this could be achieved by 'grounding the analysis in a particular time, place and sociocultural context' (DeVane and Squire 2012: 250). This meant some attention must be paid to any features of learning to teach reading which arose from changes to teaching reading within an activity system or the wider influences around it. Teaching materials, reading schemes and school policies might demonstrate changing cultural expectations from different periods as well as the local and national context for teaching reading. University guidance might also reveal contradictions between the systems of the school and university.

3.3 Insider research and ethical considerations

3.3.1 Insider research

One ethical consideration particular to the nature of this project was the position of the researcher at the time of the study. The research took place at the university where the researcher had worked for eight years and within a department that the researcher had left the year before the research commenced. This identified the work as 'insider research' (Sikes and Potts 2008; Atkins and Wallace 2012). Possible problems could arise if the researcher found negative information about the students' experiences at the institution where she was still employed. There was also the potential for increased researcher influence as the students and mentors might have responded to the researcher differently as a member of staff at the university (Smyth and Holian 2008; Atkins and Wallace 2012; Clegg and Stevenson 2013). The research began with a partly established theoretical stance based on the researcher's previous experience (Drake and Heath 2008), so there was the additional danger of bias, distortion or assumptions based on previous knowledge and experiences of the PGCE route, the course content and tutors.

From the beginning of the project, any potential concern that the research would set out to 'judge' the schools, mentors or tutors was addressed through verbal explanation of the focus and purpose of the research and the anonymity of information about the schools and participants. It was made clear that if the research uncovered problems with

mentors or tutors, other than issues of safeguarding, the researcher would not be able to intervene and any issues with student practice observed or explained to the researcher would not be shared elsewhere but anonymised and used as data in the research. In discussion with mentors and students, the researcher was transparent about the nature of the research as a project towards a doctoral qualification but also shared her previous work history and personal interest in the subject of ITE for early reading. This meant that the participants understood the potential value of their contribution to knowledge in this area of ITE and to the workings of the university and schools' ITE partnership without the researcher making inflated claims about the impact of this knowledge in the future.

Through informal contact with colleagues before the project commenced, the PGCE university team understood the motivations for the research and they also wanted to know more about the students' experiences of becoming a teacher of early reading. They were hopeful that the research could offer some insight into possible improvements to be made to the course and they trusted that as the researcher was a previous member of the team, there was a shared understanding of the constraints of ITE which would result in a fair and balanced picture. The university department's openness to the findings and trust in the researcher, built on their previous working relationships, meant that there was support for an accurate representation of the research findings. However, the researcher still had to be aware of how best to share and report findings in a balanced and constructive way following the research. If any findings did raise negative issues experienced by the student teachers, these were reflected factually but care was taken to share all contextual influences.

In order to address the impact of the researcher's position on the research participants, careful verbal and written explanations were given at each stage to distance the researcher from the PGCE course. Claiming to adopt a removed and neutral stance is to some extent counter to the role of an interpretive researcher (Smyth and Holian 2008; Israel 2015), but students and mentors were made aware that the researcher was not part of the assessment or tutor team for the students at the university and, in ongoing interactions in school, the researcher did not attempt to answer questions or explain issues related to the PGCE course. However, the participants' responses still demonstrated a particular awareness of their role as learners compared to the tutor interviewer which offered useful insight but may also have limited certain elements of

discussion as the power relationship was unequal (Cohen et al. 2011; Clegg and Stevenson 2013).

In the interviews and observations with the students, the researcher was careful not to assume the role of an assessor but to encourage the participants to discuss and reflect on their teaching with limited prompting. This relaxed interaction meant that the students at least appeared to be calm, honest and comfortable in their post-observation interviews. The researcher's 'insider knowledge' was advantageous because their familiarity with the language and circumstances of the case encouraged openness in the participants (Atkins and Wallace 2012) and allowed access to the settings (Sikes and Potts 2008; Atkins and Wallace 2012). This also helped to make the research design sensitive to the participants' circumstances so the methods of data collection were focused on everyday practice for the student teachers and their host schools. The 'bureaucratic burden' on the students was not increased by the research methods and the timings of interviews and observations were arranged flexibly to suit the normal school routines and minimise disruption (BERA 2011: 7).

As outlined earlier, ITE for early reading has been a focus of scrutiny in all universities in England and the research was partly motivated by concerns about student satisfaction with this aspect of their teacher preparation and the researcher's negative experiences as an NQT. The starting point for the research could, therefore, bias the interpretation or collection of data towards identifying problems or, as a university tutor, it was possible that the researcher would focus on the university role in ITE and look for positive impacts on student teacher learning. These potential issues were limited in the first instance by the design, which focused on the perspective of the student teachers, and the use of multiple sources to triangulate and clarify interpretations. Although tutor interviews might have added a new perspective to the study, the researcher chose to maintain a distance from the staff team. This allowed the researcher the opportunity to attempt to see the student experience through 'new eyes' and not have previous assumptions and interpretations reinforced by members of university staff.

The questions at interview were carefully structured to avoid leading the participants and to allow for open responses. Care was taken to consider interview responses in the context of a shared interaction and to include researcher comments or reactions as part of the interpretation (Freebody 2003; Roulston 2010). For example, if a participant

answered another question in the course of their response, their ideas were included in the analysis. If the researcher prompted or shifted the focus from the original question, this was also considered as a possible influence on the participant. Replicating the procedure for data collection and analysis and using set frameworks and tools helped to ensure that analysis was consistent and not selective to focus unrepresentatively on particular elements of the different cases. Improvements and difficulties in student practice were noted, as were factors which the participants cited as supportive or detrimental to their learning. Claims were checked rigorously against the data within each case and across cases to prevent the research from presenting a narrative based on assumption or over-inflated claims, and isolated findings were made clear to the reader. Alternative interpretations were considered in the analysis and sufficient raw data were included so that the reader could judge the validity of the researcher's claims. In the analysis and discussion of findings, the researcher endeavoured to be reflexive by considering the influence of prior assumptions and experience on the interpretations made and the interactions taking place during the research (Greenbank 2002; Roulston 2010; Clegg and Stevenson 2013).

3.3.2 Informed consent and right to withdraw

All the expected ethical considerations for educational research informed by BERA (2011) and the university research ethics policy (Bishop Grosseteste University 2015) were addressed during the planning and execution of this project. Firstly, the nature of the project meant that several layers of informed consent were needed, not only so that the direct participants in the study were informed but so that university and school staff understood that the research was taking place and the aims and purposes behind it. As an insider researcher, it was especially important that colleagues and the wider ITE partnership of the institution were well informed in order to uphold the reputation of the university and maintain good relationships with schools. By being transparent about the focus and purpose of the research, it was hoped that any concerns about it could be allayed and the researcher would not be vulnerable to criticism. This process began by gaining approval from the university research ethics committee to conduct the research and then access to the PGCE cohort was granted by the Head of Department. In addition, members of staff on the PGCE were informed so that they were aware of the research taking place and could facilitate the recruitment of participants. However, no details of the schools or student participants were shared with university staff.

All lower primary (3–7 years) PGCE students were informed about the project through their virtual notice board and a verbal announcement following a lecture. The researcher addressed the cohort in person being mindful that the longitudinal nature of the study would require a relationship with the participants involved and that they should have the opportunity to judge from the outset whether they were happy to work with her. The timeline and methods of data collection, measures taken to preserve anonymity and confidentiality, and the position of the researcher as an outsider who did not assess student progress were made clear. It was explained verbally and in writing that the participants were free to withdraw from the project at any time. Following the lecture, the students were given written information and asked to sign and return a consent form if they wished to be involved. The form included some details of their age and previous experience so that in the event that there were too many volunteers, the researcher could select a range of participants based on this information. This process of selection was explained to the students from the outset so they were aware that they might not be selected. All volunteers were informed by email and, those selected, invited to an initial interview. The final layer of consent was sought once the student teacher participants were allocated school placements. The researcher contacted each school and spoke to the head teacher and the individual mentors concerned. This gave the researcher the opportunity to explain the research and answer any questions. Telephone contact was followed up with information letters and permission forms and arrangements were made with the mentors and students to agree convenient times to visit.

In all cases, the right to withdraw and means of doing so through telephone or email communication was made clear. Although adults, the student teachers were taking part in an extremely high-stakes ITE course and could have been concerned about the impact of their performance or ideas expressed during the research on the success of their PGCE. It was important to ensure that the student participants did not feel coerced into taking part in the research and felt free to end their involvement at any point (BERA 2011). For this reason, even after giving informed consent, they were asked at each stage if they were still happy to continue with the research.

3.3.3 Safeguards, confidentiality and anonymity

As the project required work with student teachers in classroom settings, normal safeguarding considerations were observed but additional thought was needed about issues of confidentiality when collecting data in schools and the researcher role as a member of university staff. University and school staff and students were made aware that if either the research participants or the children in their care were subject to safeguarding concerns, which came to light during the study, these would be acted upon following the guidance for schools and the university. The researcher was mindful that, although children were not the focus of the research, interaction between student teachers and their pupils would be an important part of lesson observations during the research. The student teachers were also likely to discuss the children's progress and record-keeping and reflections on children's work would form part of the documentary survey. Consequently, the researcher could become party to sensitive and personal information about individual children and therefore had responsibility to both the direct and indirect participants in the research (BERA 2011). Confidentiality about what was seen and discussed in school beyond the focus for data collection was essential, as was making any data anonymous by removing identification of individual pupils, the school and staff members referred to as well as the student participants. In the project report, names of participants and schools were fictionalised. The researcher also ensured that no characteristics which made the participants or schools easily identifiable were included in the findings (Israel 2015) so that individual and school anonymity was not compromised.

3.4 Organisation

3.4.1 Pilot

The project as a whole began with a pilot study of data collection methods during school visits to three PGCE students in the final term of the course which was followed up by one pilot NQT visit in the following term. This included trialling semi-structured interview questions with student teachers and mentors, making chronological lesson observation notes and comparing these to themes from the literature and the 'Classroom Literacy Observation Schedule' (Louden et al. 2005), and scrutinising available documentary evidence using a pro forma of prompt questions. All forms of pilot data were also used to trial different methods of analysis and coding and so provided a good

opportunity to begin to develop this process before the main phase of data collection. After the pilot, some small adaptations were made to the questions at interview in an attempt to find out more about the students' beliefs about reading and compare these with the school ethos as communicated through the mentor interview and documentary evidence. The possibility of replacing the face-to-face mentor interview with an email open questionnaire or telephone interview was added to the planned methods in case mentors were unavailable during the visit. Initial categories for coding and a sequence of analysis were developed and then refined during the main study.

3.4.2 Main study

The main phase of data collection followed after the pilot with participants from a new PGCE cohort and ended as they completed their first term as NQTs. For most of the students selected, this process was between September 2013 and December 2014 including one starting point interview followed by one school visit per participant in each placement. They were then visited in their NQT school in November 2014, apart from one who had an additional re-sit placement at this point and was visited in her first post in March 2015. The data collection methods were repeated in all phases with the same participants and their mentors in each location. Mentor involvement varied according to their availability for interview. The data collection process is simplified in Table 3.4.

Table 3.4: Timeline and data collection

Timing		Sample
Pilot study May 2013– October 2013	Pilot interviews with student teachers and mentors, lesson observations and documentary analysis	3 PGCE students 1 NQT 2 mentors
Phase 1		
September 2013– October 2013	Participant selection Individual interviews on entry to the course	7 PGCE students
Phase 2	School 1	
November– December 2013	Lesson observation 1 Observation-stimulated student interview 1 Mentor interview 1 Documentary analysis 1	7 PGCE students 5 mentors

Table 3.4: Timeline and data collection continued

Phase 3	School 2	
February 2014–March 2014	Lesson observation 2 Observation-stimulated student interview 2 Mentor interview 2 Documentary analysis 2	7 PGCE students 5 mentors
Phase 4	School 3	sample
June–July 2014	Lesson observation 3 Observation-stimulated student interview 3 Mentor interview 3 Documentary analysis 3	7 PGCE students 7 mentors
Phase 5	NQT or additional placement school	
	Lesson observation 4 Observation-stimulated student/ NQT interview 4 Mentor interview 4 Documentary analysis 4	6 NQTs 1 PGCE student 5 mentors
Phase 5 continued	NQT school	
	Lesson observation 5 Observation-stimulated NQT interview 5 Mentor interview 5 Documentary analysis 5	1 NQT 1 mentor

3.4.3 Location

The university workplace of the researcher was purposively chosen as the location of the ITE partnership studied because it offered the opportunity to understand the experiences of student teachers in a familiar local context. This 'insider research' presented benefits and challenges, as well as the potential to inform future work at the university. Although all universities structure and organise their PGCE courses in slightly different ways, each PGCE route must adhere to regulations set out by the DfE (Adewoye et al. 2014) and meet expectations outlined by Ofsted (Ofsted 2015). Consequently, although the location of the research could be considered to be unique, provision also had much in common with similar ITE providers in England at the time and so might provide findings of value to other ITE contexts.

The schools where the student teachers carried out their assessed school experiences were allocated by the university partnership office on a termly basis and therefore were a random element to the study. The schools used to provide placements were required to be graded at least 'Good' by Ofsted and to have a member of staff who had accessed mentor training at the university. Several of the schools agreed to host the student teacher on two occasions during their PGCE course so that some students began and

ended their PGCE in the same school environment, although this was not always with the same class. Some participants also gained their first NQT post in a school where they had been a student. The activity systems of these different locations for learning are analysed in Chapter 4.

3.4.4 Participants

The selection process was influenced by Stake (2008: 130) who argued that a case (or cases) should be chosen in an attempt to provide balance and variety. Eight participants were initially chosen from a convenience sample of 30 volunteers (Cohen et al. 2011). The intention was to include a balanced profile of student gender, age, ethnicity, previous careers and undergraduate education. In practice, only one male student and two students aged over 25 volunteered. One participant in the 35–40 age range was selected but later withdrew from the study. She was also the only volunteer who was not 'White British' and who spoke English as an additional language. Six of the students selected were therefore in the 21–25 age range and female and one male aged 26. They were all from 'White British' backgrounds and had varied previous experiences of employment and education (Table 3.5).

All volunteers came from the cohort of 150 students who had elected to train to teach children between three and seven years of age. This ensured that any placements allocated during the year would require them to teach the early stages of reading in Early Years Foundation Stage (Nursery and Reception) and Key Stage 1 (Year 1 and Year 2) classes. Other in-depth collective case studies in education have used between four and five cases to offer enough information and variety but also remain manageable when multiple data gathering methods are used (Cross 2009; Wilcox and Samaras 2009; Graves 2010). In this study, eight students were initially selected to guard against sample mortality during the demanding PGCE and NQT years as the researcher was aware that a small number of PGCE students each year usually withdraw from the course in the first term. The school-based mentors, interviewed during the research, were chosen because they were responsible for the student participants in the study. As their input was primarily used to triangulate data about school activity systems, it was not considered necessary to gather personal data. All seven participants, who remained in the study, are identified using pseudonyms (Table 3.5).

Table 3.5: Participant background

Name given for the study	Age on entry	First degree	Previous work and school experience	Links with teachers
Ben	26	Vocational. Small education component.	Retail chain manager (full-time). Volunteer in a primary school weekly for a year.	Several extended family members in educational roles but not in primary sector.
Chloe	21	Education focused.	Volunteer in school and school experiences as part of degree (approximately two months in total).	Several friends and relatives are primary teachers.
Hannah	22	Education focused.	School experiences as part of degree (approximately two months in total).	Several family members are primary and secondary teachers.
Laura	22	Social Sciences. No education component.	Work in retail and volunteer in Reception class one day per week for a year.	None known.
Natalie	25	Arts. No education component.	Arts-based career (full-time). Required ten-day pre-course school experience only.	Parent a retired primary teacher.
Sarah	23	Education focused.	Career in childcare for two years and school experiences as part of her degree (approximately two months in total).	No current contact with teachers.
Stephanie	21	Sciences. No education component.	Childcare with school-age children (part-time) and required ten-day school experience.	None known.

3.5 Methods: rationale and design

3.5.1 Links between methods and the conceptual and analytical framework

Methods were chosen which could, in the most part, provide in-depth qualitative data from each case, reflect the participants' own perspectives and offer information about each activity system. In addition to this, with the aim of offering a comparative measure of student practice, the 'Classroom Literacy Observation Schedule' (CLOS) (Louden et al. 2005) was used to analyse observed teaching (see sections 3.5.4 and 3.7) but the focus remained on drawing together an interpretive account of any connections between activity systems and students' knowledge, understanding and practice for teaching early reading and any possible common trajectory of development. In activity theory informed research the design and application of methods are particularly closely aligned with the explanatory theoretical framework (Langemeyer and Nissen 2005). Fig. 3.5

shows the links between the overarching conceptual and analytical framework and the choice of methods used.

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Interpretive

Each student perceives the experience of learning to teach individually. The researcher can only 'know' about the student teachers' experiences through their own explanations (Geertz 1973; Martin 1993; O'Donoghue 2007; Morehouse 2012).

⇩

Method: Semi-structured interview allowing for students to discuss experiences. Documentary evidence such as students' own planning and reflections.

Sociocultural

Interaction is the main method of student teacher learning. Therefore, knowledge is needed of the learning environment and community and the ways in which learning is facilitated. Student teacher practices may offer further evidence of changes in their understanding (Vygotsky 1978; Louden et al. 2005; Hagger and McIntyre 2006; Edwards 2010).

⇩

Methods: Lesson observation and post-observation discussion with student, comparison of practice in different locations using criteria for observation, mentor interview about school ethos and practice.

Cultural-historical

The practices, tools and expectations of schools and university activity systems vary and may have tensions between one another. These may be a result of historically accumulated roles and practices (Engeström 1987, 2001; Cole and Engeström 1993).

⇩

Methods: Mentor interview and student interview may reveal tensions. Documentary evidence may reveal changes and tensions in the activity system elements e.g. use of schemes, planning and set tasks.

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Fig. 3.5: Links between conceptual and analytical framework and choice of methods

3.5.2 Foci for data collection

Choosing a collective case study approach did not dictate the methods used as a case study commonly uses several methods which offer the benefits of greater depth of triangulation. However, it is generally agreed that case study research should be contemporaneous and include qualitative detail (Bassey 1999; Stake 2008; Yin 2009; Cohen et al. 2011; Creswell 2013). Stake (2008: 125) suggested that the researcher should gather data on:

> the nature of the case, particularly its activity and functioning, its historical background, its physical setting, other contexts such as economic, political, legal and aesthetic, other cases through which this case is recognised and those informants through whom the case can be known.

This identified the importance of researching the physical and cultural contexts and previous experiences, or 'history', as part of each case and linked well to activity theory.

In order to keep the integrity of each individual case within the collective case study, it was necessary to gather data about each participant and their school experiences individually. O'Donoghue (2007) argued that interpretive research should focus on methods which are unobtrusive and naturalistic and suggested that main methods of data collection are likely to be semi-structured interview, examination of documents and records and on-site observations, whilst Bassey (1999: 69) asserted that the choice of research method should be determined by the research questions. In this study, by using the existing framework of activity system elements (Engeström 2001), newly labelled for this study (Table 3.2), it was possible to identify ways in which data could be collected in order to consider the influence of all the elements of each activity system (Table 3.6). This process highlighted several significant sources of information: the student teachers themselves, their classroom mentor and documentary evidence from both the university and school settings.

Table 3.6: Data collection methods for activity system elements

Activity system elements relabelled	Possible sources of evidence and methods of data collection
Student (subject)	Initial interview to gather biographical details and starting point perspective
Object	Interviews with student and mentor, classroom observation
University or school community	Interviews with student and mentor, university-set tasks, handbooks, taught programme materials, school documents, policy, plans, schemes
Expectations	Interviews with student and mentor, classroom observation, university-set tasks, handbooks, taught programme materials, lesson feedback, school planning, policy, placement reports
Roles and responsibilities	Interviews with student and mentor, classroom observation, university-set tasks and handbooks, lesson feedback, school timetables, planning, policy
Language, resources and curriculum	Classroom observation, interviews with student and mentor, university-set tasks, handbooks, taught programme materials, school plans, schemes and assessment documents

3.5.3 Interviews

Semi-structured interviews were chosen as these were considered more likely to provide rich data than questionnaires or surveys and are particularly appropriate when gathering data based on thoughts and experiences (Gillham 2000). For example, using a combination of semi-structured interviews, on-site observation and focus groups, Edwards and Mackenzie (2005) were able to create detailed case studies which focused on the link between individual adult learners' changing sense of agency and their different levels of participation and engagement in a community learning setting. This personal and interpretive approach allowed for the participants to explain not only what they gained from their learning context but also what they contributed to others and to offer links between their learning behaviour and their previous life experiences, as well as the behaviour and expectations of their families and communities. The semi-structured interview was particularly useful for the study presented here as it combined standard questions which could be compared over the course of the PGCE as well as offering flexible questions and prompts which were responsive to individual circumstances and observed practice (Freebody 2003; Cohen et al. 2011). The first interview took place in the first three weeks of the PGCE course before the participants began to work in schools. It followed a relaxed format in order to establish a comfortable relationship with the participants and to find out about their expectations and understanding before they had been influenced by ITE (Table 3.7).

Table 3.7: Initial interview schedule

Questions (prompts in italics)
Introduce self – *was a primary teacher and a PGCE tutor, really want to know what will help so it is important that you are honest and realise I am not judging you or looking for a right answer. I genuinely want to know what it is like from the point of view of different student teachers…*
Can you tell me a little bit about yourself as a person, where you are from, your family…? Can you tell me a little bit about your educational background and your experience of work so far and why you chose to join the PGCE?
How do you feel about reading? *Is it something that is important to you?* What is your experience of teaching reading so far? *What do you think makes an excellent teacher of reading?*

Table 3.7: Initial interview schedule continued

Questions (prompts in italics)
How do you think the PGCE will help you learn to teach reading?   *What do you think will help you the most?*   *What do you think you will find the most difficult/what are you concerned about?*   Is there anything else that you think I should know about you as we begin this project together?   Do you have any questions about the project?

The initial interview was followed up with four lesson observations and observation-stimulated interviews, one in each school placement and one in the school where the participants gained their first teaching post as NQTs. An interview with the school-based mentor was also part of the four school visits. The mentor interview provided a way of triangulating data gathered from the student teacher and the documentary evidence, with a particular focus on the activity system for teaching reading in each location.

It was possible that the student teachers might have difficulty explaining their teaching decisions and beliefs about learning as they might take such socioculturally influenced behaviour for granted. One way to avoid this was to use an observation as a starting point for the interview (Rubin and Rubin 2005). Some previous research with teachers and student teachers used either videoed lessons as a starting point for semi-structured interviews (Cremin and Baker 2010; Haggarty et al. 2011) or observed lessons followed up by a semi-structured interview which discussed the participant's perspective on their practice in the lesson as well as their learning more generally (Brown and McIntyre 1993; Fisher 2001; Edwards and Protheroe 2003; Mutton et al. 2010). Observation followed by interview offered the chance for the participant and researcher to link the participant's actions with their underlying beliefs and ideas and avoided false reconstruction of events (Brown and McIntyre 1993). Edwards and Protheroe (2003) also used post-lesson observation interviews to explore the student teachers' understanding of teaching and learning and the factors which helped this to develop. They were able to analyse interview responses by common themes to find out what the student teachers felt they were learning about teaching and what they were learning from their mentors.

In some cases, previous research with teachers required them to narrate each aspect of their teaching whilst replaying a video or audio recording of the lesson or looking at a detailed written record (Calderhead 1981; Stough 2001; Reitano and Sim 2010). In this case, broader questioning allowed the student to more generally explain the thinking behind their teaching practices and interactions and gave the researcher the opportunity to draw out information about how these decisions had been influenced by the activity system elements within the school or university or a previous setting. It was also a way of identifying any possible difficulties or achievements noted by the participant in their teaching and the process of learning to teach reading. It was important to consider that the student teachers might find it difficult to reflect on all aspects of their teaching immediately after a lesson as their response might initially be clouded with emotion. In order to balance the opportunity to discuss the lesson whilst fresh in the student's and observer's minds with the attempt to maintain validity, a summary of themes from analysis was emailed to the participant a few days later so that they could add any comments or later reflection. This was in line with the activity theoretical perspective that research participants should be viewed as active subjects rather than objects of research (Langemeyer and Nissen 2005).

The student teachers were first asked questions based on their lesson observation, including 'What were the successes and difficulties in that lesson? What is your main focus for the children's reading? Why did you approach it like that?' Then the question and prompt clusters moved in sequence through a focus on school approaches to reading, student confidence and factors affecting this, adaptations and knowledge transfer between different systems (Table 3.8). This 'informant' style of questioning was used to allow opportunities for the participants to comment in ways that the researcher might not have anticipated (Atkins and Wallace 2012).

Table 3.8: Student teacher/ NQT interview schedule

Questions (Prompts in italics)	Changes/additional questions for NQTs
From observation What were the successes and difficulties in that lesson? *For you? For the children's learning?* What is your main focus for the children's reading? Why did you approach it like that? Where did the ideas for planning and resources come from? How did the lesson compare to what you had planned? *When you did this, what were you thinking? Would you change anything?*	What other things do you do to promote/support/teach reading in your classroom?

Table 3.8: Student teacher/ NQT interview schedule continued

Questions (Prompts in italics)	Changes/additional questions for NQTs
Can you tell me a bit about how the school approaches reading? *Are there any particular issues or aspects that the school is working on at the moment? What schemes and resources are used? What are the arrangements for assessment?* What are you learning about teaching reading in this placement? What do you think is most important in your teaching? *How have you come to think this? What or who has helped you?* Is it what you expected? *How does it link to your reading/sessions at university/work in previous school?* What would you like to learn from your mentor?	What have you learned about teaching reading since you started your NQT year? What do you think is most important in your teaching? How did your experience of the PGCE help to prepare you (in school/in university)? What else could have helped to prepare you more? What sort of teacher of reading do you want to be now you have your own class?
How confident are you feeling about teaching reading at the moment? What are you working on? Which bits are going well? What are you finding more difficult? What has helped or hindered you? *How has your mentor or other staff helped you? What is she/he working on, what aspects of her/his practice need developing, how is her/his confidence, subject knowledge, differentiation?* How did you adapt to teaching reading in this school? What did the school do to help you adjust? Have you been able to use any ideas from other schools/higher education? Have you brought in any new ideas or tried things that don't fit with the school way of doing things? Is there anything else that you think would help you more? *Has she/he needed extra time/induction to a scheme or observing other teachers? Are there things she/he has found difficult to grasp e.g. terminology, pace, grouping?*	What has the transition been like to teaching reading as an NQT? What sort of changes have there been to how you teach reading and phonics? What sort of help have you needed? What other ways have you found to help you with this transition? Who or what has helped you the most?

The mentor interview followed a similar set of prompts in order to triangulate data gathered from a different perspective. It also included questions designed to find out about the school context, values and pedagogy and provide information about the influences on each student's developing practice but did not include reflection on the observed lesson unless the mentor also happened to be present (Table 3.9). Both the

semi-structured interview formats were trialled and altered during the pilot phase and then used consistently through the data collection phases with slightly adapted questions in the NQT first term (Tables 3.8 and 3.9). New questions specific to the NQT year were also added for the final set of data collection to gather information about the students' experiences of transition and support.

Table 3.9: Mentor interview schedule

Questions (Prompts in italics)	Changes/additional questions for NQT mentors
Can you tell me a bit about how the school approaches reading in general? Are there any particular issues or aspects that the school is working on at the moment? What are your priorities for teaching reading in the classroom? What would you like him/her to learn from you? *schemes, policy, co-ordinator, training, phonics, guided reading, differentiation, assessment, links with parents*	What are your priorities for him/her to take on as an NQT in the school? What would you like him/her to learn from you?
How is he/she coping with taking on these approaches? Why? What have you helped her/him with? What do you think has helped or hindered her/him? *Has she/he needed extra time/induction to a scheme or observing other teachers? Are there things she/he has found difficult to grasp e.g. terminology, pace, grouping?*	What sort of things does the school do to induct the NQT into managing this?
What are the successes and difficulties in her/his teaching of reading at the moment from your perspective? *What is she/he working on, what aspects of her/his practice need developing, how is her/his confidence, subject knowledge, differentiation?*	
Has she/he brought in any new ideas or tried things that don't fit with your way of doing things? Is there anything else that you think would help her/him more?	

The main difficulties arising from the use of interview were that transcription and analysis of interview data could be difficult and extremely time-consuming for one researcher to manage and that the process of transcription was vulnerable to misinterpretation and selective analysis (Gillham 2000; May 2011; Atkins and Wallace 2012). In order to make the data analysis as manageable as possible, ongoing

transcription and analysis was a vital aspect of the study as well as allowing the opportunity for respondent validation during the year and keeping the participant number small. With an unequal relationship between the researcher and student teachers, there was the possibility of participants giving answers that they anticipated the researcher would want to hear (Atkins and Wallace 2012). This was overcome to some extent by the fact that the researcher worked on a different programme at the university and so was not part of the participants' PGCE course. However, researcher influence could not be entirely avoided in a sequence of overt face-to-face interviews and observations and the impact of this was considered during analysis. Further measures taken to provide an authentic account of interview and observation are discussed in Sections 3.3 and 3.6.

3.5.4 Observations

Observation of literacy lessons has been used as a method of data collection in a number of studies of effective literacy teaching in the UK and abroad (Wray et al. 2000; Pressley et al. 2001; Bogner et al. 2002; Louden et al. 2005; Topping and Ferguson 2005). However, the purpose of the observations in this research study was also to act as a starting point for discussion about how and why student knowledge, understanding and practice for early reading was developing. The 'Classroom Literacy Observation Schedule' (CLOS) developed by Louden et al. (2005) was adopted as one framework for analysing the observations of student teachers. This instrument was designed for an Australian study of 200 early literacy teachers and categorised effective literacy teaching behaviours under 'participation, knowledge, orchestration, support, differentiation and respect' with sub-dimensions in each category (Table 3.10). Applying these categories after the observation took place provided the researcher with opportunities to compare individual students' practice over time in conjunction with their interview responses and to consider the impact of the activity systems of their different placements. The way in which the CLOS categories were used with activity system elements in analysis and how possible limitations were addressed is explained in Section 3.7.

Whole class and group sessions, including shared reading, guided reading and systematic synthetic phonics, were observed as they were more representative of the demands of daily teaching than one-to-one reading practice with individual children.

Where possible, the student teachers were observed teaching lessons in which they enabled children to apply their phonic knowledge and language comprehension such as literacy, or English, and guided reading. However, in classes where children were focusing on the early acquisition of phonic skills, phonic sessions were observed instead of, or as well as, other reading teaching. Each observation visit was arranged flexibly to accommodate the organisation and timing of different reading-related sessions in the school day so that the observed sessions took place as they would under everyday circumstances.

It was not possible or desirable for the researcher to observe covertly, and to participate fully could influence the observations (Cohen et al. 2011). For this reason, the researcher became a non-participant observer in the classroom, a common role for educational researchers (Angrossino and Mays de Pérez 2003) and part of normal practice between mentors, tutors and student teachers in school. These observations were separate from the observations used to formally assess the student in the attempt to minimise the power difference between student and researcher so that the participant was more likely to be open and honest in their post-observation interview and acknowledge any difficulties or barriers to their success. For the purpose of this study, videoing the lesson was considered to be too obtrusive and out of the ordinary for the student teachers and therefore likely to influence their teaching. Instead, field notes were taken during the observations to record events, actions and interaction in chronological order and provide sufficient detail from each lesson to stimulate detailed discussion about the students' decision-making and the influences on their practice. As using field notes can result in the observer overlooking elements of the lesson or selectively noting features of interest (Cohen et al. 2011), the researcher focused on attempting to factually record what happened in the lesson, including noting what the student teachers said and pupils' verbal and non-verbal responses. Because the observation was later used as a starting point for the interviews, this allowed the participants opportunities to explain and clarify events and intentions in the lesson which helped to balance any observer bias or oversights.

Table 3.10: Classroom Literacy Observation Schedule (Louden et al. 2005: 189)

Participation	**Attention** Almost all children are focused on literacy learning. **Engagement** Children are deeply absorbed in the literacy lesson/task. **Stimulation** The teacher motivates interest in literacy tasks, concepts and learning. **Pleasure** The teacher creates an enthusiastic and energetic literacy classroom. **Consistency** Strong literacy routines are recognised and understood by the children.
Knowledge	**Environment** Literate physical environment is used as a teaching resource. **Purpose** Children's responses indicate tacit or explicit understanding of the purpose of the literacy task. **Substance** The lesson/task leads to substantial literacy engagement, not busy work. **Explanations** Explanations of literacy concepts and skills are clear and at an appropriate level. **Modelling** Demonstrations of literacy tasks include metacognitive explanations. **Metalanguage** Children are provided with language for talking about and exemplifying literacy concepts.
Orchestration	**Awareness** The teacher has a high level of awareness of literacy activities and participation by children. **Structure** The environment is predictable and orderly. **Flexibility** The teacher responds to learning opportunities that arise in the flow of literacy lessons. **Pace** The teacher provides strong forward momentum in literacy lessons. **Transition** Minimum time is spent in transitions or there is productive use of transitions.
Support	**Assessment** Fine-grained knowledge of children's literacy performance is used in planning and teaching. **Scaffolding** The teacher extends children's literacy learning through modelling, modifying, correcting. **Feedback** The teacher gives timely, focused and explicit literacy feedback to children. **Responsiveness** The teacher shares and builds on children's literacy contributions. **Explicitness** The teacher uses explicit word and sound strategies. The teacher makes explicit specific attributes of a text. **Persistence** The teacher provides many opportunities to practise and master new literacy learning.
Differentiation	**Challenge** The teacher extends and promotes higher order thinking in literacy learning. **Individualisation** Differentiated literacy instruction recognises individual differences. **Inclusion** The teacher facilitates inclusion of all students in the literacy lessons. **Variation** Literacy teaching is structured around groups or individuals. **Connection** Connections are made between class and community literacy-related knowledge.
Respect	**Warmth** Welcoming, positive and inviting classroom is focused on literacy learning. **Rapport** Relationships with the children support tactful literacy interventions. **Credibility** Respect for the teacher enables her/him to overcome any challenges to order and lesson flow. **Citizenship** Equality, tolerance, inclusivity and awareness of the needs of others are promoted. **Independence** Children take some responsibility for their own literacy learning.

3.5.5 Documentary evidence

Documentary evidence is a common element of case study data (Bassey 1999; Stake 2008; Yin 2009) and can include official records or personally generated, less formal, information (Hodder 2003; McCulloch 2012). In previous research studies, mind maps, drawings, written reflections or journals have been used to collect the ideas and thoughts of student teachers (Richards 2006; Ellis 2007a; Hobson 2009; Anspal et al. 2012). E-journals, for example, have been used effectively when large numbers of participants working across the UK have been involved (Hobson 2009) or even when smaller groups of student teachers were learning in an environment at a distance from the researcher (Richards 2006). However, in this case, the researcher was familiar with the high demands of school planning and preparation and written assessments placed on the PGCE students and wanted to guard against participant attrition. Therefore, this study did not require the student participants to complete any extra paperwork or written documentation that would add to their workload. Instead, it was decided that existing written reflections, planning and assessment information usually kept by each student as part of their school placement would offer a good range of additional data. There were also records of lesson observations and feedback from the class teacher mentor, university tutor and other colleagues which could offer information about the possible conflicts and collaborations between the different activity systems of schools and the university, as well as co-authored documents such as mentor meeting logs and target-setting information. Although only some of the documentation offered a reading focus, specific observations, planning and assessment in this high-priority area were available and provided a rich source of individual information about the learning process.

In each school visit, the researcher took opportunities to examine materials that the school had chosen to share with the student on the subject of teaching early reading. Sometimes student teachers kept policy documents or were given information from staff training. These gave some insight into what the schools might consider important for the students to know. Where possible, information about the reading and phonics schemes was gathered and any school planning and assessment formats shared with students were examined. The researcher also made notes about the learning environment that the student was working in, noting the reading areas and displays to gain further understanding of the activity system and its distinct view of teaching

reading. A prompt pro forma was devised to assist with data collection (Table 3.11). In order to find out more about the influence of the university and how university expectations for teaching reading were conveyed, the documentary evidence analysed also included placement handbooks and university-set tasks with a reading focus, as well as taught programme materials made available to the student during university sessions including seminar PowerPoints and hand-outs. Of course, texts cannot be relied upon as a true representation of events or interactions (Hodder 2003; Cohen et al. 2011) but in this case they offered a useful perspective on the personal interpretations and experiences of the mentor, tutor and student teacher and a further opportunity to triangulate what the mentors and students said about the ways that they worked together (Scott and Morrison 2007; Cohen et al. 2011; McCulloch 2012).

Table 3.11: Prompts for documentary scrutiny during school visits

Activity system elements labelled	Prompts What data are there about?
Knowledge, understanding and practice (possible object)	The student's beliefs about reading. The student's knowledge/behaviour/practice for teaching reading.
Confidence and effectiveness (possible outcomes)	The impact/effectiveness of the student's teaching of reading. Their confidence in teaching reading.
School community University community	The staff and pupils, size, location, organisation, routines of the school. Interaction with tutors or peers from uni.
Expectations	Policy, ethos and expectations for teaching reading in this location.
Roles and responsibilities	Planning, preparation, teaching and non-teaching organisation, mentor conversations, timetable, assessment expectations, school-based tasks, tutor feedback.
Language, resources and curriculum	Strategies, scheme, resources, learning environment, language used by the student and particular to this school. How university materials are being used.

After the school visit, the researcher supplemented this information with available online data taken from DfE and Ofsted about school size, pupil population and external measures of effectiveness including national test results. These influences were later considered as part of the analysis.

3.6 Authenticity and generalisability

Researchers generally agree that although findings within cases may not be directly transferable, there is worth in identifying possible patterns or trends across cases as multiple case studies may provide deeper explanations and greater understanding by analysing similarities and difference (Stake 1995; Bassey 1999; Miles et al. 2014). In order to overcome potential issues associated with validity, it is essential for the researcher to provide enough personal information for the reader to decide whether to agree or disagree with the researcher's interpretations (Stake 1995, 2008). Not only are biographical details important but some acknowledgement of the researcher's self through explanation of their values is also required. Reflexive researchers should explain how the research may have contradicted prior expectations or beliefs and their thought processes during analysis (Stake 1995; Greenbank 2002; Stake 2008). Clegg and Stevenson (2013) highlighted that interview analysis in higher education research conducted by insider researchers is embedded in tacit ethnographic knowledge of the university system. They suggested that some discussion of additional researcher knowledge as a form of data and explanation of taken-for-granted perspectives could ensure that interviews are not falsely presented as neutral and isolated from the researcher's and participants' lived experiences. In the research presented here, the researcher's biography, personal motivation for the research and potential bias arising from previous experiences are made visible from the outset and have been highlighted, where relevant, throughout the study. In the analysis, presentation of findings and discussion, these issues are addressed by following the recommendations set out by Stake (1995: 87):

> Include accounts of matters the readers are already familiar with so they can gauge the accuracy, completeness, and bias of reports of other matters.
> Provide adequate raw data prior to the interpretation so that the readers can consider their own alternative interpretations.
> Describe the methods of case research used in ordinary language including how the triangulation was carried out, especially the confirmation and efforts to disconfirm major assertions.
> Make available, both directly and indirectly, information about the researcher and other sources of input.
> Provide the reader with reactions to the accounts from data sources and other prospective readers, especially those expected to make use of the study.
> De-emphasize the idea that validity is based on what every observer sees, on simple replication; emphasize whether or not reported happenings could or could not have been seen.

The data collection and analysis here was designed to provide an authentic account through factual accuracy and interpretive validity (Cohen et al. 2011). Ecological validity was preserved through the use of data collection in the everyday environment of the student teachers. The combination of data from interview, observation and documentary evidence offered the opportunity to triangulate evidence about each student and activity system by comparing a minimum of two vantage points (Gorard 2004). This triangulation allowed emerging interpretations to be 'tested' against data from these sources and therefore provided internal validity (Yin 2009; Cohen et al. 2011) which was further supported by the repeated methods used and comparison of analysis at each stage (Fig. 3.2). In order to try to avoid researcher misinterpretation or misrepresentation, respondent validation was sought (Cohen et al. 2011; Schreier 2012; Miles et al. 2014) by writing a narrative analysis based on the coded data at each stage and sending it to the participants for feedback.

One possible difficulty caused by the longitudinal approach was that repeated interviews and observations following the same format during the study might compromise the validity of participant responses as they might anticipate and perhaps change their responses or behaviour as a result (Cohen et al. 2011). The semi-structured nature of each interview addressed this concern as it prevented the participants from becoming overfamiliar with the interview questions. The lesson observation starting point for each interview was also different on each occasion and so this naturally enabled the researcher and participant to be responsive to the different circumstances in the interview. Another possible advantage of this approach was that repeated interviews and observations could allow the student participants to become comfortable with the researcher and therefore be more candid. The same relationship could not be created with the mentor participants. Mentors were usually seen for just one interview, although some were revisited if the students returned to the school for a later placement or as an NQT. Under most circumstances, they met with the researcher only once and had no previous connection so their responses might well have been influenced by their wish to present either themselves or their school in a certain light. One way to examine the authenticity of their responses was by searching for discrepancies between documentary data, student interviews and mentor comments. It was also important to explain the context and purpose of the research as a non-judgemental one in the hope that this might help the mentors to be honest about their views and practices.

3.7 Analysis

3.7.1 Alternative approaches

The analysis of interview, observation and documentary data can take many forms. Possible alternatives which were considered were grounded theory, qualitative content analysis and conversational discourse analysis (Table 3.12). The collective case study approach taken for the research was not ideally suited to a grounded theory analysis because it focused on experiences within one encompassing site with limited participants. This meant that one of the key principles of grounded theory (testing and re-testing codes in different locations until codes reached saturation) was not possible (Glaser and Strauss 1967; Birks and Mills 2011). Furthermore, the coding in this study was partly deductive, in contrast to the purely inductive principles of grounded theory, as it was influenced by and used alongside existing categories from activity theory (Silverman 2006, 2015). Grounded theory also involves constant comparative analysis and refocusing of data collection (Glaser and Strauss 1967). This study did not have the flexibility or scope to change the participants and focus as the data emerged. Instead, it began with the literature and worked within the activity theory framework to draw additional codes and themes from the data.

Another possible method of analysis was qualitative content analysis (QCA) (Schreier 2012). This approach is data driven, with coding emerging from the data, and can be case-oriented on a single or several cases (Schreier 2012). Content analysis originally focused on the analysis of text and can therefore be applied to interviews and written accounts (Silverman 2001). However, content analysis, even in its more recent qualitative form, lends itself to reduction of data and abstract coding. This could have been beneficial when working with large amounts of data in a cross-case analysis as comparison of coding and categories was possible (Schreier 2012), but in a small-scale interpretive case study, such an approach ran the risk of valuable detail and individual perceptions being reduced to abstract coding (Silverman 2006; Schreier 2012). To maintain the in-depth interpretive nature of the study, it was necessary to build a coding system that could reflect the 'messiness' of real people learning in situated contexts and allow for codes to overlap or even be specific to a single case (Miles et al. 2014). QCA focuses on what people say and what is present in the data and is better suited to answer factual 'what' questions, for example 'What support do students get when learning to

teach reading?' (Schreier 2012), rather than illuminating the different constructs and perspectives that the participants hold or why certain issues have been important to their learning.

Conversational discourse analysis (distinct from critical discourse analysis) stems from a belief that whilst using language, humans construct reality and it has commonly been used to analyse natural language in conversation rather than in research interviews (Silverman 2001). It might include identifying aspects which are missing and how the participants use language to define their experiences. This project could have been re-framed to focus on the conversations between mentors and students about their learning but this could have missed the wider influences on both parties and also the development of practice. The aim of the research was to find out more about what students did at different points in their ITE, what their thought processes were about these teaching decisions and how these were influenced by the activity systems in which they learned. However, although a systematic approach to discourse analysis was not selected, the data produced still offered the opportunity to notice language patterns, things that students alluded to, how their choice of language might suggest a particular concern or feeling, and what they might leave out. Silverman (2001: 184) described these as 'scripts' or a reconstruction of reality which the participant shared with the researcher.

Table 3.12: Evaluation of alternative methods of data analysis (summary)

Method of analysis	Potential contribution	Reason for not using in this study
Grounded theory (Glaser and Strauss 1967; Birks and Mills 2011)	Qualitative, able to examine social phenomena. Draws themes from the data. Establishes theoretical perspectives from the data.	Requires sufficient repetition to validate themes with different participants in different contexts. Is not influenced by existing literature or theory.
Qualitative content analysis (Schreier 2012)	Draws themes from the data. Can be used for single or multiple cases. Can use codes across cases.	Reduces data to abstract codes. Codes must be distinct and cannot overlap. May overlook detail of individual cases.
Conversational discourse analysis (Silverman 2001)	Offers the opportunity to identify individual constructs and perceptions and how these change. Can be used with interview data.	More frequently focused on natural discourse. Cannot be used to analyse actions or the influence of context.

After considering the relative benefits and difficulties of these possible approaches to qualitative data analysis (Table 3.12), it became clear that the nature of the study and research questions were best suited to a more eclectic process of analysis starting with activity system elements as initial themes. The design of analytical processes used was strongly influenced by the work of Miles et al. (2014), who focused on generating inference through seeking patterns in the data gathered, checking emerging propositions were valid against further data and making cumulative links across data sets. This process was applied to individual cases and across cases within the study and is explained in the following sections.

3.7.2 Principles and sequence of analysis

The analytical framework for this study was derived from activity theory and developed in order to provide a method which would allow the researcher to examine two main elements: the trajectory of student teachers' learning about teaching reading, and the influence of the activity systems, in which they learned, over this process. The data analysis was designed around the following principles:

> Principle 1: Each individual participant was to be treated as a separate entity and data about their learning journey were to be examined holistically from an interpretivist perspective during the process of analysis (Geertz 1973; Martin 1993; O'Donoghue 2007).
>
> Principle 2: 'Fuzzy generalisations' between the collective case studies were acceptable in order to identify common issues and suggest a possible learning trajectory for this aspect of ITE (Bassey 1999: 12).
>
> Principle 3: It was essential that each activity system was regarded as a unit of analysis, including comparison of systems, their impact on learning and learning at the boundaries between systems (Engeström 1987, 2001; Holt and Morris 1993; Daniels 2004; Hashim and Jones 2007; Arnseth 2008; Spendlove et al. 2010; Hutchinson 2011).

The methods of analysis in this study were, therefore, designed to investigate individual and collective cases both holistically and sequentially to gain the benefit of in-depth intrinsic analysis and the instructive comparisons between cases (Fig. 3.1). This could be described as within-case and cross-case analysis (Mason 2002; Miles et al. 2014). As a consequence, the design was complex with multiple layers and cases within cases. For

example, the experience of Chloe in her first school had to be analysed separately as one learner in a distinct activity system but then Chloe's experiences were analysed sequentially to investigate changes over time (Fig. 3.1). The in-depth analysis of each individual case study offered greater opportunity to focus on specific incidents, detail and description as well as researcher interpretation (Stake 1995). This was followed by a cross-case analysis with a focus on looking for answers to the research questions and aggregating common responses or observations whilst making comparisons between the cases (Stake 1995). Langemeyer and Nissen (2005: 191) argue that the process of analysis in Activity Theory research involves:

> Objectifying activities into theoretically organised models which are constructed to challenge experience and theory (seek out contradictions).

In order to apply this theoretical perspective, the analysis of data at each phase of the study followed a sequence of coding, interrogation, replication and comparison across cases, using activity theory concepts, which is summarised in Fig. 3.6 and explained and exemplified in more detail in the following sections.
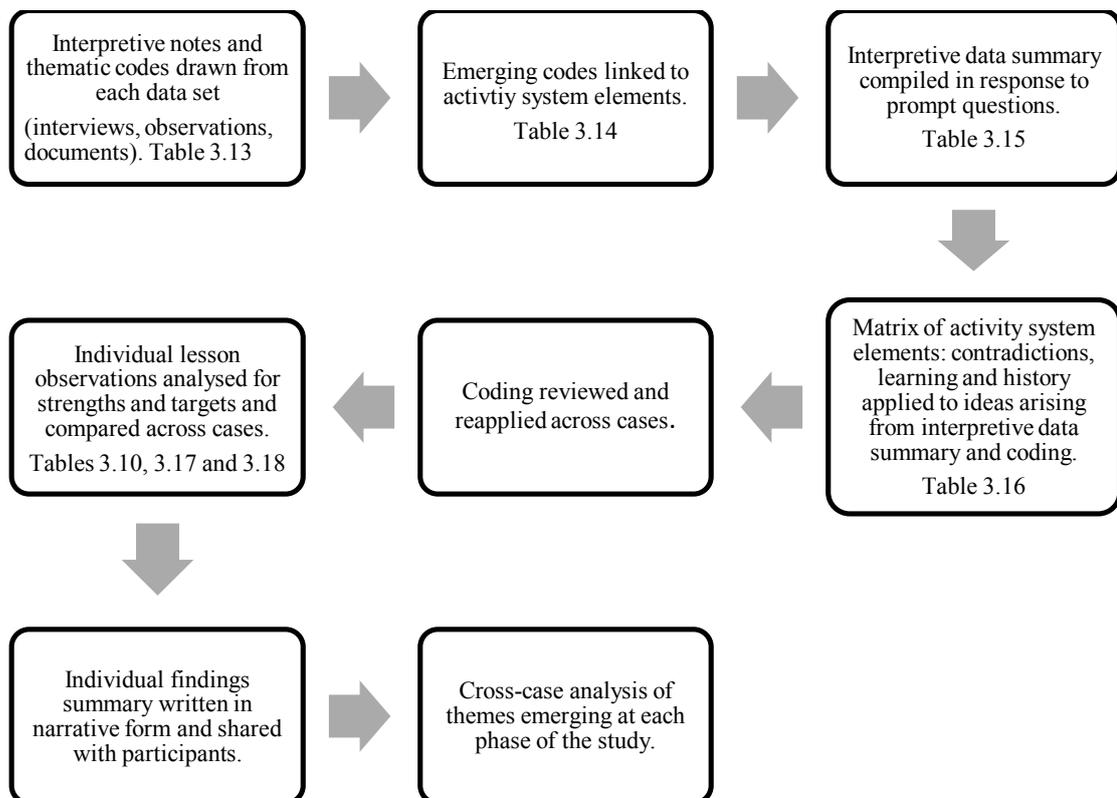
Fig. 3.6: Sequence of analysis at each phase of data collection

3.7.3 The development of coding

The initial starting point for the development of coding was driven by activity system elements and key concepts from activity theory to provide a first level of deductive coding (Miles et al. 2014). The analysis did not focus on the structure of the organisations alone or the individual thoughts and decisions of the human actors separately from the system. Instead, the focus was the whole work activity as the unit of analysis, which comprised a range of interrelated elements: subject, tools, object, rules, division of labour and community (Engeström 1987; Holt and Morris 1993; Hashim and Jones 2007). In order to achieve this, the interrelated elements of the activity system were labelled to reflect the contexts of school and university and then used as first-level codes for the data from interview, observation and documentary evidence (Table 3.2). This broad framework allowed the researcher to begin by looking for themes across the cases through the use of codes developed from the data (Miles et al. 2014) until, within the theoretical first-level coding, further codes were identified using qualitative thematic analysis (Boyatzis 1998; Mason 2002; Miles et al. 2014). The development of coding was firstly carried out within an individual case to identify thematic responses by annotating the data (Table 3.13); these emerging codes were then grouped under the activity system elements (Table 3.14).

Table 3.13: Example of transcribed mentor interview with notes and emerging coding

Mentor: The next step is to sort of plan a sequence of lessons – not necessarily a sequence of six weeks of lessons but actually be able to draw on children's responses and be able to put that into the planning of the next week and that's what we're working on. And I mean it's quite tricky in under 3 weeks to be able to do that you know to take the learning that happened and then put that into next steps. **Mentor looking ahead to planning whilst student worrying about pitch and management (CONTRADICTION between goals)**

Researcher: I saw that she's been tracking her key children – do you think that she's thinking about what children need to do next?

Mentor: I think there's an awareness of that, of what children need to do next, but I think it's probably the early stages and I think that's something that we will revisit later on, when we actually get to the really nitty gritty…

Researcher: So what do you think that you would want her to work on next particularly with a reading focus in mind?

Mentor: Well, I think really when they're here for longer and we can start to get into tracking. Because it's just being able to see children and know them well enough to know that in different contexts they will[demonstrate the same level of understanding]… some of the observations I've seen are really quite accurate you know because sometimes when some people write things you think well what is it telling you about that child but she's written some very… she's picking up on that key information you know a certain child saying a certain vocabulary and really important stuff that will inform what she does later on. **Able to observe and notice individuals (KNOWLEDGE OF PUPILS) but not yet ready for systematic assessment approach (ASSESSMENT)**

Researcher: I noticed that you'd fed back to her about developing their vocabulary, Have you been talking to her about that?

Mentor: Yeah, I think that's something that she is focusing on for this week. So for instance when they played the sound lotto and a child shouted 'it was a dog' and she said 'yes it is a dog' and I said well the next step is you can really sort of broaden their experience of language by saying 'yes it is the dog and the dog is barking' and extending it. I said you'll find yourself eventually doing it as second nature in everything that you do but it's just adding that little bit extra on to where the children are. **Mentor reflects back conversations about vocab which N is conscious of – can see how N is embodying mentor's priorities. (MENTOR FEEDBACK/SUPPORT)**

After the first case was analysed, these codes were applied to the other cases looking for patterns, similarities and differences. This sometimes gave rise to new categories which were seen in more than one case. As each case was scrutinised, new categories were added to the coding themes. Once all the cases had been considered, the coding themes were reviewed and reapplied across all the cases to ensure that nothing had been overlooked. This was in an attempt to make the coding as explicit and consistent as possible (Boyatzis 1998; Yin 2009; Miles et al. 2014). This method was applied to all

forms of data from interview, observation and documentary evidence. The codes developed through this process are set out in Table 3.14. Whilst the coding was developed and applied across cases, detailed research notes and comments were also added to the transcripts to begin the process of interpreting the themes and respondent validation of analysis was sought by email.

Table 3.14: Coding frame developed after the first phase of analysis

Activity system (AS) elements and concepts (deductive categories drawn from activity theory)	Codes from data phase 1 (categories drawn from the data)
Knowledge, understanding and practice (possible object)	Knowledge – subject (e.g. phonics, word function, spelling patterns, text choice, authorial intent) Knowledge – pedagogy (e.g. modelling, application, cues) Knowledge – pupils Differentiation Assessment
Confidence and effectiveness (possible outcome)	Organisation and management Preparation Pitch Self-reflection/evaluation Difficulties (e.g. misconceptions/time lag/awareness/pace) Aspiration
School community University community	Theory/practice links Conflict university/school, school/ home, school/govt Support
Expectations	University tasks Student contribution to the team Conformity/routine Targets/next steps
Roles and responsibilities	Mentor support Mentor gatekeeper to AS Mentor modelling Mentor feedback Mentor as mediator of university tasks Mentor as role model Student as communicator of university tasks Working with teaching assistants Student as role model
Language, resources, curriculum	Planning Observations Schemes
Disturbances/contradictions Learning/change History	

3.7.4 Interrogating the data

As indicated earlier, a recurring element of activity theory analysis is to look for disturbances in practice, where things do not go according to the normal rules and expectations of the system which could point to contradictions between the expectations of an activity system and the roles that the human participants are expected to fulfil (Nummijoki and Engeström 2010: 57–58). Therefore, during the process of analysis, the researcher noted incidents of contradictions or disturbances within and between the rules and expectations and the real-life practice in schools, as they were described by the participants, witnessed in practice or seen in documentary evidence. Noting such disturbances in previous research has created an opportunity to identify learning and growth within and between organisations (Middleton 2010) and in this study highlighted the competing or complementary influences of multiple activity systems on student teachers' learning.

In this research, the history of the practice of teaching early reading (and preparing teachers to teach early reading) and the changes that this has been subject to in recent years was another area which was highlighted in the initial analytical framework drawn from the literature. Activity theory recognises the changing nature of activity systems and so it also offers the opportunity to analyse the influences of the history of an activity, for example through the evolution of tools used (Engeström 1987, 2001; Holt and Morris 1993; Hashim and Jones 2007). In previous research, the key elements of activity systems have been analysed using the overarching questions: 'Who are learning? Why do they learn? What do they learn? How do they learn?' These have been applied to the activity system elements alongside consideration of 'multivoicedness', 'historicity' and 'contradictory struggle' (Engeström 2001: 146; Max 2010: 223). At the beginning of this study, these key issues were encapsulated under the following headings: contradiction/disturbance, learning/change and history, and they were added to the coding categories (Table 3.14). Following data coding, a summary of the data within each activity system element was also recorded using a prompt question grid (Table 3.15) as a means of noting key findings. Further interpretations were drawn out using an analytical matrix which combined activity system elements with the categories of contradiction/disturbance, learning/change and history in order to highlight where tensions and issues might be visible (Table 3.16).

Table 3.15: Notes using prompt questions following first phase of coding

Activity system elements	Prompts	Example notes from Stephanie (S) – Placement 1
Knowledge, understanding and practice (possible object)	What does the student think is effective in their lesson? Why? Can they articulate their own philosophy of reading? How are they interacting/questioning/modelling/ responding and feeding back to the children? What do they do to assess? How has this changed?	S focuses on engagement as the important factor in her lessons. She is aware that behaviour management is an issue and something she wants to improve. Her modelling and questioning is sound but sometimes needs further emphasis. She does not appear to be using assessment.
Confidence and effectiveness (possible outcome)	Are they confident in using the school resources and routines? Is their subject knowledge accurate? Can they identify individual needs and respond to misconceptions? How has this changed?	S has adopted the mixed methods of the school and followed a set layout for guided reading from the books. Her subject knowledge is mostly good but there are misconceptions such as asking children to sound out a 'tricky' (non-decodable) word.
University/ school community	How have they organised the class? Why? What is the influence of other members of staff? How do the staff respond to the university tasks for teaching reading? How have they worked with the tutor? How is reading treated in the wider school, e.g. subject of staff meeting, whole school events, letters to parents? How has this changed?	The class organisation is replicated in terms of groups and the teacher has designated who will teach the different groups. The teacher is following the mentor guidance but expects S to proactively ask to complete tasks. Reading is a focus for improvement in the school with intention to build a new library. Mentor describes phonics check as 'turbulent'.
Expectations	Does the student describe specific expectations of teaching practices for reading which are part of this school? How does this agree or differ from mentor explanation? Can they describe a school culture for reading? How does this differ from previous schools and university? Are the students aware of external influences on the school?	S recognises practice in the school by schemes and personnel and so can describe how these are used. S can name the schemes used but does not explain the aims of the current requirements of her teaching and how they fit into the bigger picture in the class and school. She seems to be doing things without questioning or understanding. S does not mention changes in the school approach except that her own previous experience has been with *Jolly Phonics* so she finds this easier.
Roles and responsibilities	How has their planning and lesson structure changed? What do they do to assess? How do they work with other adults before and during the lesson?	Phonics planned using normal uni lesson plan template – lacks detail, very minimal statements about sequence of activities, no key questions or specific children indicated. S and mentor have divided responsibilities for the lesson although S is planning for mentor (from previous discussion).
Language, resources and curriculum	What sort of teaching resources, schemes and planning do they use? Are these different/the same from the previous school? What sort of language does the student use in teaching and talking about teaching? What sort of language does the mentor use in talking about teaching reading?	*Jolly Phonics* actions, *Read Write Inc.* cards (to re-enforce handwriting), *Oxford Reading Tree* books. The language is not obvious but both talk about stopping and discussing the features of the book and pace. Both mention handwriting as a priority. S talks about her language role model for children. S describes reading in the school as a 'big thing'.

Table 3.16: Matrix used to interpret data; example from Ben's (B) placement 1

	Object knowledge, understanding and practice	Outcome confidence and effectiveness	School community University community	Expectations	Roles and responsibilities	Language, resources, curriculum
Contradictions /disturbances	B wanted to inspire pupils by matching reading to their interests as suggested at university but the constraints of the school system did not offer him this opportunity.	B was concerned with behaviour management and transitions during the guided reading lesson but felt confident that pupils were meeting the learning objective.	The mentor was uncertain of the purpose of some university tasks. The planning used was university format but lacked detail and was not the more relevant guided reading format, which could have scaffolded the session better.	The mentor and B had different priorities for his learning at this point. B was focused on behaviour management whilst the mentor was focused on application of phonics and developing independent planning skills.		The use of *Storyworld* and banded reading books in part contradicts the govt focus on decodable texts; however, the children were at a stage where decoding was a less important part of their reading skills.
Learning/change	B had learned that 'one size does not fit all' and that the practice in school matched the message from university. He understood about the importance of monitoring and intervening for individual pupils and planning based on their needs.	B was able to adapt questioning and support to meet individual needs by modelling different reading strategies and noticing why pupils were 'stuck' on a one-to-one basis. The lesson flowed well but missed some opportunities to move learning on by not asking children to justify their comprehension with reference to the text.	The mentor had realised that she needed to monitor B to notice and intervene with his misconceptions when teaching reading.	B had adapted much of the questioning organisation and pedagogy of the teacher. At this point, it was largely by imitation.		B had learned about using a combination of schemes and resources used in school including *Letters and Sounds* planning, a banded reading scheme (not only decodable texts).
History					B combines old and new reading schemes established over time in school.	Use of the reading scheme and phonics groups had changed over recent years to adapt to an increase in pupils new to English and their needs as well as govt policy.

3.7.5 Additional analysis of observations

In addition to the processes outlined, the observations of students' classroom practice were also scrutinised for features of effective literacy practices arising from the literature. Firstly, previous categories from the empirical studies of effective literacy teaching were synthesised to identify common areas noted in observations (Table 3.17).

Table 3.17: Matrix of observation foci from the literature

Categories of effective literacy teaching drawn from the review of the literature (some repeated to show correspondence with Bogner et al. 2002)	Observation foci. Adapted from Wray et al. (2000)	Broad areas for observation adapted from Bogner et al. (2002)	Classroom Literacy Observation Schedule (Louden et al. 2005) (Table 3.10)
Skills and strategies instruction	What were the children asked to do?	**Teaching style behaviours,** e.g. one-to-one interactions, scaffolding learning, making cross-curricular links, making learning fun.	Knowledge
Modelling of reading strategies	Give examples of any ways in which the teacher modelled or demonstrated reading.		Knowledge
Spontaneous intervention and support	Give examples of the responses that the teacher made to children's reading.		Support
Cross-curricular links	Give evidence of the level of excitement/enthusiasm generated among the children.		Participation
Opportunities to practice	Give evidence of the level of children's engagement with the task.	**Classroom content behaviours,** e.g. providing appropriately challenging content, using games, tasks matched to students, good use of literature.	Orchestration
Resources and learning environment	Describe the environment for literacy in the classroom. What texts were children invited to read?		Participation
Modelling of reading strategies	**See above**	**Communication behaviours,** e.g. providing clear learning objectives, giving clear directions, providing immediate feedback.	Knowledge
Spontaneous intervention and support	How did the teacher differentiate reading activities for children of different abilities?		Support
Lesson structure and planning			Differentiation
Classroom organisation	Give examples of ways in which the teacher was able to encourage independence in the children.	**Classroom management behaviours,** e.g. rewards, whole class and individual monitoring.	Orchestration Respect

Each observation, recorded as descriptive chronological field notes, was compared to the general categories from the literature on effective literacy teaching (Table 3.17) and the more detailed framework of literacy teaching behaviours developed by Louden et al. (2005) (Table 3.10). In each section of the 'Classroom Literacy Observation Schedule' categories, the student was given a rating based on the observer's judgement of how developed those specific teaching behaviours were during the lesson. These individual ratings were then recorded on a grid which included each participant's ratings at the same point in their ITE and induction (Table 3.18). In order to address the potential for bias inherent in this subjective use of observation criteria, after the observation, evidence was noted for the different categories from the transcribed field notes. The researcher was then able to compare evidence in the different categories before allocating a rating. Triangulation from mentor interview perspectives on the student's teaching, the views of the students themselves, and documentary evidence of other observations, feedback and reflection also helped to prevent the researcher from making unrepresentative judgements of their practice. The observation analysis offered a summative snapshot of each individual student's practice which could be compared sequentially as they progressed through the year, and with the other participants, in order to identify possible similarities in strengths and difficulties within the ITE and induction process. After this initial summative survey of practice, each observation was analysed using the coding devised for the interview data (Table 3.14) and the additional prompts and matrix (Tables 3.15 and 3.16) in order to relate behaviours seen in the lesson and the language and resources used to the activity system elements.

Table 3.18: Observations rating using categories from the Classroom Literacy Observation Schedule (Louden et al. 2005), example from cross-case analysis phase 1

	Ben	Chloe	Hannah	Laura	Natalie	Sarah	Stephanie	strengths	neutral	targets
attention								2	4	2
engagement								2	4	1
stimulation								3	4	0
pleasure								1	6	0
consistency								2	5	0
environment								1	5	1
purpose								4	3	0
substance								1	6	0
explanations								1	3	3
modelling								1	2	4
metalanguage								0	2	5
awareness								1	5	1
structure								3	4	0
flexibility								3	3	1
pace								3	4	0
transitions								2	4	1
assessment								1	2	4
scaffolding								2	5	0
feedback								3	3	1
responsiveness								3	3	1
explicitness								1	3	3
persistence								1	6	0
challenge								2	2	3
individualisation								0	4	3
inclusion								0	6	1
variation								0	6	1
connection								0	3	4
warmth								4	3	0
rapport								5	2	0
credibility								2	4	1
citizenship								3	4	0
independence								2	4	1

Key: Consistently in evidence	
mostly in evidence	
partly in evidence	
limited evidence	
not in evidence	

3.8 Summary

The methodology for the study took an original approach by combining a longitudinal collective case study design with a conceptual and analytical framework derived from activity theory. This provided a new way to investigate student teacher experiences of ITE and induction for early reading 'through the analysis of conditions and relationships between specific educational practices' (Langemeyer and Nissen 2005: 193). The design included seven nested cases of participants enrolled on a lower primary PGCE which were analysed individually in a diachronic sequence and compared across cases at each point of data collection. This allowed the researcher to maintain the integrity of individual experiences whilst identifying common patterns.

In previous research (Douglas 2010), the university and schools involved in one ITE partnership were conceptualised as one activity system. The methodology for this research study was designed from the contrasting perspective that each school and the university in the ITE partnership were in fact separate activity systems comprising distinct cultural and historical practices, holding different objects and drawing on different rules, tools, communities and division of labour. These elements were therefore seen as an important focus for data collection and analysis and were relabelled: knowledge, understanding and practice; expectations; language, resources and curriculum; university or school community; and roles and responsibilities. In addition, the concepts of disturbance, contradiction and history were also highlighted by activity theory as a way of identifying tensions within and between activity systems. These were chosen as another key focus for data collection and analysis and provided a new way of examining aspects which might be influential in the process of becoming a teacher of early reading.

The ethical considerations for the study included multiple layers of informed consent to ensure that the students and staff in the university and schools understood the purpose of the research and felt comfortable that it did not set out to criticise the practice of students, tutors or teachers. The students were selected from a sample of volunteers in order to represent a wide range of starting points in terms of previous careers and education. Their school-based mentors, allocated at random, were also invited to participate in the research. Maintaining anonymity and, where appropriate, confidentiality of participants and schools was achieved through removing identifiable

features from the data, fictionalising participants' names and information, and maintaining a distance from the PGCE staff during the research period. The position of the researcher as an insider at the university where the study took place afforded both the benefits and difficulties of having established relationships and knowledge of the PGCE course. Potential bias, based on the researcher's concerns about student teachers' experiences of teaching reading, was addressed by providing the reader with a reflexive account of the researcher's perspective and biography at different points throughout the 'write-up' of the study. Rigorous replication and triangulation of data collection also guarded against selective analysis and overstated claims.

The research began by piloting methods of data collection in the final term of the PGCE course and following one student into her first post. The research methods were adjusted to capture student teacher experiences from their own perspectives and to compare the ideas and understanding expressed verbally with their practice in observations of reading lessons in the early years of school. As a result, observation-stimulated semi-structured interviews, lesson observations and documentary evidence were gathered and triangulated through interviews with school-based mentors. The 'Classroom Literacy Observation Schedule' (CLOS) developed by Louden et al. (2005) provided an innovative framework for comparing participants' practice in different locations and noting changes.

The theoretically driven collective case study approach employed analysis and comparison of individual trajectories of participation to outline the development of student teacher knowledge, understanding and practice and the influences of the activity systems involved in ITE and induction for early reading. Authenticity was maintained through on-site data collection in 'real-life' circumstances, providing raw data to explicate findings, making methods of data collection and analysis clear to the reader, replicating measures consistently and providing information about the researcher and their interpretations so that the reader could draw their own conclusions. The process of analysis was predominantly qualitative and interpretive; following what Miles et al. (2014) called an eclectic pragmatic approach. Initial coding was derived from activity system elements and the concepts of disturbance and contradiction outlined in activity theory. Within these broad categories, new themes emerged from the data and were tested through comparison within individual cases and across cases. The CLOS analysis of observed lessons (Louden et al. 2005) provided a useful way of considering the

impact of activity systems on student teacher practice which was further explored in other data. The next chapter presents findings drawn from the cross-case analysis of the participants' experiences following the chronology of the study from student teacher to NQT. Common features of development and difficulty are highlighted alongside key influences from the university and school activity systems.

Chapter 4 Findings

4.1 Introduction

This chapter presents cross-case findings from the collective case study of seven student teachers. The reported findings come from analysis of 36 student teacher interviews, 23 mentor interviews, 28 lesson observations and documentary evidence from the university and the 20 schools where the participants were placed and took up their first posts. The chapter reports the development of the student teachers' knowledge, understanding and practice for teaching early reading in the chronological sequence of their PGCE course and first term as NQTs. The findings are divided according to consistent themes which emerged from the data and answer the two research questions:

> How do student teachers develop knowledge, understanding and practice for teaching early reading during a PGCE course and through the transition into the NQT year?

> What is the nature and influence of the multiple activity systems involved in ITE and induction on the process of becoming a teacher of early reading?

The findings are supported by examples of evidence in the form of direct quotes from the participants and extracts from field notes and documentary sources. The chapter begins with students' beliefs and expectations about reading as the participants entered the PGCE course and then moves on to outline key features of their knowledge, understanding and practice in the three school placements and at the end of their first term as NQTs. Following this, the influences of specific elements of the university and school activity systems involved in this process are analysed including changes in support and expectations for teaching early reading and the impact of these on the transferability of knowledge, understanding and practice from student to NQT.

4.2 Beginning the PGCE

The lower primary (3–7 years) PGCE course studied ran from September 2013 to July 2014 and included 24 weeks in school. University sessions took the form of two-hour practical workshops in groups of about 30 and were planned around school placements which increased in both the length of time spent in school and the responsibility for planning, teaching and assessing expected of the student teachers over the three terms of the PGCE course (Table 4.1). As outlined in Chapter 3, the participants, Ben, Chloe,

Hannah, Sarah, Stephanie, Laura and Natalie, were aged between 21 and 30 with four out of the seven having pursued previous full-time employment. Each student had studied a different university subject, three having previously attended the host institution, three in universities in the East Midlands and one in the West Midlands. Six out of the seven participants were female and one male which broadly reflected the ratio of female to male students on the lower primary PGCE route. As stated earlier, the participants had very different types of experiences working with children as part of their previous degree or in their working life (Table 3.5).

The first three weeks of the PGCE involved a full timetable of taught sessions. The student teachers attended one workshop on learning to read and one on phonics (Table 4.1). The sessions introduced the simple view of reading, current curriculum expectations for teaching phonics and decoding and example planning and resources. They emphasised the importance of motivating children to read through storytelling and familiarised students with phonemes, graphemes, segmenting and blending. Initial interviews with participants took place in the first two weeks of the PGCE course before the students began their school placements. Stephanie and Sarah were interviewed before attending any reading or phonics workshops; Laura, Natalie and Hannah had attended a two-hour reading workshop; and Ben and Chloe had attended both the reading and phonics workshops before the interview.

Table 4.1: PGCE overview

Term 1	September 2013															December 2013	holiday
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Reading workshop	▒																
Phonics workshop 1		▒															
Taught content (no reading-specific sessions)			░														
School placement (non-assessed)				█	█												
Taught content (no reading-specific sessions)						░											
Optional *Storysacks* lecture							▒										
School placement (non-assessed) including half term								█	█	█	█	█	█	█			
Phonics workshop 2															▒		
Additional sessions focused on students' individual targets, including phonics and reading																▒	
TERM 2	January 2014														April 2014		holiday
Week	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
Taught content (no reading-specific sessions)	░																
School placement (non-assessed)		█															
Formative assessment of reading workshop			▒														
Optional workshops: phonics and reading schemes			▒														
Assessed school placement				█	█	█	█	█	█	█	█	█	█				
Taught content (no reading-specific sessions)														░			
TERM 3	April 2014									July 2014							
Week	31	32	33	34	35	36	37	38	39	40							
Taught content (no reading-specific sessions)	░										End of PGCE course						
Assessed school placement		█	█	█	█	█	█	█	█								
Taught content (no reading-specific sessions)										░							

Key to Table 4.1	
Students attending university sessions without a reading focus	░
Students attending university sessions with reading-related content	▒
Students in school placements	█

4.2.1 Beliefs and expectations about teaching reading

The participants began the PGCE with very different experiences of home life, education and work. Although this study did not focus on examining the influence of these additional activity systems on student teacher learning, some interesting common starting points emerged. All participants indicated that they believed reading to be important for children, especially as a source of enjoyment, and that reading was the foundation for children's future learning. The importance attributed to learning to read was significant for the student teachers as they expected a strong sense of responsibility to 'get things right'. More than one participant referred to the lifelong need for reading, and this perspective seemed to heighten their expectations of pressure:

> I think that's quite a scary acknowledgement that you are responsible for them to be able to read which they're going to do for the rest of their life. If I do that wrong, that's it for a child or a group of children. (Stephanie)

Most of the students had either very limited or no knowledge of phonics but some had observed and assisted with occasional phonics sessions whilst helping in school and Sarah had taught initial letter sounds. None could remember learning to read but were aware that practice in school had changed since they became readers. This difference between their own learning and current practice in school was also a source of anxiety at the beginning of the PGCE. Laura suggested that her first university session on teaching reading had made her expect that reading and phonics could be an area which might cause difficulties between parents and the student teachers but, like the other participants, accepted phonics as part of everyday practice which she needed to learn:

> It's just how different it is from when we were at school, especially with the phonics. Isn't that a relatively new thing? We didn't do it at school so it obviously helps children read better because they're going to understand the sounds as well as the letters but she [tutor] did say the ways that their parents will have been taught to read will have been totally different from them so it's getting it through to the parents who say 'No, you're doing it wrong.'

When asked what they believed made an effective teacher of early reading, the participants highlighted enthusiasm as a key characteristic. They also focused on the need to motivate children to read and find texts that matched their interests. Little or no knowledge of specific pedagogical practices for teaching reading was noted, although participants were able to make general suggestions based on their own experiences and limited observations so far. For example, Natalie believed that effective teachers of

reading would create interesting lessons, communicate clearly and have accurate subject knowledge, but she did not have a detailed understanding of exactly what this would entail:

> Someone that's engaging and interactive and is able to keep the lessons going but also explain things properly so why there's a full stop at the end of the sentence ... and being able to explain things clearly and in a language that the children respond to and understand.

Participants' expectations about their future role teaching reading included some anxiety about supporting pupils who did not want to read, or who had reading difficulties, in classes which included a range of reading levels:

> I think keeping the class engaged. You're not specifically looking at one child, it's got to be a whole group, and obviously some children are going to be ahead of others and some are getting the extra help at home. (Natalie)

The main common starting points for participants beginning the PGCE were therefore found to be extremely limited knowledge, understanding and practice for teaching early reading coupled with concerns about pupil progress. This highlighted both the pressure and importance of their ITE and induction period in becoming effective teachers.

4.3 The development of knowledge, understanding and practice

4.3.1 Term 1: Notice and emulate

After the initial interviews at the beginning of September, the students spent five weeks alternating between attending university sessions and carrying out set tasks in their first placement school (Table 4.1) before a six week block placement beginning in October. Students were asked to support children's reading under the guidance of the teacher and to find out how reading progress was assessed and recorded. They were expected to observe and be observed teaching English, phonics and guided reading. They were also expected to complete self-study tasks with a phonics focus (Table 4.2). The participants took increasing responsibility until they were able to plan and teach sequences of lessons in core-subjects including timetabled sessions with a reading focus.

By the end of placement 1, student teachers had begun to notice pupil progress and emulate practice observed in schools. The student teachers understood the focus of early reading teaching to be building pupils' skills for decoding and word recognition. Phonics and guided reading sessions were firmly focused on these elements and the

participants both demonstrated and discussed segmenting and blending, identifying phonemes and word recognition as objectives driving their teaching and interactions:

What is the main thing that children are working on? (Researcher)

Well in Reception we're just introducing them to segmenting and blending ... so they're doing just very basic words. I think that's the big thing for them at the moment, segmenting the different sounds. (Stephanie)

Table 4.2: Summary of reading-specific set tasks in the *Learning and Teaching Portfolio* and placement handbooks

Before and during school experience – placement 1	
Portfolio self-study tasks: Audit of subject knowledge. Individual action plan set from audit outcome. Begin to add information about children's literature to the *Teacher's Reading Passport*. Read 'Rose Review' (2006). Become familiar with *Letters and Sounds* (DfES 2007). Become familiar with Clackmannanshire synthetic phonics study (Johnston and Watson 2005). Explain the simple view of reading (Rose 2006). Outline the phases of *Letters and Sounds* (DfES 2007). Provide definitions for phonic terminology. Investigate phonics games. Practise phoneme articulation and grapheme-phoneme correspondence. Reading comprehension: complete online learning unit on prediction, inference and deduction.	**Guidance in placement handbook linked to the** *Teachers' Standards* **(DfE 2013a):** Follow school procedures regarding support of early reading. (Standard 6) Observe the teacher teaching phonics, guided reading and English or in FS1 (Nursery) teaching phonological awareness and a storytelling session. (Standard 3)
School-based tasks: Literacy learning environment analysis. Storytelling planner. Evaluation of the school phonics scheme. Observe phonics. Plan a phonics session (or preferably a series of phonics sessions). Teacher to observe and give feedback. Reading session (guided or shared) to be planned and observed.	Teach using shared reading or visual literacy in a group. (Standard 4) Suggest reading targets through discussions with mentor based on assessment. (Standard 6) Familiarise yourself with progression in systematic synthetic phonics. Know the phase and strategies to teach effectively in your classroom. (Standard 3)
Learning and Teaching Portfolio essays: Students submit an essay on a choice of topics some of which relate to phonics and reading. Students to give rationale for essay choice, usually based on aspect for development from audit.	
Before and during school experience – placements 2 and 3	
School-based tasks: Observe phonics. Plan a phonics session (or preferably a series of phonics sessions). Teacher to observe and give feedback. Reading session (guided or shared) to be planned and observed. Collate prompt questions for a guided reading session. Carry out individual reading analysis of areas for development with one pupil. Identify a small group of pupils needing extra support and plan a sequence of reading or writing intervention sessions. Evaluate the impact of intervention session on pupils.	**Guidance in placement handbook linked to** *Teachers' Standards:* Analyse a child's reading. (Standard 6) Mentor to observe phonics and guided reading. (Standard 4) Discuss methods for students to keep records on pupils' achievement and progress in reading and phonics. (Standard 6) Complete school-based tasks from the *Learning and Teaching Portfolio*. (Standard 3)

The participants were generally able to segment and blend and identify phonemes and graphemes, although this was still an area for development (Section 4.3.2). However, as the student teachers, understandably, focused on emulating their class mentors' practices, their attention was often concerned with class management more than on the learning during reading and phonics sessions:

> What could have gone better is the starter. It's really beneficial but it's really chaotic… and as always getting them sat on their bottom and listening. It's never going to be perfect but it's always eyes everywhere. They get things out of it but sometimes you think, 'Oh God…it would be easier to be a bit less chaotic.' (Ben)

Despite these concerns, during lessons with a reading focus, the students were observed to be more successful in class management than they felt. When their observations were analysed using CLOS categories (Table 3.10) Natalie, Ben, Chloe and Laura exhibited strengths in purpose; Natalie, Stephanie and Hannah showed well-developed structure to their reading teaching; and Natalie, Ben, Chloe, Sarah and Laura had particularly successful rapport with their pupils. They were able to manage the class effectively whilst conveying a shared purpose and focus on objectives for reading. Pupils in reading and phonics lessons were encouraged to take turns and listen to one another, creating a climate of respect.

By the end of placement 1, the observed lessons ran smoothly and the learning objectives were clearly understood by the pupils. However, it became clear that the student teachers' lessons were highly reliant on maintaining existing routines and emulating the practice of their class teacher mentors:

> They always start with the alphabet rap and they always go on to identifying the sounds and then the tricky word trees. (Sarah)

> I basically just do what my teacher does, I haven't seen anybody else. (Hannah)

Although the student teachers were predominantly emulating practice, they were noticing pupil learning and difficulties. They often spontaneously reported the specific progress of their pupils as individuals or groups:

> I wish a boy that wasn't here today that you'd seen him because he couldn't do any of the sounds and now, all of a sudden, it's almost like his ears have been switched on…You know when he's putting them together he can hear it now. (Sarah)

The participants were also able to notice and reflect on successful pedagogy for different elements of reading:

> I found the phonics books really good for building their sounding out and their word recognition but for picking events and details they don't get that from the phonics books because they're too abstract from what the children know as normal. With '*Story World*' they can pick that out [events and details] but they need the phonics books to help with their strategies, decoding, breaking up. Using the pictures to help them is a big one [additional strategy] as well. (Ben)

However, an important shared characteristic of student practice at this point was that they were not yet able to intervene spontaneously to address misconceptions:

> I find it difficult to know how to approach children when they aren't getting it right. And which way is best to go, whether to tell them that its wrong and this is what it needs to be or whether to go about it some other way. (Hannah)

4.3.2 Notice and emulate: areas for development

In their first term of teaching reading, unsurprisingly, the student teachers demonstrated the greatest number of shared areas for development in their knowledge, understanding and practice. Firstly, they reported finding it hard to select objectives and activities which matched the level of their pupils:

> It's just more about making sure ... that I am challenging them because there's nothing worse than them being bored and not really learning anything. (Laura)

> In the year one activity the reason that maybe didn't go as well as I'd planned was that some of them [words] were a bit tricky so they couldn't maybe read some of the words because they're not aware of those. (Stephanie)

They also demonstrated some inaccuracies in subject knowledge for teaching reading, especially when decoding, modelling reading processes, or using metalanguage, which made it difficult for them to emulate the practice they observed. The students were most concerned with articulation, terminology and segmenting and blending, and mentors reported having to correct their examples. Chloe reflected on her awareness of her own incorrect pronunciation of phonemes which had clearly emerged from mentor feedback:

> Obviously I knew phonics before but with me not teaching phonics I've not really understood. Like 'luh', I say 'luh' but it's not that sound. You've got to say 'ulll' so they do it right.

Sarah explained the difficulty of becoming fluent and automatic in the use of encoding and decoding as an example for her pupils. This meant that she did not always provide an accurate role model in the classroom:

> I had to practise my segmenting…because I thought I was okay with it and actually when you come to teach it, it's very different and you want to make sure you're getting it right… [mentor] does a really good bit where she says 'Show you're ready, put your hands on your h-ea-d and your b-a-ck' and I was sounding it out wrong. I was segmenting it wrong so I said 'ba-ck'.

In some cases, the student teachers used incorrect examples or pupils were asked to carry out inappropriate activities because of the gaps in the student teachers' knowledge. These included encouraging pupils to try to decode a tricky word which did not conform to a regular phonic pattern and therefore needed to be recognised on sight, being unaware of the different phonemes for u-e (you and oo), or not knowing an example word for a specific phoneme.

In observations at the end of placement 1, most participants could have benefited from further use of modelling and some participants modelled reading processes, such as segmenting and blending words using phonemes, very briefly or not at all; modelling was one of the least developed aspects of Ben, Stephanie, Chloe and Laura's practice. In addition, the most frequent area for development during placement 1 was the category of metalanguage, which is simply defined as talk about the use of language. Perhaps as a result of limited confidence in their subject knowledge, the student teachers were more likely to give task instructions to their pupils verbally than to demonstrate what they needed to do. The students used terminology and explanations of language related to reading infrequently and did not use opportunities to encourage children to explain how language was working. For example, notes made during Stephanie's observation show that she did not make use of an opportunity to emphasise the term digraph or reinforce pupils' knowledge that two letters can make one sound, an important concept when decoding:

> Stephanie asks a pupil to write buzz and corrects when the z is written back to front. Stephanie demonstrates 'ck' as one sound and then 'zz' as one sound but does not use terminology to reinforce this concept.

The participants' generally limited use of modelling and metalanguage at this point appeared to demonstrate the difficulties of attempting to emulate mentor practice before they had developed confident knowledge and understanding of reading processes and

pedagogy. An exception to this was Hannah who made frequent use of terminology and strategies for decoding but in a particular way linked to the prescriptive scheme used in her first placement school. She referred to 'Fred talk' (Fred refers to a toy frog who is part of the resources in the scheme and is used to demonstrate segmenting the phonemes in words and then blending them back together) as well as encouraging pupils to count phonemes on their 'Fred Fingers' and to recognise 'tricky' (not phonetically decodable) words on sight. Hannah was also more confident at modelling these processes than her peers. At this stage, the difference between Hannah's practice and that of her peers seemed to stem from the highly monitored use of the structured scheme in her placement school and the emphasis her school placed on emulating this correctly.

The student teachers, perhaps as a result of their developing knowledge of early reading processes and terminology, were not always able to identify reasons for their pupils' misconceptions or understand how to support them. For example, notes from Chloe's observed lesson showed her struggling to encourage pupils to differentiate between alternative graphemes:

> Children are asked to suggest e-e words but can't. They offer 'tree', 'green', 'bee'. Chloe says 'What do I need between ee for a split digraph?' One child says 'a line', eventually one child says 'a letter' but the children still can't give examples. Chloe suggests they write 'Pete' but a child comes to the board and writes 'Peat'; Chloe does not challenge this error.

By the end of placement 1, assessment was another aspect of student practice which was noticeably less well developed than other categories in the teaching of reading. Interview comments showed that the student teachers were aware of some individual progress in their lessons and had an overall impression of the stage the class or group were working at but in most cases it was unclear how knowledge of individual progress directed their planning and teaching:

> They're doing the new sounds like 'er' and 'ai' and stuff but sometimes when they're reading they say 'a/i' [as separate phonemes without recognising the digraph] so they're struggling to notice that. (Stephanie)

Natalie, Stephanie, Chloe and Sarah did not refer to assessment strategies or recording individual progress. Most students in placement 1 were generally focused on matching the activities in the lesson to the learning objective and keeping the pupils engaged. Ben

was an exception as, in his first placement school, he completed reading assessment grids by highlighting the assessment focus and making brief comments after each guided reading session in the manner set out by the school. He then used these to guide the next session's planning. Ben's mentor enabled him to effectively use the very structured system in place in the school through their ongoing discussions about the purpose and application of this process. This suggested that student teachers could show more developed practice if a mentor focus on emulation was supplemented with explanatory dialogue:

> Well, he's involved with planning. Basically, for all of my groups I fill out APP [Assessing Pupil Progress] sheets for each child every week so I know where the gaps are so I'll usually have a global objective for all of the children in the class but I still know that three of them haven't got 'talking about the main events in the story' so they would be highlighted on the planning and Ben has seen our APP sheets and how I choose the objectives for each week.

A further difficulty was that students did not feel adequately prepared for the pre-phonics teaching used in the Nursery or the focus on reading comprehension in Year 2. They perceived that the university course and tasks for their first placement were not well matched to differences in schools or age groups. This made participants in some age groups more reliant on emulating observed practice in schools:

> Our uni elements [set tasks for school placement]…focus more on teaching phonics and observing phonics…I know phonics is reading but I think that because I'm in Year 2, I'm finding there's more reading than actual phonics. (Laura)

Interview with Natalie in placement 1:

> And does what you're doing here link to things you've done at university? What about the reading and the phonics? (Researcher)

> Phonics? Not so much because we don't do them at that level. Reading? Again not so much. I don't know whether that's because of the age, because I really am at the bottom of the three-to-seven category. (Natalie)

The limited influence of the university-taught sessions on pedagogy for teaching children, especially for pupils who were working on either phonological awareness and book-handling or fluency and comprehension, was also identified by the school-based mentors. The student teachers in all age groups therefore needed support with their subject knowledge and pedagogy on entry to placement 1. In particular, the student teachers struggled to model shared reading and to emphasise key features of a text through questioning and interaction, and also found management of guided reading to

be challenging. For some mentors, the students needed more support than they expected and the mentors identified a gap between their expectations of student preparation and the standard at which they entered school. An example of this was when Sarah's mentor specifically identified that two of her PGCE students in their first placement lacked secure phonic knowledge and confidence in decoding and encoding, and overlooked the importance of teaching early reading behaviour, such as identifying the front cover and predicting the focus of the text.

Entering school with limited confidence in several aspects of teaching reading appeared to be an inevitable result of the restricted time spent in university-taught sessions before beginning to teach in school, as well as the pressure of an overloaded timetable at the university which meant that the research participants were unable to retain the information from the taught sessions. University guidance indicated that the participants were expected to develop knowledge, understanding and practice during placement 1 through tasks, observation and mentor feedback (Table 4.2). However, it was clear that even though the student teachers were able to notice pupil needs and progress they were often reliant on emulating rather than being given opportunities to analyse practice, perhaps as a result of misaligned expectations between the university and the schools.

4.3.3 Term 2: Respond and innovate

Between placements 1 and 2, the student teachers returned to the university for taught sessions and a short 'enrichment' placement working in a school or class with pupils with special educational needs (SEN) or in a multicultural school with pupils learning English as an additional language (EAL) (Table 4.1). The students attended one two-hour workshop on the later phases of phonics and spelling and one on the formative assessment of reading. All students were also given the choice of an additional phonics 'top up', for those who were experiencing difficulties with subject knowledge, or a session on reading schemes. Placement 2 required the students to take on the class teacher role and demonstrate teaching which met the *Teachers' Standards* (DfE 2013a) in one age phase. The student teachers were asked to observe their mentor teaching phonics and guided reading and then take responsibility for planning and teaching these areas. They were also asked to carry out an individual reading analysis of areas for development with one pupil and plan a sequence of reading or writing intervention sessions for a small group needing additional support (Table 4.2).

At this point in the PGCE, the student teachers demonstrated more confident knowledge of terminology, processes and practice for teaching reading which improved their ability to respond more flexibly to pupils' ideas and misconceptions. The extract from Hannah's observed guided reading session below gives a representative example of the multiple components of practice for teaching reading which the student teachers demonstrated. She showed clearly that she was able to use her subject knowledge to scaffold and support individual pupils with relevant elements of their reading. She encouraged, supported and modelled segmenting and blending to decode unfamiliar words in the story. She reinforced knowledge of terminology relating to phonemes and how split digraphs should be decoded, she checked that the pupils understood vocabulary in the text, and asked them a range of questions which stimulated comprehension at the level of information retrieval, interpretation and response to the text:

> Who can remember what we are reading? (Hannah)
>
> The elves and the shoemakers. (Children)
>
> The elves and the shoema<u>ker</u>. What does it mean when there is an 's' on the end? (Hannah)
>
> That there's more than one. (Child)
>
> Hannah establishes that there is just one shoemaker. Children find the place they reached in the last guided reading session…. Hannah listens to Aaron [pseudonym] and Emily [pseudonym] reading out loud one line at a time. She reminds Aaron to look at the words whilst Emily is reading. When he is stuck on 'make', she says 'What's the first sound?'… She helps Aaron to segment 'th/ey' until he gets it…Helps Emily to sound out 'wedding'. Emily is segmenting but struggling to blend. Hannah slows her down and gets her to repeat and models blending the word for her. She points out the split digraph in 'late' and asks 'What do the sounds "a" and "e" make together?' Hannah reads the full sentence back to the children with expression. She asks, 'What does refuse mean?' Emily says 'Won't do it.' Hannah asks and gains answers for: How many pairs of shoes do they need? Why? What is the problem? Do you think the shoemaker is happy about that? Why? (Researcher observation)

In the observed lessons, all of the student teachers demonstrated sound subject knowledge with noticeable errors and misconceptions no longer present. This change in subject knowledge confidence was supported by findings from interviews with the school placement mentors as six out of seven of the mentors did not raise any areas of concern about the students' subject knowledge or report needing to help their students with this aspect of teaching early reading during placement 2. Laura was the only

student whose mentor indicated that she needed help with subject knowledge accuracy. However, in her observed session, there were no inaccuracies with modelling or metalanguage; her difficulties were more obviously with applying her subject knowledge to provide the pedagogical content needed for the lesson through choosing activities which matched the objective for the lesson and breaking them down into manageable steps. In common with the majority of participants, Sarah explained that her improved subject knowledge confidence and automaticity allowed her to pay more attention to the children's learning in lessons and to respond by intervening and correcting them when necessary:

> I think I'm getting better at the sounds now, which is good, and I'm more comfortable now with the terminology so I feel more confident, rather than me having to keep learning it and then delivering it…I've got more knowledge to be able to correct the children a bit more, trying to listen out for it.

For most students, their improved subject knowledge and understanding of pedagogy allowed them to maintain school expectations in their second placement and to begin to innovate in reading and phonics lessons with new tasks and resources. For example, in mentor discussion about Natalie's progress, in common with the other participants, the mentor linked her ability to differentiate planned tasks and expectations for the needs of groups with her confidence to take risks in her choice of activities. In this case, the mentor was referring to Natalie's introduction of a new game for the Early Years Foundation Stage (Reception) pupils where they were asked to 'write' given initial letter sounds with their fingers on their partners' backs for their partners to guess the phoneme:

> She knows the children really well already so she plans for support, she plans for extension. There's differentiation in there… and her activities are really good. The children really enjoy them. She's not scared to try something different. I mean what she's doing today I think actually that's quite brave because it's a new thing that the children are doing and she's trying it.

Participants began to use their knowledge of individual pupils, based on informal assessment in previous sessions, to respond by informing their questioning, support and expectations of pupils. These ideas were briefly included in their daily plans. For example, in Natalie's observed session she directed questions requiring different levels of reading skills to individuals in her class engaging them in either, sentence reading,

tricky word recognition, decoding words or responding to the pictures in the story. Her planning included this questioning at three different levels and identified additional support for one child from the teaching assistant. Natalie exemplified common changes to the student teachers' knowledge, understanding and practice by responding to the needs of the class through creating innovative activities.

4.3.4 Respond and innovate: areas for development

Despite obvious improvements in the student teachers' subject knowledge and ability to respond to pupil needs and innovate in lessons by the end of placement 2, they identified gaps in their knowledge of teaching progression between the phases of phonics and different levels of reading. This was exacerbated by the change in year group which all the students experienced in their second placement. For this reason, most of the student teachers reported feeling anxious and still needing to practise some elements of their teaching. Natalie explained that she was managing the different expectations for a new age phase as well as still trying to become automatic in her use of phonics:

> Well, coming from the Nursery, I was very aware that I didn't have the knowledge of the phonics as much as was needed for higher up … It's been quite difficult. I still feel like there's some letters that I still have to work on and I do have *Jolly Phonics* in the car!

By the end of placement 2, a further shared area for development amongst the student teachers was that some opportunities to support or challenge pupils' learning were being missed. The student teachers struggled to fully differentiate planning and expectations:

> In an independent comprehension activity in Year 2 the children have to read a passage and answer questions. This is the same for all of them, not differentiated, and it is too hard requiring inference and deduction. (Researcher observation)

> In literacy independent work, the 'less able' children are expected to make sound effects to accompany other children reading play scripts rather than being given a reading task. (Researcher observation)

Missed opportunities for supporting and challenging pupil learning seemed to arise from the student teachers' developing knowledge and understanding which meant that they were not always sure about how to 'pitch' their teaching for the range of learners:

> Setting an appropriate challenge is always hard and I'm always aware of setting it too easy and them getting bored…But again I'm aware of setting it too hard and them panicking and freezing. It's really hard to get the right balance. (Stephanie)

> I think before I was more noticing the lower ones and trying to help them but now I'm starting to notice…that if you leave the highers to just,[pause] they're going to find it too easy so it's just noticing who needs help and why. Just because they're not struggling doesn't meant they don't need extra help. (Laura)

In addition, at interview, the participants made hardly any reference to making links across the curriculum or applying reading skills. Their focus was on the objective and learning within the lesson and even when they showed spontaneous responsiveness in teaching, they did not talk about wider links.

Improvements were evident in the areas for development that had previously been identified during placement 1 (metalanguage, modelling and assessment). However, Ben, Chloe and Laura missed some opportunities to respond to pupils' needs by failing to reinforce metalanguage. For example, after a Nursery lesson on sound discrimination Ben's mentor said:

> He wanted really good listening ... and that wasn't what he was praising all the time ... perhaps if he'd made a bit more of the language [to describe sounds] and praised the children for what they were saying back to him.

Assessment was also still a less developed aspect of practice for Ben, Stephanie, Sarah and Laura. Documentary evidence showed that, although the participants could discuss the needs and progress of pupils during interviews, they were only making brief notes on children's reading and were not yet systematically recording children's progress or indicating how this influenced the next steps in teaching. This may have led them to spontaneously respond during lessons but not always plan ahead to move children's learning forward.

Interestingly, all students, apart from Sarah, were judged to be using at least one specific aspect of classroom practice less effectively than in their first placement. In simple terms, certain elements of their teaching appeared to have deteriorated. In some cases, this may have been linked to the change in age phase, the specific lesson which they were observed teaching or the circumstances of their teaching placement, but it also highlighted that even when aspects of responding and innovating were shared

between participants not all practice for teaching reading was automatically transferable between placements.

4.3.5 Term 3: Apply and connect

In between placements 2 and 3, there were only two weeks of term time at university. During this period, there were no university-taught sessions relating to reading although there were opportunities to discuss individual student progress and targets for the next placement with peers and tutors (Table 4.1). Placement tasks and expectations for planning and teaching reading were largely the same as in placement 2 but in a new age phase. Students were expected to plan, teach and monitor progress in phonics and shared or guided reading, taking over the responsibilities of the class teacher (Table 4.2).

During placement 3, the student teachers became more focused on their pupils' ability to apply their reading skills and make connections with other aspects of literacy. Most mentors and students reported concentrating on sharing formal assessment procedures which had the potential to inform this new focus:

> At the moment I'm sort of working through with my mentor. They've got a pupil tracking device here…[an online system of recording and monitoring pupil progress] and because she's writing her reports at the moment we're going through them and we're doing the 'exceeding', 'expected', 'emerging' [categories of pupil progress compared to national expectations]. (Sarah)

However, although these experiences gave students some knowledge of assessment and tracking arrangements in schools, they were used by students and mentors as a rehearsal for future practice rather than a mechanism for informing current teaching, perhaps even more so as a result of changes to the national curriculum and assessment requirements during the period of data collection:

> The school are moving away from the APP [Assessing Pupil Progress] at the moment and there's the discussion about what we're going to use. We've bought in some new system and Ben's seen it, we've tested all the children as a baseline for next year and we're going to track their age chronologically... As they're going through the school their reading age will change and that's what we're going to track. So we've had a discussion of how the levels in that marry with the level that we've assessed on the current national curriculum and sometimes they don't marry very well so we've had all this discussion about why. (Ben's Mentor)

Despite the fact that participants were still developing their ability to use a full range of assessment strategies for reading, they demonstrated a confident understanding of their pupils' application of phonic knowledge and reading skills. This was evidenced at interview by their ability to articulate their aims for the class, groups and individuals and note individual difficulties:

> I think Jamie [pseudonym] at one point- he just used the 'ar' sound in one of the words but I think it was just him forgetting that we were using the 'al' sound because they're used to using and think of 'ar', well its sounds like 'ar' doesn't it? It doesn't sound like 'a/l'. All of them used it, the rest. (Hannah)

Participants at this stage also demonstrated high levels of knowledge of their pupils' ability to apply reading skills through their choices of interaction, questioning and support during observed teaching. For example in Ben's guided reading lesson he was able to focus on reading with expression and responding to punctuation at an appropriate level for his pupils:

> When Ben shows the exclamation mark one child suggests you say 'Yes!' Ben deals positively with the misconception by giving an example in the text and asking if we should say 'Yes!' when there is an exclamation mark and is able to move children forward to talk about sounding surprised or being louder. They agree that you need to change your voice. (Researcher observation)

In placement 3, the participants demonstrated much more developed understanding of the importance of making connections between reading and other aspects of literacy than had been seen in previous placements. Observations showed that students included comprehension and vocabulary discussion in phonics teaching as well as reinforcing handwriting. They made links to spelling and punctuation in all observed sessions and supported decoding, recognition of 'tricky words' and the development of new vocabulary and comprehension in guided reading. Notes from Hannah's observed phonics session give a good example of the links being made to different elements of literacy. She modelled and reinforced blending using alternative graphemes whilst ensuring that the pupils understood the vocabulary used in the examples:

> Hannah brings up 'half', 'calm' and 'almond' on her ready-prepared PowerPoint. She tells them 'al' is making an 'ar' sound in these words. Hannah puts on sound buttons [segments the words using written symbols] and models reading them to the children. Hannah asks the children what the words mean and acknowledges children's suggestions/examples. There is some discussion around children's knowledge of the word 'almond' and how it is pronounced.

Later in the lesson, Hannah went on to connect phonics and spelling and took the opportunity to reinforce accurate handwriting and sentence construction. Throughout the session, she reinforced connections between decoding, encoding and comprehension. She emphasised checking for sense and meaning by modelling strategies to support accuracy and re-reading the pupils' writing:

> Hannah asks them to write 'I have half an almond.' She counts the words on her fingers and says 'five words'. She repeats the sentence and reminds them it is a nut. When one child writes 'I half an almond,' Hannah says 'What word are you missing?' and reads their sentence back to them.

> Hannah models writing the whole sentence with pupils telling her what to write, she reminds them about the 'e' at the end of have, reinforces capital letters and full stops, and models joined-up handwriting.

The participants, therefore, provided further 'opportunities to learn' by placement 3 as they made more effective links between different aspects of the pupils' knowledge about reading and writing. For example, in Natalie's guided reading session, she balanced opportunities to respond to individual reading with whole group discussion about the text. She also supported the children to make predictions about the story, to recognise conventions of text, such as author and illustrator, and to identify the impact of writing devices including the use of punctuation and capitalisation for different effects.

By placement 3, students were more conscious of the wider impact of their teaching of reading and spontaneously made reference to their pupils' application of reading skills in other lessons. As a result, students also reported adapting the demands of tasks across the curriculum to reflect the reading level of their pupils:

> When I'm putting a question out on the table, I have to work out who's going to be able to read it and choose my words very carefully. (Natalie)

Sarah also gave an example of how she used pupil progress in other lessons (especially literacy) to inform reading-specific lessons:

> I'm noticing they're taking the knowledge from phonics through to literacy…Last week it was the 'ie' sound that was fine in phonics and then when we went to literacy they weren't making that connection… And then when we were doing some reading, I think it was in the digraph books, they were OK then. So we did a little bit of work on words with 'ie' in so they could take it into literacy as well.

This awareness of the importance of application and connection of reading skills in other Literacy sessions and across the curriculum demonstrated a new level of understanding and practice in common with other student teachers at this stage of their ITE.

4.3.6 Apply and connect: areas for development

By the final placement of the PGCE, some students felt that they did not have a good grasp of expectations of pupil outcomes and progress in different year groups or at different stages within the year. The student teachers felt generally confident about their ability to teach early reading and phonics but were aware that there were some 'gaps' in their knowledge and experience which could hamper their ability to connect pupils' past and future learning:

> I'm off out to teach Reception and I feel quite confident with the teaching at the beginning of the year it's maybe just that middle bit where I'm not quite [as confident]. (Ben)

These gaps in their understanding of progression meant that some students were not confident about teaching alternative phonemes and graphemes and enabling pupils to develop accurate spelling:

> How confident are you feeling about going into your NQT year? Do you think there are any gaps? (Researcher)

> How to go about teaching suffixes and pre-fixes and getting the higher up stuff. (Natalie)

> Getting across the different spellings of the sound that make the same sound. (Chloe)

In placement 3, individualisation (personalising planning and teaching to meet the reading needs of specific individuals) was still a target area for six out of the seven participants and for four students was seen to have declined between placements 2 and 3. Only Laura showed high levels of individualisation in her planning and teaching of phonics and reading. This difference seemed to be a result of the guidance available in her school placement (Section 4.5.3). Overall, the participants verbally identified some individual learning needs in reading and phonics at interview and were seen to adapt teaching strategies to support these pupils in lessons. However, although students were able to discuss the individual and group levels within their class and make some

adaptations, they were not fully personalising the planning for phonics or guided reading:

> I'm not really differentiating because they're already split into quite similar levels but I suppose…in your guided reading you know who's going to need that extra bit more, like sitting next to them and going through it with them and the ones that can get on with it by themselves. (Hannah)

One particular area for development was that the students reported finding it difficult to 'catch up' with what they had missed between the first and third placement if they returned to the same school. This gap in knowledge of children's progress as a result of changing school locations was one possible explanation for the common decline in student teachers' use of individualisation:

> Because I knew the children, I thought it would be easy but I noticed the gap I'd missed being out for a term was really tricky to overcome. Just little bits I'd totally missed with them and having to go through a whole term's assessment it was harder to pick up the second time than the first time round. (Ben)

In addition, as discussed in Section 4.3.5, most students were keeping assessment records and finding out about wider assessment processes in the school but in Natalie's, Stephanie's and Sarah's cases, this was not recorded systematically in lesson planning or was only used for a small number of individuals in the class. The majority of students were not encouraged to group pupils using their assessments, as the schools had already streamed pupils. This meant that some students experienced difficulties with managing phonics groups which contained pupils working at very different levels:

> That's our higher ability group and that's the same group for Literacy and Numeracy and there are almost three groups within one group... Some of them are further ahead than others ... another adult to take another group off would be ideal. (Sarah)

Such difficulties suggested that the students would have benefitted from more opportunities to use assessment to fully drive teaching and learning decisions for reading. For instance, the participants could have re-organised groups in order to monitor and support pupils' application of reading skills and their connections between elements of reading and literacy.

4.3.7 NQT: Extend and augment

As they neared the end of their first term as NQTs, the participants were seen to have extended their knowledge, understanding and practice for teaching reading and to be

beginning to augment existing practice in their schools. However, they all, to some extent, described the feeling of 'praxis shock', even though the demands of teaching early reading and phonics were not a surprise to them and the challenges that they encountered were not new. The praxis shock seemed due to a change in feelings about their role which they perceived to have been extended by their sole responsibility for the learning in the class. This responsibility was compounded by the change to the working pattern of the NQTs who, for the first time, had to continue to maintain teaching and planning without the artificial break provided by returning to the university at the end of school placements:

> When I was on placement, it was sort of a countdown until the end of placement but this is obviously, well, I'm thinking of being here for two or three years and these scores and their levels are all my responsibility, 'my doing' at the end of the day, so it's quite scary. (Hannah)

There were few specific difficulties related to teaching reading and phonics as an NQT compared to the adjustments made between PGCE placements, but there was an increased feeling of pressure to meet external and school expectations and a decrease in support. The participants' ability to cope with this change was strongly influenced by the different activity systems of their new schools (Section 4.5).

Participants reported a greater awareness of specific children who were not faring well with a phonics approach to reading and the alternative strategies they were trialling with these pupils:

> For my little boy in my class who doesn't have much phonic knowledge, I'm using the pictures and the book and the layout and stuff like that to develop his comprehension instead of him always struggling with his reading. (Stephanie)

Working with the class over a longer period and having sole responsibility for their pupils' progress seemed to have made the students more aware of the difficulties that some pupils experienced:

> It's very strange going from being in a room where you've got support there with a real teacher that's monitoring you and making sure that you're getting the progress and things like that. To then you being sort of dropped in and it feels like you've been dropped in at the deep-end and you're sort of expected to know everything… nobody else knows my class's ability really apart from me. (Natalie)

In fact, all of the new teachers, whatever the home backgrounds and composition of their classes, mentioned that children struggled with comprehension, retention of learning or application of reading skills in other lessons:

> Some of the children in there fantastically do lots and lots of *Letters and Sounds* work and then when we get to literacy which is the next lesson, they'll have forgotten it. They're not transferring those skills. (Sarah)

> Some of them just don't know what words mean. I've seen because they've been told to start with an adverb in their writing [and] it's very clear that they don't know what they're writing. They go 'Interestingly, I walked down the street,' or, 'Surprisingly, I saw a red flower.'…They can read a page and I go, 'Right. What happened in that page?' and you have to really break it down and show them where to find it. (Stephanie)

Overall, the NQTs demonstrated an interesting contradiction in their perceptions of practice for teaching reading and phonics. Many said that they did not feel completely confident. However, when this perception was examined further, the NQTs were happy that they knew how to teach reading and phonics in terms of teaching methods, activities, organisation and subject knowledge. They felt that they had mastered the relevant schemes and systems, and that they had a good understanding of their pupils' learning levels and were clear about what they needed to do next. When the NQTs said that they did not feel completely confident, it seems that they were expressing anxieties about the speed of progress in their class or the discomfort they had initially experienced trying to make teaching with new routines and resources second nature. This contradiction is summed up very well in the following interview with Hannah:

> How confident are you feeling about your own teaching of reading? Can you see it making a difference? (Researcher)

> I don't know really…if we're doing guided reading, I do struggle because they are very slow at reading and it takes them a long time just to sound out a few words. So if we're doing it one by one and listening to each other read the sentence and then the next child goes on to the next sentence, these lot lose concentration because they've got to wait and they can't follow words. (Hannah)

> That's not really about what you're doing though is it? (Researcher)

> I think what I'm doing is OK. It's just going to take lots and lots of practice. (Hannah)

Even whilst highlighting concerns about meeting pupils' needs, the participants in the study showed that they had extended their ability to differentiate effectively. They had

quickly used assessment to guide their reading and phonics lessons and gave many specific examples of what they were trying to achieve and adaptations they had made for groups and individuals:

> I've done a phonics screening check already this week as a practice and they just don't remember most of the phase three sounds so we've gone back over it all. (Hannah)

A noticeable change from their ITE was that most of the participants referred to the way in which their record-keeping and assessment was shared with others to guide next steps in teaching, either with teaching assistants or with staff in parallel classes and Key Stage leaders. Although this meant that there was more systematic sharing and monitoring of progress in the NQTs' classes, they seemed unperturbed. The new teachers took ownership of assessment in their classes and appeared to use this effectively. They all felt that they had a good understanding of their pupils' needs and abilities and were using daily assessment to direct their planning and teaching, an aspect of practice which had developed since their final placement:

> Week to week it's up to us to evaluate and we look at our groups every three to four weeks. We sit down all the staff together and discuss whether we think anybody is ready to move up or down or whether they need some extra work. (Ben)

An interesting finding was that there was no decline in practice for teaching reading in the six NQT observations despite some changing schools, age groups and reading and phonics schemes. In fact, the participants had extended their teaching skills and were using them to very good effect in the observed lessons. In general, they appeared calm, confident and in control of their classes with high levels of engagement and interaction from all pupils observed in each lesson. The lessons moved forward with pace and purpose, and the pupils clearly understood what was expected of them and were confident in following the literacy routine for each session.

The NQTs' depth of understanding of the reading process and focus on the needs of learners was demonstrated when dealing with misconceptions in lessons and through their choice of pedagogy for different elements of reading. For example, in Hannah's lesson, children were asked to read the sentence, 'my hair is fair'. Hannah questioned the group to find out if they understood the meaning of 'fair' in this sentence. When she found that this was new vocabulary for the group, she explained by giving examples of

class members with fair hair and discussing hair colour more generally using other adjectives. With more advanced readers, when working with guided reading texts, Natalie and Stephanie modelled and encouraged fluency and expression in reading. Stephanie used a range of questions which required the pupils to retrieve information, deduce responses from the text and link the subject matter to their own experiences of favourite toys, whilst Laura described concentrating on the needs of her pupils learning English as an additional language (EAL) by developing verbal comprehension and vocabulary as a necessary precursor to reading comprehension:

> I think they spend so much time segmenting the words when they're reading them that then they're just exhausted and when you ask them what it's about they just don't know because they've not really understood. So I'm trying to, as much as I can, either me or [teaching assistant] read to them and then ask them what they've understood about the story instead.

In contrast to the schools' timetabled focus on phonics teaching and guided reading, the new teachers began to augment school practice by promoting reading for pleasure and encouraging pupils to read in different parts of the school day. Natalie augmented existing organisation in her school by introducing independent reading slots to the Year 1 routine and opportunities for pupils to choose their own texts. Hannah established a new and inviting reading area, which pupils were observed using as part of their literacy lesson, whilst Ben created a new system of books for parents to borrow and share with their children at home.

To some extent, the early signs of augmenting school practice through personalising their classrooms and promoting reading for pleasure seemed to link back to the values that the participants had expressed at the beginning of the PGCE course. Where the NQTs felt most confident and well supported, they seemed to return to their beliefs about teaching reading and to begin to question the expectations imposed on them:

> The school likes to follow a different reading to my ideals: it's very phonics based which sometimes is a little bit tricky for me to deal with because I like the enjoyment of the books. So I've got an extra little trolley which is books where the parents can sign [the books] in and out as they wish. So they've got their phonics reading book but they can then take another book that they can share, one that interests the child. (Ben)

Ben augmented school practice because he was uncomfortable with the prescriptive phonics scheme in the school. Whilst he adhered to the expectations and taught using the scheme on a daily basis, he was also beginning to attempt to improve on the

limitations that this imposed for the children's motivation to read. In a similar way to the changes made by Natalie, Hannah and Ben, Stephanie reorganised the school system of a carousel for guided reading to suit her organisational needs, and Laura focused on reading to her EAL pupils. These instances suggested that the NQTs were making more independent decisions about the school systems they were working within. Given the emphasis on conforming to school expectations during placements, it was surprising that the participants were already confident enough to augment practice in their first term as teachers and heartening that they were, in the most part, able to extend their knowledge, understanding and practice to their new contexts. However, this also perhaps indicated how much they had been prevented from augmenting and challenging practice in schools during ITE.

4.3.8 Extend and augment: areas for development

In their first term as NQTs, one area for development that the participants reported was supporting children with a wide range of learning levels without the guidance of a more experienced teacher. This was particularly challenging for Hannah, Laura and Chloe whose school environments included a higher proportion of pupils new to English or those with special educational needs (SEN):

> These are a challenge not just with the behaviour, with the concentration and actually being able to do anything. I've got a lot with speech problems and then they can't hear the sounds properly, they can't say the sounds. (Hannah)

However, Hannah, Laura and Chloe had experienced working with challenging classes including pupils with EAL and SEN as part of their PGCE, so it was not simply lack of experience that meant the demographics of their NQT schools were particularly challenging. It did not seem that the school contexts in which the new teachers were working presented an unusual level of challenge or were significantly more complex than those classes where they had completed their PGCE. Their concerns partly arose because they did not have another adult to consult with when deciding how to work with these pupils:

> It's been tricky because I've gone ... into quite a deprived area where the children are really low ability and I've not really got a lot of support in my phonics or anything to be honest (Chloe)

NQTs also needed further guidance with transferring to new schemes and new systems of planning for early reading and phonics; this, in some cases, led to difficulties

extending their practice to new school contexts. Some NQTs were well supported by opportunities to talk through planning and routines before starting the first term. Some were given existing plans and systems for specific aspects of reading. For example, both Sarah and Stephanie were given guided reading planning formats and prompt questions to scaffold their planning and teaching. Sarah's school also provided weekly phonics plans and ready-made interactive whiteboard resources. However, in Chloe's case, she was simply directed to the planning folder on the school's shared computer system, Natalie had a brief chat about how to teach an unknown and highly prescriptive scheme, and Hannah planned and resourced her lessons without any given materials or guidance:

> I've only been given the *Letters and Sounds* book. (Hannah)
>
> And there's no existing planning to take it from? (Researcher)
>
> No, so it's quite difficult. (Hannah)
>
> And no supplementary resources that they've bought already? (Researcher)
>
> No… I got them off the internet. (Hannah)

It seemed that guidance and further development in phonics and reading were not considered a priority for most NQTs. Instead, the focus of any available support was on transferring schemes and routines and even this was often limited:

> I started off not having a clue about *Read Write Inc.* I sort of had to get through pretty much the whole of the first half term based on about a 15-minute conversation with the ex-deputy-head and two observations. (Natalie)

The students also indicated some 'gaps' in knowledge of teaching and pupil progression in areas they had not yet taught. For Laura and Stephanie, who gained NQT posts in KS2 classes, these included adapting to the demands of teaching reading in KS2:

> Are there any things that you have found difficult coming in? (Researcher)
>
> I think the change of age group is interesting because there is a wide difference in their reading ability and lower down the school it was all about their decoding and actually their comprehension of what they were reading was fine. Here quite a lot of the parents are a bit 'Why is my child in the lower group?' And it's to do with their comprehension. (Stephanie)

Others were not able to extend their practice from ITE to induction if they had limited prior experience of specific areas during ITE:

> Do you have any areas you feel more anxious about to do with reading phonics and literacy? (Researcher)

> It was only guided reading because I don't feel I got enough looking back on my PGCE and I don't know if that was because I was in Foundation (Early Years Foundation Stage) and we just never fitted it in. It just never was a priority down there. (Sarah)

Nearly all the participants agreed that a further barrier to extending or transferring practice from ITE to induction was the pressure on those NQTs in Year 1 classes to ensure that their pupils met external expectations by reaching a set standard in the Year 1 phonics screening:

> They want to achieve 82% [Year 1 phonics screening pass rate] which to be honest with the low level of children is a very high percentage and I sort of feel if I don't achieve that then that's me looking bad because the majority are in my class. (Chloe)

Sarah was the only Year 1 teacher who did not mention feeling pressure about national tests for her pupils in decoding. It is not clear whether this was an omission or whether she felt more confident than the other participants. It seems possible that the supportive and highly structured environment of her induction school acted as a protective factor.

During induction, some NQTs experienced new challenges when extending their practice of working with other adults in their classrooms. Normally, teaching assistants fulfilled a supportive guiding role for the participants, as both student and NQTs, but Natalie and Hannah reported working with teaching assistants who were unsupportive or needed extra training and this was more of a drain on their time than a support:

> I'm struggling at the moment a little bit with her [new TA]. Because she hasn't got the experience and she's only going to be with me a few weeks anyway and I'll get somebody else so I don't see the point in spending the time training her up for her to just leave and to have to do it all again for somebody else. (Hannah)

Communicating with parents about reading and phonics was another potential barrier to extending practice from ITE to induction because, during the PGCE, most contact was normally mediated by the placement mentors. The NQTs mentioned parents more frequently and this increased contact was viewed as both an asset and a challenge. Sarah had to explain teaching and expectations in phonics at parents evening but relished meeting parents and finding out more about her pupils' home lives as a way of understanding them better as individuals, and Ben actively sought out further parental

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involvement with his home reading system. However, Hannah found the online system of sharing children's achievements with parents an additional managerial burden, and Stephanie had been challenged by parents who questioned decisions about pupils' reading groups. It was clear that in some cases NQTs needed more support to work with parents.

In both the transition to the NQT role and during the PGCE course the participants demonstrated common features of knowledge, understanding and practice for teaching reading and common areas of difficulty which appeared to follow a broad continuum of development. However, the activity systems of the university and schools where they learned, and the interaction between them, shaped their individual trajectories of participation in specific ways. Particular tensions arose from differences in the objects of the university and schools, or between different schools, which shaped the roles and responsibilities, expectations and other elements of each activity system. The next section explores the impact of the university and schools' activity system elements on the participants' experiences of becoming a teacher of early reading.

4.4 The influence of the university activity system

4.4.1 Theory and practice

The university activity system attempted to influence student teacher knowledge, understanding and practice through workshops on phonics and early reading but these were remembered and perceived very differently by individual participants during the PGCE. Some claimed that the workshops had been useful and connected well to the practice seen in school. Ben explained that ideas about the relevance of materials for reading were introduced in the university sessions and then he was able to understand why a balance of different texts could be used for different purposes when he saw this happening in school:

> From university there was a big emphasis on 'Phonics books are good but if you can try and not to stick to them.' Being in the school I've understood why and I've seen the benefit of using them but then moving away can really benefit … I've seen in practice what they said in the lecture which was nice.

However, even after only one term of the PGCE most participants had very limited recall of the university-taught sessions, with some of them stating that they had not been taught grapheme-phoneme correspondences although these were very clearly part

of the university-led session content from documentary evidence. It seems most likely that this mismatch arose as a result of the 'front-loading' of the university-taught sessions. As Sarah explained, there had simply been too much content to remember in the first few university-based weeks of the PGCE:

> I feel those three weeks before we started was so much crammed in that, if I'm being honest, I can't remember much from it. It was too much to take in.

Despite participants' limited recall of university sessions, the influence of the university activity system was evident from the first placement as the students were able to begin teaching with some grasp of relevant subject and content knowledge and understanding of planning and pedagogy which they did not have on entry to the course. Once they became NQTs all of the participants referred to specific taught content, feedback from tutors and mentors or placement experiences that guided their practice. For example, Sarah recounted using a specific storytelling strategy that she had learned in a university session, whereas Stephanie explained that she had learned what sort of questions to ask during guided reading during her PGCE and that she was able to use her knowledge of teaching phonics in Key Stage 1 to support the children in Year 3. Some of the NQTs explained that they drew on ideas from planning materials and activities for teaching reading and phonics as well as their experience of teaching using particular schemes used during ITE. There was a shared awareness of the mechanics of the everyday practice of organising and teaching guided reading, independent reading and phonics which the NQTs were able to transfer to any new schemes or systems they encountered. However, there was very little continued contact with the university community or the peers who had been part of the PGCE course.

The NQTs believed that, although some university-taught content was seen as important and some participants cited individual tutors as being particularly supportive, practical application of trial-and-error teaching strategies in placements was more influential than the university activity system. The role of the mentor was identified as one key to the success or otherwise of this experience (Section 4.5.1). There was also a general view that the PGCE could not fully prepare new teachers for their role as a result of the limited time available and the variables which new teachers were likely to encounter:

> I think the PGCE gives you all the information you need. The NQT year is putting it into practice. The behaviour things, the reading schemes, the methods, you know about them so they're in your head so you can apply them. But I feel like I'm only starting to apply them in my NQT year. (Stephanie)

When the new teachers reflected on the influence of the university activity system on their ability to link theory and practice, those who had the least guidance in their new school suggested university-taught content that might have supported them in their first term. Hannah suggested that the perceived phonics focus of university-taught content was not exactly what she needed as she wanted other strategies to support those pupils in her class who struggled with a phonics-based approach to reading:

> I think probably if we'd done more actual reading activities with books not just phonics because it's obvious that the words that you learn as words they remember but when they've got to sound out words all the time they just forget what they're reading. And I think lower ability would benefit more from reading words and remembering words.

Hannah's concern points to the tensions between the ITE focus on a 'phonics first' teaching approach and the reality of children's more variable approaches to learning to read. Whereas Chloe, who reported that she experienced very limited dialogue and ideas from her NQT school, would have liked to learn more practical activities which she could now draw upon. This highlighted tension between the university expectations of what students would learn in school and the limited practical ideas which some had gained during their PGCE. In activity theory terms it indicated a quaternary contradiction between the roles and responsibilities elements of the university and school activity systems.

4.4.2 School-based tasks and guidance

The university activity system also attempted to influence student experiences in school through set tasks and expectations set out in the school placement handbook (Table 4.2), which in activity theory terms was a 'tool' focused on the university object. The handbooks included directing students to observe and be observed teaching guided reading, phonics and literacy in school and investigate the use of schemes. These were generally well received in placement 1 but by the second and third placements, they were seen by students as an additional burden. Importantly, the 'rules' embodied in the handbook highlighted quaternary contradictions between the objects of the schools and the university, as the university handbooks focused on linking set tasks to the *Teachers' Standards* (DfE 2013a), whilst mentor feedback to students was more focused on day-to-day management of teaching and learning. This contrast in focus may be explained by the different external expectations and monitoring requirements placed on ITE and

schools and may have limited the intended influence of the university activity system. Similarly, the university required students to complete a subject knowledge audit for English and pursue resulting targets throughout their placements. However, the audits and subject-knowledge tasks were not mentioned in any mentor interviews and were rarely alluded to by the student teachers. The university attempts to direct student learning through this process did not obviously inform the students' work in schools and appeared to be something that mentors and students considered separate from the school placements.

The university made the assumption that directed tasks in school would allow students to develop confidence in the different phases of phonics teaching as well as developing planning and questioning strategies for guided reading. However, the mentors did not prioritise the university tasks, as communication about the reasons behind them was limited. They did not know the detail of what was covered in university-taught sessions and mostly viewed their role as facilitating opportunities for the participants to practise teaching. As a result, the learning experiences directed by the university were variable and left to chance. Students and mentors felt that they either had to 'go through the motions' or they chose to ignore university requirements.

The influence of the university directed-tasks was also limited because some schools did not plan and teach guided reading or their pupils were not working at a level expected for some of the tasks. This was particularly noticeable for Chloe when working in a school for children with complex SEN and for Ben and Natalie when working with three-year-olds. In these placements, some university tasks and expectations for planning and teaching needed to be applied flexibly to meet the needs of each setting. Tutors were able to support mentors to make adaptations but this flexibility was not immediately obvious in the university paperwork:

> I've done the lesson observations and I did find that some of the sections weren't really that relevant. But then having spoken to the tutor and he kind of put it in a different way and I was like 'Oh that's fair enough then' and I can find a way of making it work. (Mentor)

Both mentors and students did not always understand why the university asked them to repeat tasks in later placements even though the intention was that the student teachers would gain additional feedback and work on targets to progress to a more confident and competent level of teaching reading:

As much as I think they probably are useful and do make you think about what you are doing, it's hard to fit them all in with planning and all the other things that we have to do and essay writing and deadlines for those things. So that's quite full-on and intense. (Natalie)

The influence of the university activity system through directed tasks also rested on the students' role in schools as it became clear that the mentors relied on the student teachers to explain what was expected of them and what extra information they needed:

I think because Ben's fairly confident… I said to him if there's anything you need to do, please just say and he does because it's a busy environment and we've all got a lot of roles. (Mentor)

Similar issues were present for the students as they negotiated expectations of planning for teaching reading. University planning formats were much more detailed than those used by the experienced teachers in schools and had to be completed for every lesson or substituted with a 'school' version that fulfilled the same purpose. This was another way of the university activity system attempting to guide student teacher learning from a distance. In practice, the detail and style of students' planning for teaching reading varied widely and students needed support to adapt the university planning to meet school needs. Chloe indicated that the university expectations, as she perceived them, conveyed through the planning formats and tutor feedback, were not representative of everyday practice:

Because university's planning is very all in a block, all detailed where everything has got to happen. Like when my tutor came he said you need the timings of when the children are going to put their pencils down and things like that but in this class it's really hard because obviously you've got Reception who've got the free-flow choosing time and the Year 1s who are completely different scale for ability. They're so diverse that you can't really write 'this is going to happen at this time.' (Chloe)

Although difficulties with the expectations of planning were not just related to teaching reading, they suggested that university attempts to direct student teacher learning about reading through the 'tools' of the activity system (the written guidance given) were vulnerable to misinterpretation and reliant on mentor intervention to be useful to the student teachers.

4.4.3 University assignments

The university written assignments, another activity system 'tool', were mostly not mentioned by the participants or viewed, like the directed tasks, as a burden on time.

However, in two cases, these academic assignments had a more noticeable impact on student learning about reading than other tasks directed to be carried out in school. The two participants who chose to focus on the teaching of early reading as part of their academic assignments found that the research and reading involved supported their developing practice. Laura carried out classroom research on the impact of using props and interactive strategies to bring reading to life, and Hannah investigated the research literature on the effectiveness of teaching strategies for reading. Both participants highlighted these experiences as examples of how the university activity system enhanced their learning much more meaningfully than the set school-based tasks relating to reading. By carrying out very simple action research in her classroom, Laura was able to witness the benefits of interactive shared reading on pupils' motivation to read and their retention of story elements:

> As part of my classroom-focused development [classroom research project]…I read 'Chicken Licken' to them just off a piece of paper, didn't make it exciting and then I did a little bit afterwards talking to them, 'What can you remember? What characters can you remember?' Not a lot really just the beginning and the end and they knew 'Chicken Licken'. And then we did it again with masks and they acted it out and it was a PowerPoint with pictures and they all love it now and they can tell you all the characters. So I learned from that that reading, especially at this level, isn't just about reading; it's about making it exciting and visual. (Laura)

In Hannah's case, her own research for an academic essay with a reading focus had been equally memorable because of its immediate relevance to her everyday practice. It also enabled her to reflect on current directives about teaching reading in a thoughtful and child-centred way:

> We had to do those essays. I did mine on phonics against the strategy where they just read words, whole words. And my essay turned out at the end that there was no one way of doing it. That we have to think about the individual and what suits them. Whether it's a bit of both, whether it's just phonics or whatever. And that hasn't really changed. You still have to think about your children and what's going to help them rather than, this is the way that we do it because that's the way that we've been taught to do it…I don't really remember many essays that I write, and that one does stick in my head because I did loads of research around both techniques of teaching reading and it has shaped my view on teaching reading now, that you do need to consider both aspects. (Hannah)

The university activity system, through Hannah's academic work, encouraged her to question the prescribed 'phonics first' approach as the best method for teaching all children. In school, this had both a positive and a negative impact. Hannah was sometimes frustrated by the focus on, what she perceived as limited, decodable texts as pupils' first reading materials rather than using those which were more engaging for readers, but she did maintain high-quality phonics teaching. Her knowledge that one approach might not work for all pupils appeared to give her the confidence to support early readers through a more varied range of strategies such as well-developed comprehension questions and encouraging re-reading sentences to check for sense in guided reading activities. Whilst other students also used these strategies, Hannah was particularly proficient in doing so and seemed to focus on her pupils gaining meaning from texts during her first placement which was at an earlier stage than her peers. This highlighted the potential influence of the university activity system through facilitating student teacher research which informed their teaching of reading.

4.4.4 University tutors

Analysing the 'roles and responsibilities' element of the university activity system indicated that university tutors were most commonly referred to when there was a problem for a student and became more significant during placements 2 and 3 when practice was assessed. At these times, their role was particularly valued and both students and mentors sought clear direction and reassurance from the tutor. It was also evident that, when students had difficulties, emotional support was needed from the tutors and the mentors, often more than subject or pedagogical advice. Mentors, understandably, wanted to ensure quality and consistency in the teaching their pupils received but if student teachers failed to meet these mentor expectations, the tutor was expected to find ways for the student to continue to learn and to get appropriate support.

Both Stephanie and Laura experienced difficulties in specific placements which required additional tutor intervention. Their issues were with general planning and organisation rather than the teaching of reading but the circumstances highlighted the importance of relationships between the tutor, mentor and student teacher to address any difficulties. In both cases, the student teachers struggled to meet their mentors' expectations but also felt that their mentors' feedback and guidance was lacking or unhelpful. They felt criticised and overwhelmed and their relationships became

strained. The tutors were able to mediate between the mentors and the students but were not as readily available as the students or mentors wanted:

> I will say that the university were great when I asked for help but maybe I could have done with a bit more support before it was needed. (Stephanie)

> I just felt that there was a bit of a lack of time [to spend with the tutor] and possibly after the support plan and talking about my concerns it was then just left to me. (Mentor)

Despite these concerns, Stephanie was able to address her difficulties and reach a good standard by the end of her placement. From Stephanie's perspective, this was as a result of a change in communication and mentoring style brought about by a more open dialogue with her mentor and the emotional support offered by her tutor:

> He [tutor] was just there for moral support and it was just really nice and he talked through my file. He went through my RPD [Record of Professional Development] just to make sure that I was on track.

In contrast, Laura's tutor was unable to repair the relationship between student and mentor and Laura failed her second placement. This appeared to be the result of a complex interaction of factors (Section 4.5.3) but may have been exacerbated by the university tutor's role as she focused on working with the mentor to set Laura multiple targets. Laura's tutor followed university expectations for her role but demonstrated that the emphasis on evidence and target setting driven by the university was not always a positive influence on student progress.

In some cases, the mentors described instances where the university tutor had offered specific, relevant and timely support and guidance but this was rarely focused on reading, an issue discussed further in Section 5.4.5. Hannah's mentor was supported by a university tutor to make sense of her role after her school offered Hannah a placement at the last minute, but she felt that this would not have been enough if Hannah had been a less competent student. In 'normal' circumstances, student teachers and mentors benefitted from tutor input through observational feedback, communication of university expectations and opportunities for shared observations with mentors. The participants sometimes mentioned the impact of a discussion that they had following a lesson observation with the tutor. Their commentary suggested that tutor observations and discussions had helped them to move their thinking forward but such instances were reported infrequently. This finding suggests that the tutor role was so focused on

the mechanisms of placements in terms of paperwork and guiding mentors that they missed opportunities to influence students' teaching of early reading.

4.5 The influence of the school activity systems

4.5.1 Mentoring support

An important influence in the school activity systems was the role of the mentor. In most cases they introduced the students to the resources and routines for reading in each school, through the student observing their teacher mentor and emulating their practice. Mediating artefacts were part of this process as students reported being given the handbook or scheme information to familiarise themselves with and refer to as required. This was most noticeable in placements 1 and 2 where the students were new to the schemes and was carried on in placement 3 for those students who were working with a different scheme. The amount and quality of informal and formal feedback given by mentors to students varied. All students received the minimum university requirement of one formal lesson observation a week but not all students reported receiving formal feedback on their teaching of guided or shared reading and phonics despite this being set out as an expectation from the university. Some mentors offered frequent informal dialogue about the student's teaching but others suggested that they viewed their role as directing what the student should do in their next lesson more than engaging the student in dialogue about teaching and learning. This contrast was well exemplified by the difference between Hannah's and Chloe's reported experiences:

> She'll [the mentor] make sure I know what I'm doing and if I have any questions she'll make sure that I get quite a clear answer and she's shown me parts of the scheme and…I sort of go off what she does really, like last week she wasn't there and I was asked to take a phonics group with no planning or anything so I just basically did what she did but changed the words and things. (Hannah)

> We talk every night. We don't leave school until half six/seven o'clock at night because obviously we've got the outdoor areas to tidy and everything so while we're doing it we have to talk about different things. (Chloe)

The mentors who had the most positive influence on student teacher knowledge, understanding and practice were regularly on hand to discuss next steps in pupil learning and arranged opportunities for their students to experience particular aspects of planning and teaching reading. For example, in Ben's placements, activities and

planning for reading and phonics were made flexible to suit his needs and he talked regularly with his mentor about the children's prior learning:

> The Nursery staff let me have freedom of doing adult-led activities…and the mentors are quite happy for me to do *Letters and Sounds* activities as well as the *Read Write Inc.* revision and they've actually extended it a week for me to be able to do that because they agreed it would be nice to see. (Ben, placement 2)

> She talked me through the most of it [planning] and then as I've been going through this term, if I was coming up to a topic or a certain area, she would say 'Oh we touched on that when you weren't here,' so she'd be very supportive. (Ben, placement 3)

Other positive mentoring encouraged the student teachers to find their own way of doing things and planned extra opportunities to reflect and discuss progress. As Sarah explained, her mentor for the first and final placements provided in-depth discussion about teaching and learning, making the link between phonics and spelling:

> She does often ask us questions which make us think a lot more – 'How would you push this child further?'… You know she makes me think about how I would help that child…we had this conversation recently about when you're modelling writing on the board whether to write phonetically or accurately and my teacher's advice was that she does both so sometimes she will write it phonetically especially with the lower ability. And other times she will say, 'Yes that's how it sounds but it's a funny word so we write it like this.'

Some mentors noticed gaps in the student teachers' knowledge and understanding for teaching reading through working alongside them in the classroom and discussing their assessment of pupils. This enabled the mentors to influence their students' development by identifying misconceptions and addressing them through professional dialogue:

> One day, he [Ben] said 'Oh this certain girl was getting muddled up between her ts and her ns,' and I thought, mmm, well, I'm not aware that she's muddled up with her ts and her ns and it turns out that it was the final sound in a cvc [consonant vowel consonant word] so I think it was pot and pan and she wasn't looking carefully at the final sound so working with children throws up things that I wouldn't necessarily expect could be a misconception of his but that's how you find out. (Mentor)

However, not all students received the same level of high-quality dialogue about teaching phonics and reading, so the limited influence of the university-taught sessions left them vulnerable to perpetuating misconceptions and reliant on emulating practice observed in school without being given opportunities to develop their own understanding. These difficulties pointed to quaternary contradictions between the roles

and responsibilities element of the university and school activity systems, where the university expected mentors to take on the role of supporting students' development of subject and content knowledge and pedagogy. In contrast, mentors did not have a shared understanding about how best to support the students and made assumptions that sharing information would be sufficient. This appeared to be because the object of the school activity system and the mentors differed from the university and was not focused on ITE.

4.5.2 Mentoring difficulties

One major 'disturbance' (Nummijoki and Engeström 2010: 57), or issue within the school activity system which differed from university expectations of the mentor role, was the unavailable mentor. This caused difficulties for Natalie, Hannah, Stephanie, Chloe, Laura and Sarah who, at different points, all had mentors who spent large amounts of the placement away from the classroom in order to carry out other teaching and assessment responsibilities or because of personal circumstances. The student teacher participants were left to cope with minimal formal and informal feedback and guidance about their teaching:

> My mentor's been out quite a few days…I haven't really had a lot of talk about reading, just this morning. She said about those different schemes they use. Yeah, I haven't really had a lot. (Hannah)

Have you been getting formal feedback from your mentor? (Researcher)

> No, not as much because she's out. I got my TA [teaching assistant] to do an observation as well so I'm hoping that within the last few weeks if she could come in, I need to talk to her [class teacher mentor]. She only takes this group out in the morning and then in the afternoon she's with me so she sees my teaching then. (Sarah)

There were also difficulties caused by the role imposed on the participants from the school and university activity systems. The student teachers were largely expected to direct their own learning once on school placement by asking for feedback and negotiating opportunities to observe as well as asking for support in specific areas. This meant that when mentors were absent from the classroom, the student teachers were not experienced enough to identify what they needed to know next. Stephanie's mentor was just one of the mentors who explained that they expected their student to direct their own learning in this way and referred to the placement handbook which outlined the minimum requirement of observations and feedback from mentors:

> She seems to be getting on with her side of things; I'm looking at my little section [mentor guidance]. Because I said to her I can't be on top of you for everything that you're supposed to be doing, just make sure that if there is anything that you need tell me and I will willingly help but you need to be the one that instigates it.

These tensions pointed to a primary contradiction within the roles and responsibilities element of the school activity systems as the mentors were given the responsibility for supporting and improving student teacher practice by their head teachers and yet some were expected to use the time that the students were in the classroom to carry out other tasks. This issue was noted after the first placement but worsened in placements 2 and 3 when students were perceived to be more competent. When mentors were absent, their role was not replaced but instead the participants were left to cope alone or to seek guidance from teaching assistants. Furthermore, the quaternary contradiction between the 'expectations' (or 'rules') for the mentor role between the university and school activity systems meant that the need for regular informal dialogue about the student teachers' learning and deeper discussion about the process of learning to read was not clearly understood by some mentors.

In the mentoring relationships that appeared to be less successful, the students felt pressure to maintain their mentor's teaching style and not change anything in the classroom, as Hannah described with her mentor's phonics teaching:

> When my teacher teaches, she basically puts on a bit of a show, a performance, and I find it difficult living up to that standard. I am quite outgoing but not in the way that she is.

In all cases, mentor influence was potentially hampered by their lack of knowledge about the university-taught content for teaching early reading and phonics. Some were frustrated about poor communication from the university and felt that their student teachers had not been adequately prepared with either understanding about the theories of reading acquisition or knowledge of key documents, such as the *Letters and Sounds* guidance on planning and teaching phonics (DfES 2007), all of which had been part of university sessions. These concerns demonstrated that the mentors were unaware of both the theoretical and practical content of university sessions and were also unclear about what level students could be expected to be working at during different points in the year. This lack of knowledge of university content and expectations was clearly expressed by questions to the researcher from Sarah's mentor:

How much training do they actually get at university? Is there much theory taught? Do they have to do any of their own research in terms of an assignment based on the development of reading and how children acquire language and build on that?

Ben's mentor also worried that her judgements might not be fair and consistent as she had missed out on training and had no opportunities to moderate and compare her views with teachers outside of her school. This concern seemed to be valid as differences in expectations between the university and the schools were visible through the mentors' explanations of target setting. Although they completed university paperwork which linked to the *Teachers' Standards* (DfE 2013a), neither the mentors nor the students mentioned these at any point in the research. The mentors reported that their feedback and targets for students centred on generic teaching skills in the context of teaching reading, including knowledge of assessment strategies, planning sequences of work independently, managing the timing of sessions, providing independent work for pupils and preparing pupils for the phonics screening test in Year 1. This finding suggests that mentors focused on the students' ability to organise teaching more than on the subject knowledge audits and associated target setting or the *Teachers' Standards* (DfE 2013a) emphasised by university placement guidance. This may indicate that the mentors' priority was maintaining existing reading practices. The influence of the mentor role in the school activity systems was often focused on encouraging students to replicate practice and organisation which may have seemed a 'safe' way to ensure that pupils were on track to meet national external expectations for phonics and reading. The university placement guidance compounded this issue as it centred on tasks to complete related to the *Teachers' Standards* (DfE 2013a) (Table 4.2), which were the focus of external monitoring in ITE, and missed opportunities to anticipate or address any potential difficulties arising from a mentor focus on replication of practice.

4.5.3 The school community and student teachers

As one of the key elements of the school activity system, the wider members of the community, beyond the mentor, had an influence on the student teachers' experiences of learning to teach reading. In the assessed placements, the student teachers gained support from other staff members through team planning discussion, informal feedback in lessons, opportunities to observe and be observed, and contact in passing conversations in the staffroom and around the school. These experiences boosted the

participants' confidence and allowed them to broaden their understanding of different teaching practices for reading, gain new ideas and receive emotional support from different members of the school community. The benefits of planning collaboratively with other staff were highlighted by the students at interview, both as a source of learning but also as a way of feeling a valued part of the team:

> For my planning we actually sit down as a unit on a Wednesday… and we talk about the children's interests from the past week and where we want to go… If you've got an idea, somebody else can extend it that little bit further. It really helps in planning of the provision and then, from that, my lessons I can plan around or just go with my own flow. (Ben)

However, some of the participants relied heavily on the support and guidance of their teaching assistant who was more available than their assigned mentor. The students reported that these interactions with teaching assistants were mainly used as a way of finding out about the rules, routines and resources of teaching reading and phonics in each school. They, therefore, may have led to student teachers replicating practice without developing greater understanding:

> To be honest, I've spoken a lot to the TAs about it because they know what the children are doing as well. So she [the TA] went through the different levels with me and showed me how to use the guided reading stuff. (Hannah)

Another way in which the school activity system influenced the participants' knowledge, understanding and practice for teaching reading was through opportunities to observe teaching in different classes. Students valued observing practice in other classrooms and some considered this to have lasting benefits for their own teaching:

> What was most useful actually was in the very first few weeks while we were here, our teacher arranged it for me and the other student to go around every other single class…before then I'd not actually seen any phonics being taught. And it was interesting going to the different classes because they were all teaching very differently…when I do it I try and pick up what I thought was the best practice from each. (Sarah)

However, not all students experienced opportunities to observe or were given the time and support to analyse their observations with peers or their mentor.

The emotional climate of a school community and the relationships within it were also very important to the students and both elements were commented on during all interviews. Laura, Natalie and Stephanie, who had some difficulties with their mentors in one placement, demonstrated more effective practice in the school environments

where they felt comfortable in comparison with those where they experienced a difficult relationship with their mentors. However, all three participants attributed their feelings about becoming a teacher of reading in the different environments to the wider ethos of the school and not the mentor alone. The theme of 'feeling comfortable' emerged as something the participants believed made a difference to their success and confidence when teaching early reading and phonics.

The importance of the combined influence of the activity systems elements, reflected in the school community through the mentor role, the expectations of the school and the emotional climate, on becoming a teacher of early reading was exemplified by Laura who failed to meet the *Teachers' Standards* (DfE 2013a) overall in her second placement but went on to demonstrate highly effective practice in her re-sit placement in a different setting. In placement 2, specific elements of the activity system appeared to have influenced the difficulties with her practice. These included adapting to a new and prescriptive scheme, an unfavourable relationship with her mentor, and a history of external scrutiny and change in the practice for teaching reading in her placement school. When Laura did not make rapid progress, her mentor became frustrated and attempted to 'push' Laura into improving:

> I've pushed and pushed and pushed with it [the planning]…that it's as detailed as possible, that you've run through it in your head that many times that all you have to focus on then, you're just delivering it, you're not thinking about what you're doing next because you've already gone over it a lot in the planning process.

After the placement, Laura explained that she had become overwhelmed by the pace of demands for improvement, which had in fact been counter-productive:

> While I was failing I didn't feel supported…because I just felt like there were targets thrown at me and thrown at me and I was just sinking underneath them all.

It was difficult to know why Laura's mentor reacted in a way which Laura perceived as unsupportive but one possible reason may have been the object motive of the school activity system to maintain good standards following a difficult experience where the staff had recently worked to move the school out of Ofsted 'special measures'.

In contrast, in her resit placement in a different school activity system, Laura's practice was remarkably more focused, well organised and driven by understanding of progress

in learning to read. She demonstrated very highly developed differentiation in her planning and teaching and it was clear that she had an extremely good grasp of the different needs of the individuals within each group which matched her spontaneous interventions and questioning during the lesson. Laura attributed the startling improvements in her understanding and practice for reading to the support and welcome of the whole school community and the highly organised systems in place for assessing and planning the teaching of reading which Laura was supported to use:

> I felt like I didn't click in the last placement. It didn't work and maybe the planning wasn't the way that I would get on with doing it. Here, maybe because I already knew the school and I was already settled in and I wasn't scared of seeing the senior members [I felt comfortable].

Her mentor also highlighted the commitment to supporting Laura's learning:

> So straight away we had quite an open relationship and we said we'll move forwards, anything you're not sure of ... I wanted to know that she was feeling confident and she was feeling happy and she knew how the different things worked in the classroom. (Laura's resit placement mentor)

The interrelated activity system elements of roles and responsibilities, community, and the student-focused object of this activity system appeared to have enabled Laura to be much more successful than in a situation where the school staff were under pressure and unable to focus on Laura's learning. Similar influences were seen in the other students' experiences thus demonstrating the possible impact of the school object and its influence on the ethos and community in ITE for teaching early reading.

4.5.4 The school community and NQTs

The influence of the school 'community' element of the activity system was also seen once the participants became NQTs. In some schools, they worked closely with parallel class teachers and year group teams to plan and organise groups for teaching. Where this was in place, new teachers such as Ben and Sarah found this way of working very supportive. Unsurprisingly, the NQTs generally found their new role easier to manage when there were other new teachers in the school and they were given time to talk to one another or share professional development. However, peer support was not enough on its own. Chloe, who reported receiving very little support from her mentor and staff team, explained that she needed guidance from experienced teachers about planning and assessment expectations in the school as well as help with supporting individual pupils with complex needs in her class. 'Feeling comfortable' in a school was not just about

familiarity with routines but about the ethos within the school and was clearly linked to the support systems that the wider school community offered to the NQTs, as Sarah explained:

> I think my personality suits this school and I feel comfortable and I feel I fit and I feel if I ever had a problem or I was worried about something I could always ask [parallel teacher] the other Year 1 teacher or I could go and ask [teacher] the Key Stage 1 co-ordinator and I don't feel well that's going to be a stupid question. I just ask.

In schools where the new teachers felt most supported, there was a planned programme of professional development and NQTs also had the chance to support one another:

> They put us all together for our NQT time…They've given us that space where for 30 minutes no one's going to disturb us and if we need to say something we can say it and it's really nice because there have been tears and we've been able to support each other. (Ben)

In addition to arranging opportunities to gain support from working with the wider school community, some schools and mentors also made strategic decisions to protect NQTs from unnecessary challenges. For example, Stephanie's mentor talked about working with Stephanie to develop useful planning formats which supported her guided reading teaching and limiting the meetings which she, and other NQTs in the school, had to attend in the first term. Schools also considered the classes or groups that they allocated to the NQTs. Sarah was given the class she had worked with during her PGCE placement so she was more familiar with their progress and starting points, whilst Natalie was given the most able children in Year 1 to work with as her phonics group:

> I feel quite lucky because they [pupils] are a top set anyway. I feel like they've [school management] sort of given me freedom by having them because they are already very aware of the sounds they need to know ready for the phonics screening.

In activity systems where the mentors and schools had taken care to protect NQTs from extra pressure or put in place opportunities for support from the wider school community, the new teachers were aware and felt better supported and valued by their school and they coped well with reduced daily support. However, in Chloe's and Hannah's schools there was no evidence of changes being made to limit the potential challenges faced by the NQTs or opportunities offered to learn with other NQTs or plan and discuss with other staff and they felt less confident that their pupils would make good progress. Even in the most supportive and organised locations, NQTs were

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sometimes slow to receive information and assumptions were made about their understanding of school routines and resources leading to unnecessary work. This presented the NQTs with difficulties in adopting the expected practice for teaching reading and potentially influenced their confidence and competence:

> With the reading books, I have found myself running around after everybody else. Just the fact that they're located further away in the school and nobody actually told me about they'd colour-coded them…and teachers had taken them off the shelves and into the classrooms so I found myself…chasing all the books up…The school had made me a reading folder and nobody had given me it and I'd made my own up and then I had to go back to the one the school had made me and start using that one. It was all there for me, I just didn't know about it! (Ben)

Variable levels of support seemed to be a result of the different views of NQT roles in different school activity systems. Most schools viewed NQTs as teachers rather than learners and left them to manage independently. The mentors interviewed believed their chief role to be assisting the new teacher to adapt to the expectations of the school. Only three of the new teachers reported professional development specifically focused on reading during their first term or opportunities for any kind of reading focused feedback on their teaching. There were also noticeably few opportunities for the NQTs to observe colleagues teaching phonics and reading. This indicated that the potential for the school activity systems to positively influence the NQTs' teaching of early reading through collaboration and guidance within the school community was underdeveloped and not given priority.

4.5.5 Reading and phonics schemes and routines

Despite the many differences in the use of reading and phonics schemes, or 'tools' in school activity systems, some consistent themes emerged from the data. Most of the participants, as both student teachers and NQTs, preferred a school routine, timetable and scheme for teaching reading and phonics which was clearly structured, consistent and easy to follow. The student teachers felt particularly insecure if their school did not provide a consistent routine for teaching phonics or allowed frequent disruptions. They liked having example lesson plans and planning and assessment formats which they could use and adapt. They also found that using progression guidance from the scheme and ready-prepared ICT resources from their mentor or a published scheme helped them

to manage their time and feel secure that their teaching was well matched to what the children needed to learn next, as Sarah explained:

> I do prefer having more of a structure … it's easier from a teacher's point of view because it's there and you can access it so I suppose that saves time as well…and the children do like it.

As Stephanie described, structure for teaching reading and phonics was sometimes provided by the school timetable and organisation rather than a specific scheme:

> My last placement was very structured in that literacy was an hour and a half: it had pretty much half an hour for phonics, half an hour for this and half an hour for guided reading … [it was]the most helpful thing over the year … the very strict structure… I knew what I had to do.

The student teachers seemed to benefit from experiencing different schemes because, by comparing their use in schools, they were able to evaluate the relative advantages for teaching and learning and develop their own preferences. Chloe reflected after her placement in an SEN school:

> In my last placement, it was Ruth Miskin [author of *Read Write Inc*. phonics scheme] and it was really wordy and I don't think it was good for the needs of the children in that class. I do prefer the *Letters and Sounds* ... It was good seeing both the different schemes and ... how else I can use it.

Whilst all the schools were required to use systematic synthetic phonics as the first approach to teaching reading, some school activity systems continued to support children in using other reading strategies such as sight recognition of words and syntactic and semantic clues. These multiple strategies for reading were previously advocated by the *National Literacy Strategy* (DfEE 1998; DfES 2001). This 'disturbance' (Nummijoki and Engeström 2010: 57), or deviation from nationally expected practice, was visible by their use of 'traditional' reading schemes alongside 'decodable' texts. Decodable texts were matched to the pupils' stage of phonic knowledge and included set 'tricky words' which had been taught by sight, whilst the 'traditional' reading schemes contained much wider vocabulary as the word choices were not limited by the phases of phonics teaching. The tertiary contradictions between old and new school practices for early reading were therefore communicated to the students, in part, through their use of resources which acted as a 'third teacher' alongside the university and the mentor input. This tension was very clearly described by Hannah in placement 3 where a range of different schemes, some pre-dating the

synthetic phonics agenda, were used to support decoding, word recognition and comprehension:

> My mentor was telling me earlier about an old scheme that they had, a reading scheme before they bought into another one…it's more sight reading so, some of the children in the class now whilst they used the phonics books to segment and blend there's some children which will have both. Because she was saying that some children just don't pick it up very easily the whole decoding of words and they're better off just learning by sight and so they have both bits from different schemes.

School activity systems which employed multiple strategies and schemes to teach reading were viewed as a positive influence on their practice by Ben, Hannah and Stephanie. However, Natalie found a more marked contradiction between practice and national policy in one activity system difficult to manage as her school used a 'real reading approach' and she was uncomfortable about the perceived lack of focus on phonics:

> When I've talked to my mentor about phonics here and I've said 'Ooh I didn't get a chance to do that today' I know in my last school that would have been a big no-no but [here] it's more, 'If it doesn't get done it doesn't get done, we'll catch up on it some other time.' We can go days without doing it.

> I know that my mentor says from research that there's no evidence to suggest that it's beneficial [phonics teaching]…it's quite hard to hear what they're [school staff] saying to me ... they've [pupils] still got to pass a phonics screening test because that's a government requirement.

This situation presented Natalie with a conflict where she had to follow school practice with which she did not agree and perhaps demonstrated the need for alignment in university and school perspectives or further student preparation for alternative approaches.

Both mentors and student teachers experienced occasional difficulties with a very prescriptive scheme, especially *Read Write Inc*. In some cases, the student teachers did not feel that the high level of prescription matched their personal teaching preferences or the needs of their class. Another interesting but isolated finding was that, in one school, the scheme acted as a barrier to the mentor giving effective feedback to the student. The experienced mentor who had received special in-service training and taught as a reading intervention teacher as part of the *Every Child a Reader* initiative (DfE 2011) explained that she felt unable to comment on her student's practice for

teaching reading more widely or engage in dialogue about children's experiences because of the scheme used in her school:

> Because *Read Write Inc.* is so prescriptive, he [Ben] can only follow the plan that's there ... In a way, I feel like I can't share with him all the things I know because the *Read Write Inc.* doesn't allow me to…All I can say with the *Read Write Inc.* is, 'Is he following it or isn't he?' Basically, because you know, apart from behaviour management, there's not a lot to it.

In each student teacher's journey from the PGCE course to their first term as NQTs the activity systems of university and school were highly influential. University sessions, tasks and guidance did not always support students in the way they were intended although assignments and tutors sometimes helped students to develop deeper understanding. In schools, progress through common phases of development when teaching early reading appeared to be most affected by the mentor role and space for dialogue, support from the wider school community and the ways in which schemes and resources were shared with student teachers.

4.6 Summary

The research findings identified commonalities in the development of student teacher knowledge, practice and understanding for the teaching of early reading during the PGCE course and the transition to the NQT year which have not been seen in previous research. The findings show a continuum of development which has, for the first time, isolated specific areas in which student teachers may need further support. The continuum included shared changes in knowledge, understanding and practice which were encapsulated by the phases: notice and emulate, respond and innovate, apply and connect, and extend and augment. On entry to the PGCE, the student teachers had very little awareness of processes involved in learning to read and were anxious about supporting all children to become fluent readers. This highlighted how much the students needed from the university from the start, including an understanding of theory and models of reading acquisition and possible practice and pedagogy for a range of reading levels. Once in schools, the participants were able to notice pupil progress and emulate practice observed but not support pupils spontaneously. They then developed more confident knowledge of content and pedagogy which enabled them to respond to pupil misconceptions and innovate with new activities. This finding demonstrated the importance of school and university support with terminology and modelling and

developing students' fluent use of decoding and phonic knowledge. In the final stage of the PGCE, students showed increased awareness of pupils' application of reading skills and the benefits of connecting elements of literacy. However, it was clear that individualising planning and understanding progression beyond the age groups taught presented a challenge for the participants. Although the student teachers were able to extend their practice into the first term as NQTs and augment existing practice in schools this transition was sometimes problematic as, in all cases, day to day mentor support for NQTs was withdrawn. NQTs initially maintained practice but felt much more vulnerable and especially lost confidence. A new finding pointed to the influence of pressure to meet external expectations for pupils in early reading as a possible reason for a drop in student teacher confidence once they became NQTs.

In all cases the participants' development of knowledge, understanding and practice for teaching early reading was clearly affected by the activity systems of the university and schools. The new findings from this research indicate the powerful influence of specific elements on individual students and suggest ways in which these could be re-configured for the benefit of student teachers. Throughout the placements, the university activity system attempted to connect theory and practice through the use of placement materials and set tasks. The success of this approach was limited as the university and school activity systems did not have shared objects and understanding. In two cases, the university reading-focused assignments seemed to be more influential as they encouraged the students to integrate and evaluate research, theory and practice. The study found that the tutor role was an important way of guiding mentors and mediating their relationship with students but specific support for reading was less evident. An important new finding was that student progress in teaching early reading was strongly influenced by opportunities for mentor dialogue but many mentors focused on information transfer and encouraging the student teachers to emulate practice without developing deeper understanding.

For the first time, the influence of the wider school community on becoming a teacher of early reading was identified as this also offered learning opportunities and support for teaching early reading and could strongly affect how valued and confident the participants felt. The involvement of teaching assistants in this process was highlighted in many cases. Structured schemes and resources gave the participants security but in one case were perceived to act as a barrier to effective mentoring and could encourage

unquestioning replication of practice. Importantly, NQTs were most confident about their teaching of reading when whole school support provided induction and ongoing advice for using schemes and planning and assessment systems for teaching reading. However, the schools frequently expected the new teachers to take on the role of class teacher without additional training for specific schemes or opportunities to observe or gain feedback on this aspect of the curriculum.

Findings from this study emphasise the influence of school activity systems on becoming a teacher of early reading and the difficulties that student teachers experienced transferring practice when the elements and objects of each school were so different. In particular, they provide new evidence about possible tensions and contradictions between the university and school activity systems ostensibly working together in one ITE partnership. In most cases, once a student teacher left a school activity system and joined a new one, the new expectations, the mentor, school community and systems or schemes for reading shaped the participants' understanding and dictated their practice. Improvements could be carried over from one activity system to another but were fragile and were sometimes discarded if they were deemed incompatible with the new activity system or if contextual barriers were present. The influence of the university activity system was diminished because schools and mentors did not understand or share university objects and intentions and the tutor role was not clearly focused on early reading. In Chapter 5, a broad continuum for learning to teach reading, the influence of the activity systems and the tensions present in the PGCE and NQT year are developed further with reference to the literature.

Chapter 5 Discussion

5.1 Introduction

In this chapter, key themes identified in the findings are revisited and discussed with reference to previous research in the field. In many areas, this small-scale study of lower primary PGCE students shares agreement with previous studies of student teacher development. However, it also offers new insight into the specific development of teachers of early reading and the influence of the university and school partnership at a key moment in ITE in England as the primary PGCE becomes dominated by school-based training. The discussion focuses firstly on the development of student teacher knowledge, understanding and practice for teaching early reading in relation to the question: 'How do student teachers develop knowledge, understanding and practice for teaching early reading develop during a PGCE course and through the transition into the NQT year?' Possible links between individual beliefs and expectations over the changes in participants' teaching of early reading are discussed and a broad developmental continuum for this process is proposed. Secondly, the chapter centres on the activity systems of the university and the schools involved in this process and considers the findings which address the second research question: 'What is the nature and influence of the multiple activity systems involved in ITE and induction on the process of becoming a teacher of early reading?' The influences of specific elements of the activity systems which form university and school experiences, NQT induction and external expectations for teaching reading are examined.

5.2 Beginning the PGCE

Over the past 30 years or more, much has been written which acknowledges the influence of student teachers' experiences as learners during their own schooling and their pre-formed view of teachers and what teachers do (Kagan 1992; Flores 2001; Moore 2004; Twiselton 2004; Loughran 2006; Bannink and Van Dam 2007; Bondy et al. 2007; Mutton et al. 2010; Anspal et al. 2012). This research found that although these ideas were present in a general sense in the initial expectations of the student teachers at the beginning of the PGCE course, once the students were asked to focus on

their ideas about teaching reading, they had limited school-based images and influences to draw on. It seems that learning to read is such an early and foundational skill that most participants had few memories of its acquisition. More surprisingly, they were not able to draw on pre-course observations and experiences of teaching early reading to shape their expectations of teaching practices in school. This finding appears to be in line with research in other subjects which suggests that in the early stages of ITE, students do not have enough understanding to gain from observation (Loughran 2006; Mutton et al. 2010). In common with student teachers in a more recent study in the United States (Leader-Janssen and Rankin-Erickson 2013) and an earlier study in the UK (Wray and Medwell 1994), even if the participants were aware of some components of teaching reading, such as phonic knowledge, they had a very limited grasp of pedagogy until they experienced teaching in school placements with guidance from mentors and tutors.

As much prior research has indicated (Hay McBer 2000; Harris and Sass 2007; Darling-Hammond 2009; Hunt 2009; Rinaldo et al. 2009; Clifton and Muir 2010; Coe et al. 2014), there was little suggestion that the prior qualifications or experiences of the participants in this study made an appreciable difference to their development as teachers of early reading. This was still the case for Sarah, who had studied early childhood and then worked as a pre-school leader, and for Chloe and Hannah, who had both completed degrees with an education component which entailed working with groups of children and leading lessons in schools. This *tabula rasa* starting point for the participants showed just how far and how quickly they were required to progress in order to become competent and confident teachers of early reading, particularly in a context where this one aspect of their practice was so highly monitored and prioritised by expectations set out for universities and schools.

5.2.1 Beliefs and expectations about teaching reading

Research has indicated that student teachers respond to ITE differently depending on their epistemologies linked to teaching and learning (Twiselton 2004; Bondy et al. 2007; Mutton et al. 2010). Whilst the student teachers in this study maintained some fixed beliefs about reading, an important finding was the way in which the participants' views of teaching reading and themselves as teachers and learners changed at different stages. Their beliefs about teaching and learning were highly dependent on their school

context and sometimes reflected several different perspectives at the same time. This finding was in line with Ellis (2007a: 150) who found that any 'individual knowing' of his student teacher participants was developed through their participation in different cultural environments.

The participants in the research presented here appeared to move between different epistemologies about teaching reading in common with three categories identified by Bondy et al. (2007). At times, the student teachers seemed to believe that knowledge was 'uncertain and integrated' (Bondy et al. 2007: 71) as they compared and critiqued theory and practice about teaching reading, attempting to apply ideas from the university and their own research to practice in school. This proactive and reflective approach to learning to teach reading was also identified in the most successful teacher candidates in a study of secondary PGCE students (Mutton et al. 2010). For the primary PGCE participants, there was no shared point in their ITE when this way of viewing their learning was most in evidence, but it was often provoked when there was a problem, a contradiction or a significant change for them to manage. However, at different points, they also displayed the contradictory view that knowledge was 'fixed and specific' (Bondy et al. 2007: 73). This was demonstrated through their comments which valued real-life experience over theory, and their behaviour which focused on learning through emulation. Flores (2001) found that secondary NQTs strongly believed that they would learn mostly through experience, whilst Mutton et al. (2010) found that the student teachers who held this view became reliant on the school context and mentor support to succeed and so were more vulnerable to failure. In this study, the view that knowledge was fixed and specific was to some extent more visible in the comments of the student teachers at the beginning of the course but re-emerged at different points in their ITE and was exacerbated by contexts that limited the opportunities to discuss and analyse teaching decisions. In such activity systems, the participants could only focus on attempting to follow received practice and learn by doing.

It was clear, in some cases, that the students experienced a discord between their beliefs and those of their placement school about teaching reading. In these circumstances although they may have believed that pedagogy for teaching reading was 'certain and dichotomous' (Bondy et al. 2007: 76), they copied the mentor's practice but still questioned the approach in discussion with the researcher. There were no participants in

the study who took, what Mutton et al. (2010) found to be, the least successful approach to learning to teach, namely discarding all elements that did not fit with their existing beliefs about teaching reading. However, when the student teachers reached their NQT year, some did begin the process of attempting to put into practice their beliefs about teaching reading alongside the different approaches taken by their schools (Section 5.3.5). This was in contrast to one study of secondary pre-service teachers who were seen to become more rule-focused and more traditional in their teaching methods as they conformed to the expectations of their schools (Cooper and He 2012). Reasons for this change in NQT practice may relate to the new finding that all the participants maintained one shared view of the way in which pupils learned to read. From their entry to the course and into their NQT year, the students were in agreement that pupils needed to be motivated to read in order to become successful readers and that teachers of reading should be motivating pupils to read as well as providing them with the knowledge and skills to do so. It is interesting although not entirely explicable that they adhered to this view often in the face of school practice which seemed much more focused on skills acquisition and strategies for reading. This specific aspect of their beliefs was therefore unchanged by the different activity systems in ITE but was not fully acted upon until their NQT year.

5.3 The development of knowledge, understanding and practice

5.3.1 A broad continuum

The findings of the cross-case analysis suggest a broad continuum of student teacher development in knowledge, understanding and practice for teaching reading, detailed in Chapter 4, which has not been identified in previous research (Table 5.1). This proposed continuum offers a potentially useful starting point for ITE partnerships to consider where student teachers may experience particular difficulties and benefit from focused guidance and mentoring. The findings indicate that there could be areas of development which are common to student teachers at different points in their PGCE and induction. These include an increasing awareness of pupil progress and changes in student teachers' ability to respond flexibly in reading lessons as a result of growth in their pedagogical content knowledge. However, the route which students followed along this proposed continuum was also strongly influenced by the activity systems where they learned. The following sections review the sequence of student teacher

development of knowledge, understanding and practice in the light of previous research.

Table 5.1: Continuum of the development of knowledge, understanding and practice for teaching early reading

	Term 1: Notice and emulate	Term 2: Respond and innovate	Term 3: Apply and connect	NQT: Extend and augment
Development of knowledge, understanding and practice	Students understand that decoding and word recognition are key components for reading. Students are able to segment and blend and identify phonemes. Students focus on behaviour and class management. They try to emulate the organisation and delivery of lessons modelled by the class teacher. Students notice pupils' learning progress and different elements of reading but are unable to intervene spontaneously.	Students show more confident knowledge of terminology, practice and processes used in learning to read. Overall, their subject knowledge is sound with noticeable errors and misconceptions no longer present. Students focus on the next steps in children's learning. They are able to respond spontaneously and address misconceptions. Students begin to innovate with new activities and ways of working. Some students are able to note the needs of individuals in planning and assessment and target them during lessons.	Students are beginning to understand more formal monitoring and assessment procedures. Students hold high levels of knowledge, about groups and individual pupils' ability to apply reading skills, in their heads and use this to shape their interactions. Students make use of opportunities to reinforce multiple aspects of literacy in reading sessions. Students focus on application and assessment for reading across the curriculum and making connections between reading and phonics sessions and other literacy teaching.	NQTs experience additional pressure and responsibility for meeting national pupil outcomes in reading. They become more aware of difficulties with pupil progress. These factors can undermine their confidence about teaching early reading. NQTs are more fully involved in systems for assessment and monitoring. They extend effective practice developed in their final placement and focus on the needs of learners. NQTs take ownership of the reading environment and begin to augment school practice with new ways of working.

	Term 1: Notice and emulate	Term 2: Respond and innovate	Term 3: Apply and connect	NQT: Extend and augment
Possible areas for development	Students need help to match their teaching in terms of pace, objectives and activities to the level of the children's learning. Students still have inaccuracies in subject knowledge especially for decoding. Students' ability to model early reading processes and use metalanguage is not automatic. Students are not always able to identify the reasons for pupil misconceptions. Students need support with clear systems of assessment to enable them to identify and plan for individual and group needs. Students also need help to plan lessons which focus on pre-phonics teaching, modelling reading behaviours, and comprehension strategies.	Students show gaps in knowledge of progression beyond the level being taught. Although students are more responsive to individuals and their subject knowledge is sound, there are some opportunities for learning still being missed at this stage, e.g. challenging and supporting certain groups of children. Students do not talk about making links across the curriculum or applying reading skills. Students are using metalanguage but sometimes miss opportunities to reinforce this with pupils. Recording assessments and using these to inform planning is not yet consistent.	Students report concerns about higher-level phonics teaching, alternative phonemes and graphemes and moving into spelling. They may continue to show gaps in knowledge of progression beyond the level being taught. Individualisation in planning may not be fully developed. Students may experience difficulties knowing what the pupils have done, or are capable of, following the term(s) when they were placed elsewhere. Students may need support so that assessment drives teaching and learning, e.g. opportunities to re-group pupils.	NQTs may experience difficulties supporting pupils with SEN and EAL without mentor guidance. NQTs may need help in transferring to new schemes for reading and phonics and planning according to school expectations. NQTs may continue to show gaps in knowledge of progression beyond the level being taught. NQTs may need guidance and support to work towards national expectations and testing for reading, manage TAs in reading lessons, and talk to parents about reading and phonics.

5.3.2 Notice and emulate

As the PGCE students in this study began teaching, they were able to notice pupil progress but were initially reliant on attempting to emulate practice observed in school. Phelps (2009) suggested that teachers of reading might hold specific content knowledge which would make them effective, such as knowledge of phonemes, word types and comprehension questions. The findings in this small-scale study of PGCE student teachers presented here confirm that these types of knowledge for teaching reading were very important to the participants. The participants reported that the first area of content knowledge, and the most challenging, was encoding and decoding using knowledge of graphemes and phonemes, which supports other research carried out with student teachers outside of the UK (Malatesha-Joshi et al. 2009; Phelps 2009; Fielding-Barnsley 2010; Binks-Cantrell et al. 2012). Whilst Phelps (2009) could not be sure how such content knowledge affected teaching or pupil progress, there seemed to be a clearer link in this study between the PGCE students' content knowledge for teaching reading and the effectiveness of their practice. The use of phonics as a first strategy for teaching reading was initially particularly difficult for students because the processes of blending and segmenting and grapheme-to-phoneme correspondence were not yet automatic for them. Limited content knowledge for teaching phonics, even following course input, was identified in research with Australian student teachers (Fielding-Barnsley 2010) but this study offers some further explanation of why this might have been the case. Although the participants' conscious recall of university sessions was limited, their practice and interview contributions indicated that they had gained knowledge of phonemes, graphemes, terminology and reading processes. However, they could not fully internalise their knowledge of phonics without sustained and regular opportunities for practice. For most of the participants, this sustained practice took place in their daily teaching sessions in the school placements which made the student teachers vulnerable to making errors.

The student teachers' initial difficulties with pedagogical content knowledge limited their teaching as they were unable to fully model the use of blending and segmenting as much as an experienced teacher because of their fear of making a mistake. As Ofsted (2012a: 9) reported, the best new teachers of language and literacy were able to 'use accurate and precise pronunciation of phonemes and blend and segment words when teaching phonics', but this element of practice was only partly in evidence by the end of

the first term of the PGCE. Another reason for this could be that the student teachers may not have realised how much young children needed clear examples and demonstration rather than instruction as a result of the very limited amount of time they had to observe and discuss practice before beginning to teach.

Despite the difficulties experienced by the student teachers at this stage they demonstrated a higher level of thinking about children's learning in reading and phonics at an earlier stage than previous research might suggest. In common with earlier research into student teachers' development in primary literacy teaching (Twiselton 2000, 2004), their first concern was to manage and organise their classes in phonics, literacy and guided reading and to ensure that children were engaged and on-task. Twiselton (2000: 392, 2004: 157) referred to this stage in the developing student teachers' identities as 'task managers'. She suggested that student teachers were more likely to hold classroom orderliness as their main object at the beginning of their ITE but this could be a persistent concern for specific individuals and might change at different points in their course depending on the influence of their own beliefs and expectations and those of the systems where they learned.

Like the participants in previous research (Twiselton 2000, 2004), the PGCE students in the study presented here were concerned with ensuring that lessons ran smoothly and that elements prescribed by the school and the curriculum were delivered. However, in contrast to these earlier findings, the new research suggests that concerns about class management and curriculum did not prevent the PGCE students from being aware of individual, and group, needs and progress in reading. These findings have some similarity with findings presented by Mutton et al. (2010) who identified that secondary student teachers were capable of complex thinking about learning from an early stage in their PGCE course whilst acknowledging that the focus on class management was also present. In addition, the new research presented here suggests that the students' ability to respond to pupil progress was reliant on their experiences in the different activity systems where they were learning. In most cases, this developed gradually as they moved through the primary PGCE and was underpinned by the development of their pedagogical content knowledge for teaching reading as well as opportunities to move beyond emulating mentor practice (Section 5.5.1). Some explanation for the participants' early awareness of student learning but initial focus on the mechanisms of teaching lay in the development of their knowledge and understanding for teaching

reading and types of support they received. The students particularly reported needing help to match lessons to the needs of their pupils. They sometimes struggled to find examples of words containing the grapheme-phoneme correspondences (GPC) which they were expected to teach as they were unable to easily identify the correct GPC and to decide whether words fell into the category of those which should be decoded or those which should be memorised on sight. Because the students' own grasp of phonic strategies was not fully developed, they found it very difficult to identify misconceptions and support the pupils spontaneously during their first lessons. This finding is in line with research by Tochon and Munby (1993) who found that 'novice' teachers were less likely to adapt their teaching flexibly to the circumstances encountered than their 'expert' counterparts. It seems likely that for the same reasons (i.e. fear of making mistakes, lack of automaticity and developing understanding of how young children learn), several of the student teachers also made very limited use of reading terminology or other forms of talk about the reading process during their first lessons. This omission was observed, not only in phonics but also in lessons with a reading comprehension focus.

One new finding from the study was that participants had very limited knowledge, understanding and practice about teaching reading skills which either preceded or followed decoding. This difficulty may have been a result of the university focus on phonics in response to external monitoring of outcomes for student teachers in this area as it mirrors the limitations experienced in the American curriculum for ITE following high profile government focus on phonics teaching (Gribble-Mathers et al. 2009; Bingham and Hall-Kenyon 2013) (Section 5.4.1). However, despite the participants' difficulties with some aspects of teaching reading, they did not seem to have the sharp decline in self-efficacy once they were faced with the realities of teaching reading in the classroom that has been found in previous research (Leader-Janssen and Rankin-Erickson 2013). Whilst they realised their areas for development, they mostly accepted these as a natural part of the learning process. This may well have been because the students in this study had such limited knowledge of teaching reading that they could not be disappointed by their practice at the beginning of the PGCE course. Twiselton (2000, 2006) suggested that student teachers might focus on delivering the curriculum, particularly in the earlier stages of their ITE, to cope with their own insecurities about teaching literacy. To a certain extent, in the first placement, some students in this study

used the security of the phonics schemes and guided reading systems to help them to gain an understanding of planning and progression. However, the daily interactive nature of phonics and guided reading teaching in most schools meant that by the second placement, students had overcome these initial difficulties with confident modelling of reading processes and terminology.

5.3.3 Respond and innovate

By the second term of the PGCE, the participants' improved subject knowledge confidence and automaticity meant that they moved through the continuum of development to become more spontaneously responsive during lessons. They progressed from noticing children's learning to intervening and moving learning forward as well as anticipating potential difficulties, thus demonstrating Schön's (1983) concepts of reflection 'in and on action'. This ability to make changes to teaching, both during and after lessons, in order to support pupil learning showed a shift in competence and confidence when teaching early reading and phonics for all of the participants. In most cases, their practice between the end of the first and second placements changed quite dramatically. This mirrored findings with undergraduates in mathematics as they began to 'focus closely on children's solutions and their explanations rather than on the general features of the learning or assessment situation' (Singer-Gabella and Tiedemann 2008: 467). The student teachers were able to use their pedagogical content knowledge for teaching reading and formative assessment to make much more specific choices of planned and unplanned interaction focused on the learning needs of individual pupils and groups in their reading and phonics lessons.

Findings from this study support the literature which suggests that student teachers gradually move away from a surface approach to teaching to become more responsive to pupils' needs (Kagan 1992; Singer-Gabella and Tiedemann 2008; Anspal et al. 2012). From the initial placement, the student teachers were highly motivated to develop pupils' knowledge and skills for reading and were aware of when learning was or was not taking place. However, it was not until the second placement that the participants felt able to react spontaneously and flexibly to make the most of learning opportunities that arose in lessons in a similar way to more experienced teachers in previous research (Wray et al. 1999, 2000; Fisher 2001; Pressley et al. 2001; Louden et al. 2005; Topping and Ferguson 2005; Flynn 2007). By this time, the students had

secure subject and pedagogical knowledge enabling them to clarify concepts and build on learning within each lesson, in common with 'concept builders' identified by Twiselton (2000: 90, 2004: 158, 2006: 393). In addition, in this study some students introduced new activities and approaches and so could be seen to be innovating as well as emulating their class teacher's practice. This relates well to previous research with students teaching reading in the USA (Leader-Janssen and Rankin-Erickson 2013) who felt more confident as their instruction became based on assessment data and pupil goals. These changes appear to be directly related to increased knowledge and understanding for teaching reading and provide an example of growth in pedagogical content knowledge which was embedded in teaching and hard to separate from practice, seen in previous research with both students and experienced teachers of primary English (Medwell et al. 1998; Fisher 2001; Topping and Ferguson 2005; Twiselton 2006). Students were therefore using 'active teaching' where they supported pupils' learning as they moved through a series of carefully chosen tasks (Brophy and Good 1986; Muijs and Reynolds 2003). Surprisingly, by this halfway point in the PGCE course, they demonstrated strategies seen in research with effective literacy teachers, such as making connections between whole class reading with larger texts and follow-up guided work and building spontaneously on pupils' contributions to enhance knowledge about reading (Wray et al. 2000; Louden et al. 2005; Topping and Ferguson 2005).

In Table 5.2, three extracts are included from Natalie's post-lesson interview during her second placement. These show that she was simultaneously considering the overall objective set out in the scheme used for phonics, children's progress in applying reading skills in shared reading, and her own teaching strategies for moving pupil learning forward in one-to-one reading practice. This shift was noticeable for most participants in this study, but student teaching competence for teaching reading and phonics overall was still specific to the context and needs of the class, and, in common with other research (Leader-Janssen and Rankin-Erickson 2013), the participants were not as confident about knowledge of progression beyond the level they were teaching in school. This study, for the first time, also highlighted the specific difficulties that some students experienced in providing opportunities to learn for the full range of needs in the class and in recording progress in reading.

Table 5.2: Natalie's multi-layered thinking about reading

Curriculum/scheme	Monitoring progress	Strategies and support for learning
'Well, at the moment they're still segmenting and blending their phonemes. They are on phase four…Well, we're just recapping phase four before we move forward with that so for the next few weeks they are doing that.'	'Last week it was great …we did 'Farmer Duck' and they really were getting involved in the story and they were remembering/recalling the words that I was saying so 'How goes the work?' and they were able to answer. They were able to do the reading of the animal sounds so they were sounding out 'moo' or 'quack'.'	'I think I'm even more aware of patience with one-to-one readers – give them the chance to be able to read. Guide them through it but don't rush them, allow them to segment and blend a word and then sound it out as a whole rather than just sounding it out and then moving on to the next word and not actually getting the whole word. And looking back at the sentence, so recapping the sentence and reading comprehension with them 'Is that what the story is telling us?' and putting the two together from the pictures and the words.'

A possible reason for the high proportion of students in this study demonstrating understanding at a similar level to 'concept builders' (Twiselton 2000, 2006) was that the students in this study no longer planned from the detailed expectations of a *National Literacy Strategy* (DfEE 1998; DfES 2001) or its successor, the *Primary Framework for Literacy* (DfES 2006). Instead, they were working under the broader guidelines of the primary National Curriculum in England (DfEE 1999) in preparation for the introduction of the new National Curriculum (DfE 2014) in the following academic year. Their curriculum expectations for reading were mostly driven by progress through set phonics phases and schemes which defined the graphemes and phonemes they were teaching but had little influence on how other elements of reading were taught. This may have offered the student teachers more freedom to focus on the end objective of fluent reading instead of curriculum delivery.

5.3.4 Apply and connect

The next stage of the continuum involved, students working on assessment practices beyond formative assessment in terms of record-keeping, tracking and summative assessment for reading. Interestingly, these aspects of assessment are not specifically discussed in much of the research literature on effective teaching of early literacy and reading. This might be because of the changes in expectations since some of the research has been conducted or because of international differences in schooling or even because of a more ideological choice to focus research on teaching and learning rather than assessment. However, assessment practices form part of the core role of

primary teachers in England and were an area that student teachers were developing in their final placement. In research with student teachers in the USA, their confidence about teaching reading was boosted by using assessment to direct their teaching and monitor pupil progress (Leader-Janssen and Rankin-Erickson 2013). However, the sorts of assessments used by the pre-service teachers in their study were not explored.

By placement 3, schools began to share more detail of school systems for assessment and monitoring but the student teachers' knowledge of statutory and summative assessment was noticeably less developed than their understanding and application of formative assessment for reading. A report by the International Reading Association in the USA drew on previous research to recommend that student teachers of reading should be 'taught how to interpret assessment data critically and adjust classroom instruction accordingly' (Pimentel 2007: 5). In this study, student teacher understanding of the assessment and data systems used in school was variable and still developing. The importance of learning to monitor and interpret data and formal assessment in student teacher preparation has also been emphasised by the *Carter Review of Initial Teacher Training in England* (Carter 2015). Whilst such knowledge might be necessary to work in a data-driven school system, this study adds to findings from previous qualitative research which notes that teachers' professional knowledge about early literacy informs teaching decisions in a complex way and cannot be reduced to knowledge of data (Medwell et al. 1998; Fisher 2001; Louden et al. 2005). For the students themselves, the most productive element of the assessment cycle in the development of their teaching of early reading was their formative knowledge of pupil progress and day-to-day adaptations, whether or not they were recorded. This supports the finding that the 'best new teachers' used ongoing assessment during reading, phonics and literacy lessons to guide the level of challenge and support offered to pupils (Ofsted 2012a: 9).

In this research, the PGCE students were able to verbalise their decision-making based on formative assessment at group level and often at the level of individual pupils, but in some cases, they were not recording progress systematically or showing on paper how it influenced their planning. A similar lack of individualisation in planning was also observed in some of the most effective teachers in research into effective teaching in early literacy (Louden et al. 2005). This could suggest that the university expectations of recording individual needs in planning and the school expectations of assessment

records were more valuable as evidence towards external monitoring than for their impact on student teacher practice. Alternatively, student teachers during their final term may have been too overwhelmed by their increasing responsibility for the full teaching workload to manage such demands or the difficulties imposed by moving between school activity systems with fragmented knowledge of pupil progress may have been a contributing factor.

By placement 3, students demonstrated increased awareness of the application of reading skills across the curriculum. By their final placement, they were more aware of ways in which the subject of English and specifically skills and knowledge for reading could be taught and assessed in other lessons. The participants were confident and independent in their teaching decisions and ensured that their pupils were not only highly engaged in learning but also acquired specific skills through the student teachers' choice of instruction and organisation. The pupils were given more opportunities to use reading skills across the curriculum and the student teachers were monitoring and designing these learning experiences with knowledge of their pupils' reading abilities. It was particularly interesting that cross-curricular reading links were still important to the student teachers despite the compartmentalised nature of the English and reading curriculum followed in schools and the apparent lack of dialogue with mentors on the subject. The students' behaviour was an example of providing 'opportunities to learn' identified in several earlier studies of effective literacy teachers (Brophy and Good 1986; Wray et al. 2000; Muijs and Reynolds 2003; Blair et al. 2007; Hunt 2009; Rupley et al. 2009). It was noticeable that the participants in this study were already exhibiting these behaviours in the final term of their PGCE course.

The participants in their final placement were also beginning to make maximum use of opportunities to connect different elements of the primary English curriculum. The participants showed a balanced approach to teaching reading by carefully selecting and varying the lesson structure and teaching strategies to match the objectives they were working on, as seen in earlier research with qualified teachers in literacy (Pressley et al. 2001; Louden et al. 2005; Topping and Ferguson 2005). They frequently combined activities and strategies to promote comprehension, word recognition, decoding, fluency and expression. They also took opportunities to develop vocabulary and reinforce handwriting, punctuation and spelling during reading activities. However, one new difficulty posed by school responses to policy for teaching early reading during this

study was that, in most schools, pupils were in sets for phonics teaching which differed from the classes where they were taught English and other subjects. By the end of the PGCE, the participants started to notice that this created issues around supporting and assessing the application of reading skills. Their focus was the purpose of what they had taught and its impact on pupils' learning, but they were not always able to teach in the most effective way by contextualising reading because of the external expectations for teaching phonics and the way that these had been interpreted by schools.

5.3.5 Extend and augment

In the final phase of the continuum, the seven NQTs in this study did not experience a mismatch between ITE and practice in schools or have an idealised view of the day-to-day role of the teacher as seen elsewhere (Brown 2001; Smagorinsky et al. 2004; Findlay 2006; Haggarty et al. 2011; Haggarty and Postlethwaite 2012). Previous research suggested that NQTs struggled with the transition to a greater workload and sole responsibility for their pupils (Koetsier and Wubbels 1995; Flores 2001; Findlay 2006; Newman 2010; Haggarty et al. 2011; Haggarty and Postlethwaite 2012). Whilst the new teachers acknowledged the emotional impact of this shift, they showed few changes in practice for teaching reading from their final placement. The superficially smooth transition of practice does not relate well to the 23% of student teachers who found that they were not well prepared to teach reading in the most recent NQT survey results (DfE 2015b). However, the participants did express increased vulnerability and responsibility which may be a factor in the NQT survey responses. In common with concerns previously identified in Ofsted research (2012a), the participants felt they needed more guidance about supporting children's individual needs during their first term and reported working hard to differentiate their teaching to meet the needs of learners with English as an additional language and special educational needs. The NQTs also had to meet much more targeted expectations for their pupils and contribute to whole school systems of assessment and record-keeping in a more consistent and independent way than when they were students. Although the majority of the participants felt additional pressure about this responsibility for both monitoring and raising attainment, the level of anxiety experienced and the way this affected their view of themselves as teachers of reading was highly dependent on mentoring and the wider school systems of support. As previous research in other disciplines suggested, teamwork and a supportive atmosphere made a huge difference to the participants'

feelings about their NQT role (Flores 2001) as well as the way in which schemes and systems were introduced (5.5.6) and external expectations for outcomes in reading were mediated (5.6).

One new finding from this study, in contrast to earlier research conducted with secondary student teachers (Cooper and He 2012; McIntyre and Jones 2014), was that once they became NQTs, most of the new teachers began to question and augment school practice. In recent research with secondary English student teachers, one participant described something as simple as taking pupils to the theatre as 'risk-taking' behaviour in their school context (McIntyre and Jones 2014: 34). The participants in this study seemed less concerned about taking risks, as they maintained school expectations for reading, but began to augment them with new practices. Ben provided a particularly interesting example by introducing a new system of lending story books to parents. Rather than being concerned that taking a risk would be viewed unfavourably in his school, he expressed a wish to quietly change practice in the Early Years Foundation Stage unit and lead by example. The participants' rapid introduction of new practices once they became NQTs may have, in part, been a result of the organisation of primary teaching, where individual teachers are quickly able to take ownership of their sole class and classroom. Alternatively, the findings might indicate that the participants' frustrations with the current policy for teaching early reading encouraged them to begin to make changes when they were able to do so, in line with their beliefs about reading.

It is unclear how the new teachers gained the confidence to introduce new practice for teaching reading in their new schools. Although in a qualitative study such as this there are no simple equations of cause and effect, certain contributions from Ben's student interviews seemed to offer some explanation, at least in his circumstances. In the early stages of the course, Ben was sure that effective teachers would know the sort of books that would motivate their pupils to read and that they would make these available. He also drew the researcher's attention to some university input, which he claimed suggested that decodable texts should not be the only exposure to print for young children, and a session about *Storysacks* where the importance of storytelling and reading aloud were emphasised. In his first and final placements, he worked with a proactive mentor who combined texts from a number of reading schemes to build

pupils' sight vocabulary and decoding. It is hard to know whether Ben simply maintained his original convictions about reading or was influenced by these different experiences. Certainly some combination of factors allowed him to develop new practice for teaching reading within the activity system of his NQT school.

Other changes to the practice demands of the NQTs involved taking greater responsibility for managing teaching assistants and working with parents. This change was often another extra level of responsibility which added to the NQTs' workloads. They especially needed support if there were issues with the work of the teaching assistant or there were parental concerns. Jones (2002) also highlighted the complex decision-making required of NQTs to cope with difficulties and conflicts with other adults in school. The managerial and social demands of these relationships were largely overlooked by research into ITE and induction for teaching early language and literacy (Ofsted 2012a, b). Although they may at first seem to be generic teaching skills, this study indicates that there were particular requirements associated with working with parents and teaching assistants whilst teaching early reading for which the student teachers needed further support and preparation. These became particularly significant during students' transition to the NQT role.

The continuum of development identified in this study offers new findings about the common areas of strengths and difficulties for student teachers and NQTs when becoming teachers of early reading. The next sections explain how the specific elements of different activity systems affected the students' individual trajectories through the continuum and compare this with previous research investigating influential factors at work in ITE and induction.

5.4 The influence of the university activity system

5.4.1 Theory and practice

Previous research has identified the potential influence of ITE on student teachers' experiences and outcomes in general (Barber and Mourshed 2007; DfE 2010b; McArdle 2010; Konstantopoulos 2011; OECD 2011; EIU 2012). This study also found that the university influenced the participant, as they progressed through the continuum of development for teaching early reading, through the taught programme, set tasks in and out of school, and contact with university tutors. In general, the students perceived

the taught programme to be less influential than their school experiences. However, they demonstrated new knowledge of terminology, processes and approaches for teaching phonics and reading on entry to school and as NQTs related the influence of some university sessions on their teaching. Similarly, some participants also said that they could not remember taught content for phonics and reading and yet were able to identify that it did not focus on their chosen age group. The disturbance between the student views of what they had learned and the evidence of their growing knowledge, understanding and practice indicated that they gained a lot more than they realised from their first weeks at university. It might also suggest that the student teachers' expectations for the roles and responsibilities of the university and school activity systems in the ITE partnership may have been based on a view of ITE as it had been organised in the past and so they were disappointed by the limited university-taught content in the current context.

Despite student perceptions and recall in the moment, there is agreement that universities have an important role to play in linking theory and practice and encouraging reflection and research-informed teaching (Koster et al. 1998; Loughran 2006; Pimentel 2007; Ofsted 2012a; Burn and Mutton 2013; Carter 2015). In previous research, university teaching has sometimes been criticised for being too theoretical and not enabling the links to be made between theory and practice or facilitating student teachers to build up their own 'practical wisdom' (Lunenberg and Korthagen 2009: 227). The participants in this study did not criticise the content of teaching at university or suggest that it was inappropriate or too theoretical, although they often spoke of the importance of learning through experience. Overall, the student teachers valued the university input and wanted to spend more time in the university with the foci identified below:

- alternative strategies for supporting readers who struggle with phonics
- pedagogy for pre-formal phonics instruction and comprehension strategies earlier in the course
- more practical activities for use in the classroom
- more opportunities to revisit, reflect and discuss understanding and practice with their peers

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The areas in which the participants wanted more from the university highlight some interesting issues. Firstly, the university had focused on phonics content as this was a specific area of satisfaction and competence as measured and inspected by Ofsted and the NQT survey. In activity theory terms, the university object was to ensure that student teachers met the *Teachers' Standards* (DfE 2013a) at a good or outstanding level, which included teaching reading using systematic synthetic phonics. This focus shaped the resources or mediating artefacts used by the university, including the taught content, handbooks and tasks, to emphasise phonics teaching and to some extent paralleled the narrowing of the ITE curriculum in some courses following the report of the National Reading Panel in the USA (Gribble-Mathers et al. 2009; Bingham and Hall-Kenyon, 2013). In this study, as students reached later stages on the continuum, experiences in schools meant that they questioned this narrow focus as they needed other ways to teach reading to particular children and in different age groups. Secondly, the PGCE students wanted more practical teaching ideas from the university. This might suggest that they did not gain these from their mentors in school placements which points to a possible lack of quality discussion with the mentors, a lack of mentor awareness about what the students needed to know or limited practice in schools (Section 5.5.2). Alternatively, it might indicate that students wanted to build up a teaching repertoire for early reading in the 'safe' environment of the university before putting it into practice in schools.

Finally, the need for student teachers to be given the time and the space to discuss and reflect upon school experiences has also been highlighted in previous research and writing (Dewey 1938; Schön 1983; Moon 2005; Coles and Pitfield 2006; Loughran 2006; Pimentel 2007; Lunenberg and Korthagen 2009). Unfortunately, this study indicated that the focus on learning from experience in increasingly school-based ITE acted as a barrier to supported reflection during university sessions. The limited time available to work with peers at the university meant that the students in this study had few opportunities to analyse the practice for reading in their schools in a 'safe' environment. This restricted their opportunities to learn from one another, to link theory and practice, and to gain support if their school circumstances were difficult. These limitations appeared to arise from the university response to the practical constraints and external expectations placed on ITE providers which resulted in a performativity-focused university object for ITE. Findings from the study indicate that linking theory

and practice about early reading through peer discussion and practical work at university, as well as working with mentors to improve the school-based learning opportunities available, appear to be valuable contributions which universities could make to ITE, despite policy focused on learning in schools, and could facilitate student movement through the continuum of development for teaching early reading.

5.4.2 School-based tasks and guidance

This research revealed disturbances, or differences of interpretation, in the use of university resources for teaching reading which highlight important issues for ITE providers. In this study, the school-based tasks did not completely fulfil their intended purpose in scaffolding student teachers' learning about early reading. Attempts to link theory and practice during school placements were made by providing highly structured and detailed written guidance to the student teachers and mentors. These included school placement handbooks and set tasks which were designed to focus the student teachers and mentors on specific aspects of pedagogy and subject knowledge. However, shared understanding of the relevance of university tasks was lacking between the mentors, students and tutors. Therefore, in some cases, the mentors and students did not use them as fully as perhaps intended to stimulate more in-depth thinking and dialogue about the process of teaching reading and the participants preferred to focus on the day-to-day demands of planning, teaching and assessing.

A further issue with the tasks set by the university was the expectation placed on the student teachers to act as the 'broker' of set tasks and mediate between the university direction and their mentor during school placements. In an arrangement where the power relationship and knowledge of what they needed to know was entirely unequal between student teacher and mentor, this was not an easy role for the students: where mentors were proactive and supportive, the participants were able to meet the demands of the university tasks for early reading and phonics; where mentors were absent or less supportive, it proved difficult for the student teachers to ensure that they gained the quality feedback and opportunities to learn about phonics and reading that the university required. Similar limitations in the effectiveness of university tasks and guidance were also found in research with secondary student teachers (Mutton et al. 2010; Douglas and Ellis 2011). In previous research, students perceived school-based

tasks to be too much to manage alongside academic assignments, planning and teaching and at times found that they had to be fitted into daily routines in a way which disrupted pupil learning (Mutton et al. 2010). In some cases, mentors were also unconvinced about the relevance and importance of these requirements (Douglas and Ellis 2011; Hutchinson 2011).

In this research, the use of university audits of subject knowledge and related target setting was less influential than Ofsted (2012a) suggested. Ofsted (2012a: 4) highlighted the importance of university audits of student teacher 'skills' for teaching reading carried out by tutors and equated the desirable elements to be audited as the unspecified 'knowledge and understanding students have of teaching language, reading and writing'. Ofsted went on to suggest that the best ITE providers used such an audit to set follow-up targets and review students' progress towards them. The ITE provider in this study did audit student subject knowledge for teaching reading and required each student to set targets and work towards them with the help of their mentors in school but at no point were these audits and targets mentioned by mentors, students or NQTs in the 59 interviews during this research. It could be argued that no direct question focused on this aspect of ITE but all the students and mentors were asked about what they were working on and what they had gained from university input and tasks. One interpretation of the findings could be that the audit and target-setting process around teaching reading was not highly valued by either the students or mentors and was therefore very unlikely to influence student teacher progress through the continuum of development. In this case, external expectations for ITE had been enshrined in university tasks and documentation but the students and mentors were not driven by the same motive.

The differences between the ways in which the university tasks for early reading were received in each school location confirmed a discord between the school, student and university perceptions of the resources and the overarching object of the activity systems which is in line with findings from research in different secondary school departments. In a detailed study of how mentors used university handbooks by Douglas and Ellis (2011), one mentor used university guidance as a stimulus for professional discussion with the student teacher, responding flexibly but thoughtfully to the tasks presented. Another mentor focused on satisfying the university requirements at a more

superficial level and perceived them to be less useful to the students than the 'real learning' achieved through teaching. In one activity system, the handbook represented shared understandings of student teacher learning about a subject; in the other, the handbook was seen as the embodiment of university rules imposed on the school. These differences were very much in evidence in this research with the Primary PGCE students. It appeared that, in common with Douglas and Ellis (2011), these tertiary and quaternary contradictions in the use of mediating artefacts arose as a result of historical differences in the work of the university and the schools and indicated differences in objects for ITE which either focused on the student teachers as learners or on enculturation into received practice in a school setting.

5.4.3 University assignments

Some students reported benefits from academic assignments focused on theory and research about teaching reading. One student explained that she had learned from an academic written assignment about different pedagogical approaches to teaching reading and there was some evidence that this may have improved her practice (Section 4.7.3). Another had carried out classroom research into the impact of props and visuals on the pupils' engagement and retention of shared reading which had helped her to see the impact of changing teaching strategies on pupils' reading. These findings, although very limited, offer some agreement with previous research which recommended that student teachers learned through their own research in schools (Stenhouse 1975; Lunenberg and Korthagen 2009; Frager 2010; Burn and Mutton 2013). They also suggest that a solid foundation of theoretical understanding has a place in illuminating what is being carried out in everyday practice and therefore is likely to facilitate students' progress through the continuum of development for teaching early reading.

The International Reading Association analysis of ITE programmes for teaching reading in the USA (Pimentel 2007) found that the programmes which student teachers considered most supportive had based their curriculum on research-informed teaching and used strong theoretical arguments to challenge existing beliefs that the student teachers had about the role of the teacher in teaching reading. As indicated earlier, whilst theory and research did inform the taught content of the PGCE programme at the university in this study, it is possible that the depth indicated by studies on longer ITE

programmes, or those with a reading specialist route in the USA, was not so easy to achieve in a route which had become primarily focused on practice. Findings from the study presented here suggest that the way in which the university and the schools had interpreted the external demands for school-based ITE may have diminished students' opportunities to understand the reasons behind teaching approaches seen in schools. The *Carter Review of Initial Teacher Training* (Carter 2015) criticised some ITE programmes for encouraging students to carry out their own research, without sufficiently developed research skills, rather than critically examining existing academic research, whilst Burn and Mutton (2013) advocated 'research-informed' clinical practice as the way forward for ITE. The findings in this study suggest there is a place for students to learn about teaching reading through both conducting their own practitioner research and responding to published research evidence. Findings also highlight the importance of providing school-based tasks in ITE which are focused on questioning and evaluating approaches to teaching early reading.

5.4.4 University tutors

In this research, the tutor role in enabling student teachers to progress through the continuum was difficult to examine but was perhaps more important than previous research would suggest. Whilst the mentor role is discussed in depth in the literature, the influence of the ITE tutor is less frequently part of research into student teacher experiences. When consideration has been given to the tutor role for early reading, it has more often focused on the content and delivery of university courses (Pimentel 2007; Ofsted 2012a). In a synthesis of best practice for ITE in early reading in the USA (Pimentel 2007: 12), it was suggested that tutors should have high levels of theoretical and pedagogical understanding and supervise placements but that school-based work would be supported by 'model mentoring'. More recent research in England also emphasised involving 'excellent practitioners' in ITE for early reading (Ofsted 2012a: 12) and only briefly mentioned ITE tutors with a focus on subject knowledge provision in university-based elements of ITE. In this study, mentors and student teachers most commonly referred to the support they had needed from university tutors when things had not been going well for a student on placement or when there was some concern about how to fulfil the mentoring role. In these cases, the tutor role was less obviously focused on subject knowledge and pedagogy, or teaching reading in particular; rather, it was more about repairing mentor and student relationships and identifying ways to

support struggling students. This finding supports the view that an important part of the tutor role is facilitating the mentor/mentee relationship (Hopper 2001) but also raises questions about tutor opportunities to support both the mentor and student with an early reading focus.

Although dialogue with tutors was limited, due to the time constraints of their visits during school placements, students and mentors gave instances of the tutor clarifying how best to interpret university expectations for teaching reading in a school for SEN and helping a new mentor to give relevant feedback to their student. This also supported the view of the university tutor's role as one which could provide reassurance and guidance for the mentor (Hopper 2001). Often, discussion with the tutor was the way in which the mentor made sense of the university requirements but, perhaps more importantly, put a student's stage of practice into context. In addition, this research indicated that a limited number of students gained pedagogical and subject knowledge support through observation and discussion with their mentors. Therefore, dialogue with tutors offered the students more space to reflect on their own practice and development but this was variable and hampered by the time available.

In common with wider research across ITE in England (Ellis and McNicholl 2015), these findings suggest that there could be inconsistencies in the perception and application of the tutor role in the development of teaching reading and phonics in ITE partnerships, or primary contradictions within the roles and responsibilities in the university activity system, which limit the support available for student teachers. However, tutors are still needed to support mentors in moderation and assessment and also to enhance students' pedagogical content knowledge for teaching reading. Ideally, this might be achieved through building up a consistent relationship by observing students in a series of different locations with a reading focus. The research revealed that mentors' understanding of the development of student teachers was variable and that some gave limited time to critical dialogue in school; therefore, any suggestion of teachers taking the lead in this area would need to be developed through closer partnership working and time for tutor support.

5.5 The influence of the school activity systems

The dominant influence on the experience of the student teachers learning to teach reading was that of the schools where they spent the majority of their PGCE. These activity systems influenced the participants to such an extent that a student teacher who was effective and confident in one school could discard elements of good practice and become less confident and less effective in a different environment. This finding, in part, agrees with the conclusion reached by Ofsted (2012a) that student teachers who had poor experiences in their final teaching placement could still become effective teachers of reading if they received high levels of support during their induction and that those with high levels of support and confident practice in their final teaching placement could become effective NQTs with less induction support. However, the work here reflects the more complex dynamic at work during a PGCE course and some of the more subtle differences within the experiences of the NQTs.

5.5.1 Mentoring support

Whilst the mentor role in ITE has been widely recognised (Koster et al. 1998; Mutton et al. 2010; Cuenca 2011; Caires et al. 2012; Hobson and Malderez 2013; Izadinia 2015), this study identified specific mentoring roles and responsibilities which helped or hindered student teachers to progress along the continuum for teaching early reading. The importance of informal dialogue about teaching and learning decisions, using strategies such as team teaching, was highlighted by this study more than in previous research about teaching early reading. There were three key aspects of mentoring for early reading and phonics which were most important to the student teachers in this study:

- support in the classroom through team teaching and follow-up dialogue about the next steps in pupil learning

- daily informal discussion about teaching and learning

- opportunities to observe teaching reading in different classes and discuss the teaching strategies observed

Ofsted (2012a) suggested that student teachers and NQTs would struggle if mentor observations and feedback on language, literacy and phonics teaching lacked specific guidance on pupils' learning or offered too many or unclear areas for improvement. In

contrast, in this research, participants claimed that they found observation and feedback useful but most examples they gave of improving practice seemed to come from ad hoc discussions based on shared experiences in the classroom. In common with studies of student teachers and mentoring in different subjects and age phases (Maynard 2000; Cuenca 2011; Caires et al. 2012; Gut et al. 2014), the participants found that their teaching of early reading and phonics was best supported by working alongside an experienced teacher so they could discuss the children's progress in lessons and collaborate on what to do next. In line with Gut et al. (2014), who studied mentoring at different points in student teaching and induction, findings suggest that informal, focused interaction between mentors and mentees was of most value to student teachers. This is in contrast to the recommendation that students learning to teach reading will be best prepared by formally planned observations and feedback on their literacy teaching and phonics (Ofsted 2012a, b). However, opportunities for regular informal dialogue on the subject of early reading were variable and dependent on the object and expectations of each school activity system.

Mentoring for the teaching of early reading and phonics may also be improved by the mentor facilitating opportunities for the student to work on specific aspects of practice (Ambrosetti 2010; Mutton et al. 2010). Ofsted (2012a) reported that student teachers were more effective when they had opportunities to observe the teaching of early reading in different classes, year groups and schools. Findings from the participants in this study support this recommendation as the students especially valued observing phonics and reading teaching in different classes when this was made available to them. Opportunities to observe teaching in a range of age groups helped the students to develop an understanding of progression in learning but also allowed them to develop their own teaching strategies and evaluate what was effective. However, as well as observing, the student teachers needed to discuss and reflect on observations with the help of their mentor in order to make sense of what they had seen. This need for further prompting and dialogue to make the most out of school-based observation was highlighted in previous research with student teachers in other subjects and age groups (Orland-Barak and Leshem 2009; Mutton et al. 2010; Caires et al. 2012). In this study, the impact of observations of reading practices in school seemed to rely on the stage of understanding that the student teacher had reached and the way that their mentors supported them to make sense of what they had observed through critical dialogue.

5.5.2 Mentoring difficulties

Following re-analysis of data from students, mentors and tutors in the longitudinal *Becoming a Teacher* project in England, Hobson and Malderez (2013) highlighted failings in the mentoring role at individual, school and policy levels. These included a lack of time, lack of training, unclear concepts of successful mentoring and the dichotomy between being tasked with both assessing and supporting students and NQTs. This study confirms that similar issues were influential in the experiences of the student teacher and NQT participants and in some instances impaired student progress through the continuum of development. There were some specific difficulties in mentoring for teaching early reading, including:

- quaternary contradictions in the mentor's and university's view of the mentor role
- lack of support for subject knowledge development
- lack of discussion around the process of learning to read

In earlier research, mentors were most concerned with curriculum delivery and pupil progress (Edwards and Protheroe 2003, 2004), so much so that the mentor focus on pupil learning acted as a barrier to mentoring and meant that students were expected to become teachers 'by proxy' (Edwards and Protheroe 2004: 194). The same issue was highlighted by this research in that the student teachers of reading in this study were expected to quickly follow the expectations set by their school and emulate practice. Most mentors in this study also engaged in some discussion with their student teachers about how best to respond to the pupils and were able to explain what the student teachers themselves were working on. However, findings from this study strongly suggest that there was a mismatch between the perceived objects of teacher education held by the activity systems in the ITE partnership. These findings offer the first specific example of such tensions with a focus on learning to teach early reading. Throughout the student teachers' placements, there was a continued quaternary contradiction between the mentors' view of their role and the role expected by the university, although this varied between schools. The university intended that the mentors would encourage the student teachers to reflect upon their practice, support and refine pedagogy, address misconceptions in subject knowledge and help them with pitch

and differentiation but a shared understanding of this expectation from the school-based mentors was not consistently in evidence.

In placement 1, the participants needed the most support from mentors with developing subject and pedagogical content knowledge for teaching phonics and opportunities to observe and develop teaching strategies which were particular to the teaching of phonics and guided reading. In some cases, the mentors did not seem to be fully aware or comfortable with the fact that the student teachers could not begin their first placement proficient in the use of phonics and assumed that subject and pedagogical content knowledge would have already been gained during the participants' time at the university. In recent research from the USA, mentors also felt that it was not their role to support student teachers with content knowledge and expected the students to work on any gaps themselves (Gut et al. 2014). This expectation may have been a result of student teachers' degree content, which for some students would serve as a background to teaching practice. However, in the English context, the PGCE students joined the course with an undergraduate degree in any subject and a minimum of ten days' experience in schools. In these circumstances, the fact that some mentors expected their students to have high levels of content knowledge for teaching reading clearly showed that they were not aware of the current context in ITE or did not want to accept that students started at this level. This conflicting expectation seemed likely to have stemmed from changes to ITE and mentors' experience of ITE in different forms in the past, known in activity theory terms as 'historically accumulated tensions' (Engeström 2001: 137).

One element that was missing in many cases throughout the study was a mentor focus on what the student was learning about teaching reading. As Twiselton (2004) suggested, some mentoring became superficial and task-focused, particularly if mentors perceived the object of the student teachers' learning to be maintaining order and delivering certain elements of the curriculum:

> She's [Sarah] got the planning, she's got the scheme, I've given her the online planning as well. She's had that for literacy and maths. Because we buy into 'Literacy Evolve' and 'Abacus' and she's using the interactive material following that. (Mentor)

This focus on emulation and practice rather than developing understanding was also seen in research with some secondary student teachers (Douglas 2011a; Hutchinson 2011) and it appeared to limit learning opportunities for the students in this study. These quaternary contradictions have been found in other studies; for example, learning to teach was understood differently between mentors, tutors and students in one ITE partnership (Taylor 2008), and mentors in different departments of the same secondary school held different objects for ITE (Douglas 2012a). Where schools perceived the mentor role to be one of information transmission, the mentor was more likely to be absent from the classroom and provide minimal formal and informal feedback and dialogue. These were the two most negative influential factors for students' confidence and, as far as can be isolated, effectiveness in teaching early reading and phonics. The effect of limited mentor guidance continued to be visible in the NQT year.

5.5.3 NQT mentors

As with previous research in the field of NQT experience, the support available from mentors varied widely according to each school (Brown 2001; Findlay 2006; Bubb and Earley 2006; Piggot-Irvine et al. 2009; Newman 2010; Haggarty et al. 2011; Braun 2012; Haggarty and Postlethwaite 2012) and was greatly reduced in comparison to the participants' experience as students (Keay 2009; Kane and Francis 2013; Gut et al. 2014). In this study, it was especially noticeable that opportunities to observe practice in early reading and phonics or to receive feedback on the new teachers' teaching of early reading and phonics were very limited. Despite the government's and schools' focus on outcomes in phonics, phonics teaching or other aspects of early reading were not considered to be a priority area for NQT support and mentoring by the schools or NQT mentors.

Unlike some mentoring experienced by NQTs (Haggarty and Postlethwaite 2012), the focus for the new primary teachers was not on behaviour or class management, although this was sometimes mentioned as an area the NQTs had established on transition. Instead, mentor support was mostly light touch and the NQT mentors viewed themselves as someone the new teacher could seek out if they needed help. This parallels findings from Kane and Francis (2013) which showed that NQT mentoring mostly focused on short-term emotional reassurance and providing information about the workings of the school systems. In this study, the support for teaching reading

offered by the mentors and other staff was limited to some sharing of information about planning, schemes and resources and in some schools even this was lacking.

Once the NQTs had begun their first post, their reduced access to mentor support meant that they felt vulnerable even when their practice was still very effective. This was identified as a shared feature of the continuum of development. Students were particularly concerned about being solely responsible for pupils' progress and selecting and implementing strategies for pupils with EAL and SEN without informal dialogue with their mentor. Other studies agree that high-quality mentoring at every stage is important for student teachers and NQTs (Maynard 2000; Edwards and Protheroe 2003; Pimentel 2007; Caires et al. 2012; Ofsted 2012a, b; Hobson and Malderez 2013; Ambrosetti et al. 2014; Gut et al. 2014; Izadinia 2015). However, this study highlighted the emotional and interpersonal element of becoming a teacher of reading which has only previously been identified in other subjects and contexts (Maynard 2000; Caires et al. 2012; Izadinia 2015). As discussed in Section 5.5.1, the levels of confidence felt by the participants relied on the availability of their mentors to provide reassurance but perhaps more importantly guidance and opportunities for reading-focused dialogue which included reflection on pedagogical choices. In addition to this, the participants were noticeably influenced by another element of the school activity systems, namely the wider school community.

5.5.4 The school community

Findings from this study highlighted that the wider school community and the ethos of the school were important influences on student teachers as they became teachers of early reading, elements which have received limited attention in previous research with a reading focus. Student teachers' experiences of moving between activity systems in their PGCE and induction year were highly influenced by the school culture that the participants joined. If their previous teaching strategies were a good 'fit' for their new school, these were maintained. However, if their last experiences of teaching reading and phonics on school placement did not match the expectations of their new school, the participants discarded previous pedagogical approaches. The significant influence of the context on pedagogical choices found in this study confirms previous research of induction into other teaching disciplines (Flores 2005; Keay 2009; Piggot-Irvine et al.

2009; Haggarty et al. 2011; Kane and Francis 2013). The specific ways in which participants' experiences during ITE and induction were shaped by school communities were comparable with some previous research with NQTs (Flores 2001, 2004). A combination of mentoring relationships, school leadership, organisation, systems and structures made a difference to how well-supported the participants felt and in some cases appeared to have a marked effect on their knowledge, understanding and practice when teaching early reading. Learning from members of the community could be compared with learning to take on a working role through participation in a community of practice (Lave and Wenger 1991; Wenger 1998). However, this study demonstrated the difficulties inherent in learning to teach through 'legitimate peripheral participation' (Lave and Wenger 1991: 29) as the differences in school activity systems meant that there were different ways of being a teacher of early reading in each location. Furthermore, the different elements of each school activity system did not provide a smooth transition from 'newcomer' to expected practice (Lave and Wenger 1991: 56); instead, they resulted in both positive and negative changes to student teachers' knowledge, understanding and practice, leading to uneven individual trajectories through the continuum.

In this study, it was quite striking that the student teachers frequently referred to their feelings about working in particular school environments. This links well to a study of effective teachers of literacy (Poulson and Avramidis 2003) where experienced teachers attributed their improved confidence and competence in literacy teaching during their career to a number of factors, one of these being a collaborative school culture. Although it was difficult to know whether being successful made them feel more comfortable or vice versa, the participants reported 'feeling comfortable' in some school communities more than others. They reported feeling comfortable when:

- they worked collaboratively with other teachers and teaching assistants to plan and assess
- resources were shared with them
- senior members of staff interacted with them positively and supported their progress
- they were encouraged to ask questions and seek help and were responded to positively when doing so

In common with earlier research (Piggot-Irvine et al. 2009; Newman 2010), school communities were particularly important to the participants as they became new teachers because they felt more confident about their teaching role when they were protected from some of the additional workload and pressure. Unlike earlier studies with NQTs (Jones 2002; Newman 2010; Haggarty et al. 2011), these participants did not suggest that concerns about their mentors' involvement in the assessment of their progress prevented them from asking for help. Instead, their comments indicated that the availability and attitude of their mentor and other staff was the determining factor in how much support and guidance they could gather about teaching reading. Ofsted (2012a, b) identified common features of effective ITE and induction to include opportunities for subject-specific monitoring, joint planning and assessment. Additionally, the new findings from the research study presented here indicate that the feelings of support and belonging created by being involved in collaborative planning and assessment are as important as the skills learned in the process. The disposition to learning created by supportive relationships may also be a factor that breeds success for student teachers. In this study, when students felt more comfortable, they were better placed to seek support with teaching reading rather than ignoring issues which needed to be addressed. They also began to demonstrate the agency to adapt their practice beyond expectations in that activity system.

A new finding from this study highlights the importance of the role of teaching assistants in school-based ITE with a reading focus, which has not been a notable part of previous research. Without the day-to-day guidance of these professionals, in many cases, the participants would have been less confident and less successful. Teaching assistants helped the participants to find their way around reading schemes and resources. The students and NQTs looked to them for guidance on individual children's progress, lesson ideas, and assessment feedback from their work with groups. The teaching assistants were often responsible for managing individual reading, taking groups in guided reading and teaching phonics sets and so were an integral part of the teaching of early reading. Of course, there were potential difficulties about student teachers learning from teaching assistants who had varying levels of training and experience. For some NQTs, managing inexperienced teaching assistants was also a challenge and a drain on their resources. However, as the teaching assistants were so

involved in the experiences of the participants, this study indicated that their role could be given greater consideration in the process of support and mentoring for student teachers and NQTs.

5.5.5 Reading and phonics schemes and routines

The impact of reading and phonics schemes on student teacher progress through the continuum of development has also not been fully examined in earlier research. This study found that the schemes, routines and resources used to teach reading and phonics were the ways in which many of the expectations of each school system were communicated. The participants therefore needed support to adapt to commercial schemes which in some instances drove the planning and teaching for reading, phonics and literacy. Frager (2010) suggested that, in the USA, government prescription from the National Reading Panel (NICHHD 2000) led to the rise of certain schemes which offered a scripted approach to teaching reading fluency and lessons which focused on speed reading without wider context. Artefacts in this study fulfilled a similar purpose as students were required to use resources which met a given criteria for phonics teaching (DfE 2013c) and phonics and reading were often taught in isolation from other aspects of English. At the beginning of this study, it seemed possible that the student teachers might feel hampered by these prescriptive schemes and that these might limit their teaching in some way. In contrast, the participants mostly enjoyed the structure offered by very well-organised school planning or commercial schemes as it helped them to make teaching decisions about what to do next. They also liked starting from others' ideas and ready-made planning and resources; consequently, drawing on highly organised school routines and prescriptive schemes could be seen as a way to support student teacher confidence. However, this was only the case when they were given enough time, guidance and support to make sense of the systems that were in place.

The participants in this study liked to use existing planning resources, commercial schemes and school routines even when they personally demonstrated high levels of understanding about next steps and linked concepts in pupils' learning. This was in contrast to earlier research which suggested that some student teachers focused on 'curriculum delivery' when they were unsure about how best to support learning (Twiselton 2000: 392, 2004: 158, 2006: 492). The reasons for this difference in findings are unclear but may be related to the differences between the set curriculum

frameworks used in the period of Twiselton's work and the variety of commercial and school-created guidance and systems drawn on by the student teachers in this study, as these may have offered more flexibility. There was little evidence that following the schemes impaired the participants' effectiveness as teachers but they did, in some instances, act as a barrier to engaging in deeper dialogue about teaching reading with their mentors. In schools where the mentor role was seen as ensuring that the student maintained expected practice, the mentors simply observed student teaching to check that they were following the scheme correctly and did not discuss the quality of pupil learning or any alternative approaches. This finding is in line with a detailed study of practices and dialogue around teaching reading in one North American elementary school (Holmstrom et al. 2015). Holmstrom et al. found that a very tightly structured system for reading in the school prevented collaborative reflection among the teachers and therefore stopped them from developing new and enhanced practices.

Once the student teachers in this study reached the final phases of the continuum, and as they moved into the NQT year, they voiced more concerns about their ability to motivate and support readers using set schemes. The participants had managed to gain some ideas from their school experiences and, in their NQT year, they began to feel confident enough to introduce new opportunities for children to access other reading materials in their new classes. However, the phonics-driven schemes and the focus on decoding had become the rules for teaching reading which were now embodied in the practice of the school activity systems where the students learned. Although the participants were aware that some pupils struggled with phonic strategies, they continued with the expected pedagogy and use of schemes, thus demonstrating the tensions between new teachers' beliefs about reading and the 'rules' for practice communicated through the resources of the school activity systems.

5.6 External expectations

In nearly every interview with the participants, there was some mention of the external expectations for teaching reading in England. This research reports the new, although unsurprising, finding that the expectations for pupil-testing in reading, and in particular the phonics screening test in Year 1, were a focus of pressure felt by new teachers. These external expectations therefore influenced the participants' teaching and

pedagogical decisions as they became teachers of early reading and their progress through the continuum of development. Their awareness of external expectations mostly took the form of reference to the statutory Year 1 phonics test but also sometimes included reference to Ofsted inspections of schools. The participants generally seemed concerned about enabling their pupils to meet the expectations of the 'phonics screening check'. This was also a main concern for the mentors in schools and they frequently referred to teaching choices made with this in mind, for example explaining the subject content which students were being asked to include in their lessons with reference to its relevance as test preparation:

> We're looking at the nonsense words as well as the real words because that's all part of the phonics screening anyway. (Mentor)

In contrast, the university documentation for school placements made no reference to these external expectations but instead focused on the way that the university would be measured by Ofsted, which was through the student teachers meeting the *Teachers' Standards* (DfE 2013a) at a good or outstanding level. The teachers and students did not mention the *Teachers' Standards* at all in their interview responses about learning to teach early reading and phonics which highlighted a possible tension between which external expectations were the focus for the student teachers' ITE. Some might argue that it was good to find the *Teachers' Standards* were not part of the daily discourse of the students and their mentors, pointing out that focusing on a list of standards in ITE could result in a superficial 'mastery of techniques of instruction and management of classroom behaviour' (Spendlove et al. 2010: 69) without attending to students' theoretical understanding of teaching and learning. However, in this study, the schools' focus on pupil progress, rather than standards for teaching, in some cases indicated that they had overlooked the student teachers' own development and learning.

Tensions in the objects of university and school activity systems and even between school departments have been highlighted in previous research (Larson and Phillips 2005; Taylor 2008; Spendlove et al. 2010; Douglas 2011a, b, 2012 a, b; Douglas and Ellis 2011). In this case, these may have been exacerbated by the history of changes to policy surrounding reading in the UK and the different external expectations on schools and universities. A review of previous mentoring research (Hawkey 2006) suggested that increasing external pressure on schools could limit the opportunities afforded to

student teachers to take risks and make schools and mentors less able to cope when student teachers struggled. Additionally, more recent research in Canada (Hibbert et al. 2013) found that in a climate of increasing international competition between pupils' literacy outcomes, leading literacy teachers were seen as a way of facilitating government objectives rather than encouraging more in-depth professional learning. In England, a similar view of expert teaching or 'best practice' as something that could be externally prescribed and emulated by others could also have affected the way in which students were treated in schools. The difference in focus on external expectations between the schools and the university would also explain why some mentors took an information transmission role rather than offering opportunities for deeper dialogue about teaching and learning. It ultimately raises further questions about how mentors and schools can find the time and space to focus on student teachers' learning when pupils are necessarily their priority and external expectations for teaching reading are prescriptive and highly monitored.

5.7 Individual dispositions and trajectories of participation

Previous studies of important dispositions for teachers agree that they need commitment to their role in conjunction with the resilience to cope when things go wrong (Day 2008; Hunt 2009). Student teachers also need to be able to learn from mistakes without becoming emotionally overwhelmed (Oosterheert et al. 2002). These general dispositions towards the students' teaching roles appeared to have some impact on their teaching of reading and their progress through phases of the continuum, although findings were limited. The student teachers in this study were committed to developing their practice and showed high self-efficacy and resilience in their ability to cope with difficulties they encountered. These dispositions linked very well to a 'mastery orientated response' (Dweck 2000: 9) and research into effective teachers which suggests that teachers' self-efficacy makes a difference to the outcomes of their pupils (Bray-Clark and Bates 2003; Bates et al. 2011; Muijs and Reynolds 2011; Guo et al. 2012). When the participants found aspects of teaching reading difficult and unfamiliar, they were prepared to be extremely flexible and adaptable to what was demanded of them. They generally rationalised any difficulties as part of their learning process or recognised that they were being expected to cope with a barrier or challenge beyond their control. They attributed the difficulties to the context, or activity system, in which

they found themselves and had faith that by continuing their ITE and with time in their roles as NQTs, any difficulties would become manageable.

When the student teachers and, later, NQTs in this study were observed teaching phonics and reading under difficult circumstances or using methods in which they lacked confidence, their interview responses suggested that they were still firmly focused on the needs of their pupils and what the pupils had gained from the lesson. This could indicate that the more successful students demonstrated some emotional preoccupation with the effectiveness of their teaching for individual pupils (Oosterheert et al. 2002). Certainly, the participants in this study appeared to be motivated by making a difference to pupils through their teaching of early reading, but it is difficult to be sure whether this was a result of the research sample who may have volunteered for the project because they were concerned about the impact of their teaching of early reading.

Other research has emphasised that resilience does not simply come from within but is nurtured by community support from colleagues and leaders in school, and to search for resilience as an independent personal trait is to the detriment of the support available to student teachers and NQTs (Johnson and Down 2013; Day and Gu 2014). To some extent, the student experiences in this study lend weight to this view as where mentor support was the most limited, the participants sought help and advice from other members of staff, a strategy seen elsewhere (Brown 2001; Marable and Raimondi 2007). In one case, Chloe was so unhappy in her first post that she sought support from teachers in her final placement school and, as an NQT, Hannah had to look back at her work from university to guide her planning and teaching. In these instances, Chloe and Hannah demonstrated the same proactive and flexible dispositions as those they had drawn on in their PGCE course. Similar dispositions also characterised the most effective secondary PGCE students (Mutton et al. 2010), but in the study presented here, for some students, flexibility was a necessary response to limited support from schools with teaching early reading.

Effective teachers of literacy and other subjects have been observed to be able to reflect upon their practice (Wray et al. 2000; Louden et al. 2005; Topping and Ferguson 2005) and to create warm and positive relationships with their pupils and colleagues (Pressley et al. 1996, 2001, 2006; Wharton-McDonald 1997; Wharton-McDonald et al. 1998;

Hay McBer 2000; Louden et al. 2005; Coe et al. 2014). In most instances in this study, the participants' ability to foster rapport and respect with their pupils was evident from the start and clearly facilitated the smooth running and organisation of reading lessons. Disruptions were minimised and pupils wanted to learn with their teachers. The participants showed the ability to reflect upon and adapt teaching both 'in action' and 'on action' (Schön 1983). Earlier research into literacy teaching presented this 'in action' decision-making as a key element of effective practice in more experienced teachers and so it was notable that the student participants were already responding to their pupils in this way by the mid-point of their PGCE course (Wray et al. 2000; Louden et al. 2005; Topping and Ferguson 2005). This study highlighted that progressing through the continuum of development may require the generic dispositions and attributes of effective teachers but that these personal qualities were only one small part of the complex systems which helped them to become effective teachers of early reading.

The individual student experiences within the study provide new detail of the complexity of student teachers' learning trajectories as they become teachers of early reading. They highlight the value of analysing activity systems to better understand ITE and induction. Previous research with an early reading focus has not fully considered how students transfer practice from one context to another during the course of their ITE and induction (Ofsted 2012a, b). This study emphasises that each student's journey follows a unique trajectory of participation as identified by Dreier (1999) Ellis (2007a) and Jahreie and Ottesen (2010). Although knowledge, understanding and practice may develop along a similar continuum, practice and confidence as teachers of early reading appears to be fragile and highly dependent on specific aspects of the activity systems where the student teachers learn. Student teacher expectations about learning to teach reading and their ability to cope under pressure may have drawn on individual personal characteristics and life experiences. However, much more significant than these were the influences of school objects and mentor roles, community support, clarity of organisation and schemes, as well as the university object, expectations and tasks.

5.8 Summary

This study proposes a new continuum for the development of student teacher and NQT knowledge, understanding and practice in teaching early reading as the student teachers

moved through the phases: notice and emulate, respond and innovate, apply and connect, extend and augment. This could be used to inform work in ITE partnerships as it highlights possible points in the PGCE and transition to NQT year where specific support may be needed and the form this could take. A potential consideration for the organisation of ITE was that the students were initially unable to take on pedagogy for teaching reading through observation and needed to have the experience of teaching reading before they could learn from watching others, and even then they needed discussion with peers and teachers to make sense of what they had seen. In common with earlier research, pre-course qualification routes or school experiences as undergraduates, volunteers or employees may have familiarised the students with teaching but seemed to make little difference to their understanding of teaching early reading. This highlighted how much support all students learning to teach early reading might need, whatever their starting point. In addition, the student teachers' beliefs about teaching reading and learning to teach were, to some extent, influenced by the university and school activity systems. However, some participants also experienced conflict between their beliefs and practice in schools which they were not able to challenge until they became NQTs.

In contrast to previous research, the student teachers were able to notice pupils' learning needs and progress in reading early in the course but focused on emulating practice in schools until they were able to develop more confident pedagogical content knowledge for teaching reading. Once their pedagogical content knowledge had developed, they were able to respond to pupil needs and innovate with new ideas for teaching. However, this development was clearly reliant on the level of support and critical dialogue available from their mentors and school communities. Students in this study did not seem restricted by 'curriculum delivery', which was a feature of some students' practice during the 'Literacy Hour' (Twiselton 2000). This may suggest that students and NQTs have greater freedom to make wider connections in literacy without detailed curriculum guidance. The student teachers certainly became more aware of monitoring and integrating the application of reading skills across the curriculum and connecting literacy concepts during the PGCE. However, they also demonstrated some frustration with the separation of phonics, reading and literacy lessons in schools which made these links more difficult to reinforce. Individualisation was not always visible in the participants' planning for reading lessons by the end of the PGCE but the students were

able to discuss individuals and used formative assessment effectively to inform teaching decisions. This may suggest that requirements for individualised planning were linked to university monitoring of student teachers rather than a feature of effective practice.

In the first term of teaching, in contrast to some expectations from the literature, the NQTs extended the extremely effective and responsive practice, seen in their final placement, into reading lessons in their new contexts. They also began to augment school practices with new initiatives to enhance reading provision. However, there was a noticeable decline in their confidence. This study adds a new explanation of this drop in confidence which was centred on meeting the needs of struggling readers without daily mentor support and the pressure of national testing in phonics. The findings suggest that induction support for early reading may need to be strengthened and indicate ways in which some activity systems produced more confident NQTs than others.

The activity systems of the university and schools very clearly had specific influences on the student teachers' learning and progress through the continuum of development. The university was more influential than the participants initially perceived and helped them to link theory and practice through academic assignments and taught sessions. The students wanted more opportunities to develop practice for reading in the 'safe' environment of the university, especially as the purpose of the school-based tasks was not clearly understood by the students or their mentors. An important new finding was that, in the context of primarily school-based ITE, opportunities to evaluate the teaching of reading and consider alternatives were limited. Furthermore, contrary to recent research and guidance, university attempts to monitor and direct student learning about reading from a distance through tasks, audits and target setting appeared to be more relevant for meeting external expectations than helping the students to learn. The tutors were to some extent also restricted by the focus on monitoring student progress but they were still able to fulfil a more important role than indicated in recent studies of ITE for early reading. They offered emotional support, guidance for mentors and opportunities for dialogue about pedagogy and subject knowledge for teaching reading, although these were restricted by the time allocated to visit students.

In the school activity systems, the role of the mentor was extremely important. Effective mentors were available for formal and informal guidance and built open, supportive relationships with their students with a focus on student teacher learning. Disturbances arose when the school activity systems concentrated on maintaining the status quo and viewed students as 'teachers by proxy'. In these cases, student teachers received limited support for subject knowledge development or discussion about the process of learning to read and teaching decisions around this. One finding not previously discussed in the literature was the impact of whole community support for students and NQTs. School organisation and ethos for ITE and induction protected the students from becoming overloaded and helped them to feel valued and confident enough to ask for help. Teaching assistants were an important part of this process but are not mentioned in the literature and could have a more developed role. The influence of schemes when learning to teach reading is also not obvious in previous research. In this study, structured schemes and systems for teaching reading were supportive for student teachers but only when they were thoroughly modelled, explained and discussed. In contrast to the high levels of external expectations and monitoring linked to early reading, specific induction for teaching reading as a new teacher was noticeably limited.

An important new finding from the study was that external expectations for teaching reading were a source of contradiction and influence on the students and the activity systems of the university and schools. The university focused on student teachers becoming effective teachers of early reading by working towards the *Teachers' Standards* (DfE 2013a), whereas most schools and students focused on moving the pupils towards the external expectations of pupil achievement in phonics at the end of Year 1 and Ofsted expectations of teaching reading more generally. Interaction about teaching reading in both the university and schools seemed to have been limited by the focus on these objects as well as the change to more school-based ITE.

When compared to earlier research, the personal dispositions and attributes of the individual student teachers appeared to have some influence on their ability to cope with and reflect upon the demands of becoming a teacher of early reading. However, using an activity systems approach to analyse students' trajectories of participation further illustrated the impact of specific aspects of school routines and schemes, and the roles and responsibilities of mentors and the wider community on student teacher

development. This study for the first time highlighted that differences present in the elements of these contrasting activity systems for early reading were driven by differences in perceived objects for ITE. These differences were often responses to external expectations and monitoring of university and school outcomes for early reading. Recognising the impact of the activity systems involved in ITE and induction for early reading, and the tensions between them, potentially enables a reconfiguration of partnership working. In the final chapter, the significance of contradictions in university and school objects for learning to teach early reading and the implications for ITE and induction are considered further and a new ideal shared activity system is presented. The use of activity theory as a framework for the research and limitations of the study are evaluated whilst suggesting next steps for research in this field.

Chapter 6 Conclusions and implications

6.1 Introduction

This chapter begins by drawing together the original contribution to knowledge offered by this research in response to the main questions posed:

> *How do student teachers develop knowledge, understanding and practice for teaching early reading during a PGCE course and through the transition into the NQT year?*

and

> *What is the nature and influence of the multiple activity systems involved in initial teacher education and induction on the process of becoming a teacher of early reading?*

The findings from this longitudinal collective case study delineate student teacher experiences of becoming a teacher of early reading in one ITE partnership and provide an explanation of their shared continuum of development informed by activity theory. Therefore, the important impact of contradictions in the objects of the university and schools involved in ITE and induction for early reading is analysed. Key implications are highlighted for universities and tutors, schools and mentors, and student teachers and NQTs. Wider policy implications for ITE more generally are also discussed. The application of activity theory, through an activity systems conceptual and analytical framework, is evaluated as a tool for research and development in initial and continuing teacher education. Key experiences of the researcher, conducting insider research, are highlighted and strengths and weaknesses of this perspective identified. Finally, the limitations of the study as a whole are evaluated and possible areas for future research proposed.

6.2 Contribution to knowledge

6.2.1 The development of knowledge, understanding and practice

Findings in this study suggest that student teachers follow individual trajectories of participation and appear to progress along a broad continuum of knowledge, understanding and practice for teaching early reading which is either limited or assisted by the activity systems where they learn (Table 5.1). Although this has some similarities with previous research into student teachers' development as teachers of

primary literacy (Twiselton 2004, 2006) and general progression in previous teacher education studies in a range of ages and subjects (Kagan 1992; Singer-Gabella and Tiedemann 2008; Anspal et al. 2012), the continuum of development for teaching early reading offers a new contribution to knowledge through more specific understanding of the areas where student teachers may need help and guidance.

Student teachers first need help to develop confident pedagogical content knowledge for teaching, including accurate subject knowledge for decoding, which supports high-quality use of modelling and metalanguage. They are able to notice individual progress in lessons but are not yet able to support this spontaneously. They may need support to move beyond simply attempting to emulate mentor practice so that they can use assessment to inform their planning and to match their lessons to the general level of the class, whether focused on pre-phonics teaching, decoding and word recognition or later stages of comprehension and fluency. Through taught sessions, sustained practice, dialogue and team teaching (Section 6.2.2), students become able to model reading processes with confidence, to respond to misconceptions during lessons and to innovate with new activities. At this stage, they may need guidance with differentiating support and expectations within the class and continuing to develop their understanding of progression in stages of reading beyond their current experience. Next, students are aware of the need to provide opportunities to apply and monitor reading skills across the curriculum. They demonstrate a greater understanding of the connections between elements of literacy which they reinforce through teaching opportunities. They may begin to demonstrate high-quality integrated practice akin to experienced teachers. Knowledge of progression and fine-tuned use of individualisation in planning are areas which could be developed further. As students become new teachers, they are generally able to extend the practice seen in their final placement to their new context and they may begin to augment school practices for teaching reading. However, they are likely to need support in making the transition to using new schemes and systems and guidance in managing the needs of struggling readers and working towards national tests in reading. Evidence from this study emphasises that in all cases, the continuum of student teacher development for early reading is reliant on the complex influences of the activity systems of the university and schools where they learn.

6.2.2 The influence of activity systems

This study, for the first time, reveals how the elements of each activity system combine to influence the student teachers' experience of learning to teach early reading and highlights important tensions and contradictions between the objects, language and resources, expectations and roles and responsibilities of the university and schools. The university activity system can influence student teachers positively through tutor support and dialogue and academic tasks which focus on linking theory and practice in early reading. University-taught content appears to provide the student teachers with grounding in subject knowledge and pedagogy which they can build on through school experience. However, students need an understanding of the policy context surrounding changes to ITE and regular opportunities to reflect and revisit the teaching of reading with their peers during the PGCE or they may perceive university teaching as insufficient. This study highlights difficulties with the use of school-based tasks and mediating artefacts such as placement handbooks to direct student teacher learning about early reading and indicates that, for these to be of benefit, tutors, students and mentors need to have a shared understanding of their purpose. In this research, the limited school support for NQTs also indicated that they could benefit from greater contact with the university and a network of peers.

In different school activity systems, students and NQTs adapt their practice to meet school expectations and this may lead them to discard effective pedagogy. A focus on replicating school practice for reading appears to stem from a quaternary contradiction between university and school understanding of the mentor role (Section 6.2.3). In general, student practice seems likely to decline when mentoring is absent or focused on information sharing rather than dialogue about early reading processes and teaching decisions. Where reading schemes and systems are inconsistent or poorly explained, student teachers may also struggle. However, evidence from the research illustrates the, perhaps under-recognised, role of teaching assistants and the wider impact of senior managers and other teachers in making students 'feel comfortable' and providing opportunities to work with the wider staff team to develop their understanding of progression and assessment in early reading. In both the PGCE course and the first term as NQTs, structured schemes and systems can help students to feel more confident about their planning and teaching but only when they receive focused support with adapting their practice. A particular finding of this study is that any decline in

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confidence during the first term as NQTs seems linked to the focus on pupil outcomes for reading, as tested by the Year 1 phonics screening, and the withdrawal of day-to-day informal mentoring support. The study also highlights the surprisingly limited opportunities for focused support and development in the high-priority area of teaching early reading during this period. The influence of supportive whole school environments, which combine the most positive activity system elements outlined above, clearly make a difference to NQTs' reported confidence for teaching reading as well as their observed competence in lessons. An important finding from the study, which may have wider relevance for other subjects and ITE partnerships, is the possible contradiction between the object of the university and the object of different schools when providing ITE and induction for early reading.

6.2.3 Objects for ITE and early reading

Using activity theory to provide a conceptual and analytical framework highlighted important tensions in the student teachers' experiences of becoming a teacher of early reading intensified by the school-based model of ITE favoured in England at the time of the study. These included particular differences between the university and the school focus, or objects, for ITE and early reading (Fig. 6.1). It seems clear that the participating student teachers were expected to work towards the university object which focused on the *Teachers' Standards* (DfE 2013a) and the schools' objects which were mostly focused on meeting external expectations for pupil outcomes in reading and phonics. At best, this indicated that each student teacher was under pressure from the different expectations of the multiple activity systems at work. At worst, the circumstances which the student teachers and NQTs inhabited at this particular period in the history of the English curriculum and systems for ITE could be described as presenting a double bind:

> In double bind situations, the individual, involved in an intense relationship, receives two messages or commands which deny each other – and the individual is unable to comment on the messages. (Engeström 1987: 148)

The difference in perceived objects, between the university and schools, points to a further contrast in perspectives. Put simply, the university conceptualised the PGCE as an increasingly school-based route which necessitated schools to take greater responsibility for educating the student teachers, whilst the schools' previous

experiences of ITE included more university-taught sessions (Fig. 6.1). This meant that the schools continued to view their role as it had been in the past, which was evidence of historically accumulated tension, or tertiary contradictions, between old and new versions of the same activity system. Because of the recent change to the organisation of ITE, especially in roles and responsibilities, the mentors and schools had not always adapted to the changing needs of the students and the university.
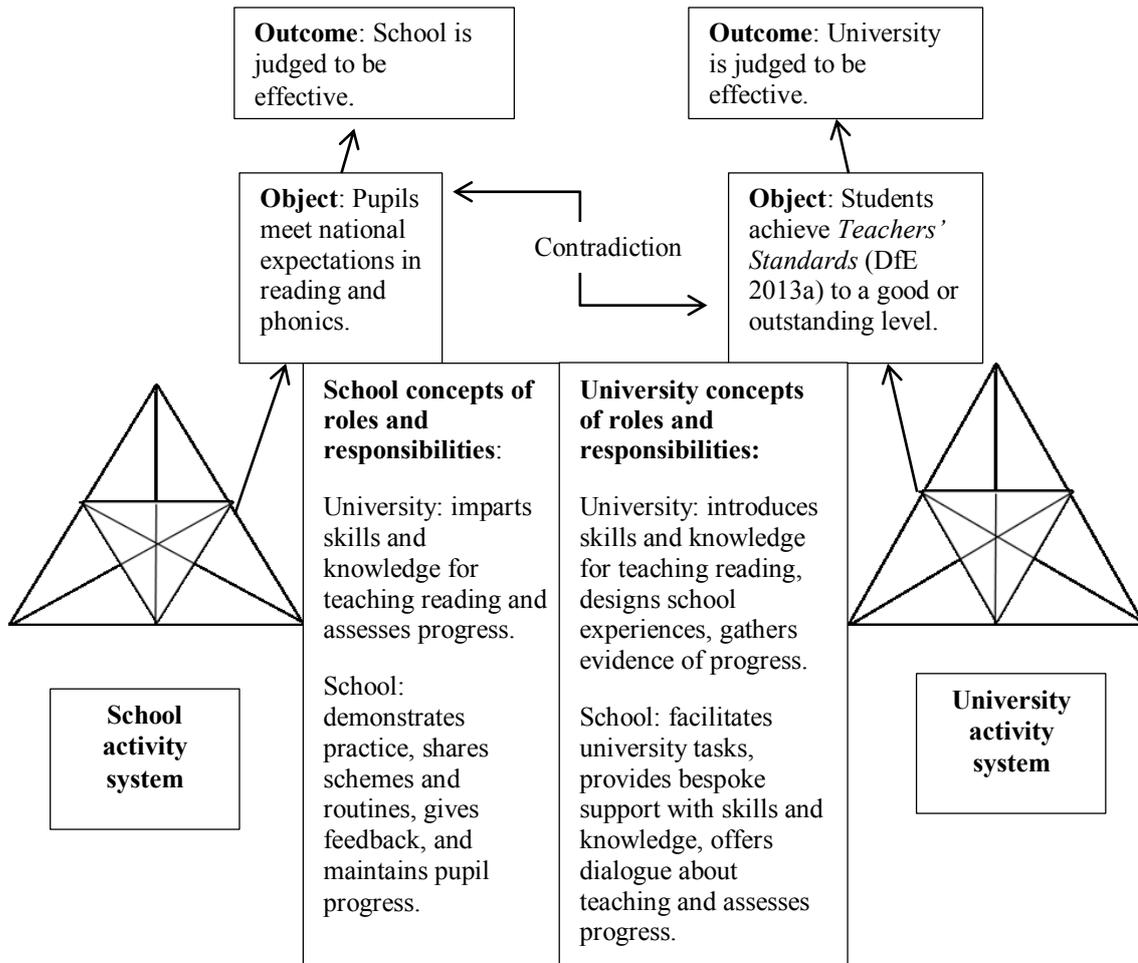
Fig. 6.1: Contradictions between school and university activity systems for ITE and early reading

The schools' object of meeting external expectations through pupil outcomes resulted in a focus on set schemes and certain prescriptive formulas for teaching reading which had become 'the rules' in their different learning locations. In research with student teachers learning to teach from the guidance of the *National Literacy Strategy*, Twiselton (2004: 163) noted that 'an emphasis on order and curriculum in school may lead to social

practices which close down the opportunities for engagement with knowledge'. In this research, the emphasis on working towards national expectations for phonics and reading using a prescribed method of teaching and specifically designated schemes had a similar effect on interactions between mentors and students and on mentor priorities, although students were less focused on curriculum delivery than students working under the overarching guidance of the *National Literacy Strategy* (DfEE 1998, DfES 2001).

The university object paradoxically potentially decreased the student teachers' opportunities to learn, as a focus on meeting the *Teachers' Standards* (DfE 2013a) resulted in a partly behaviourist approach to learning to teach reading. This involved directing students to complete audits, observe teachers, gain feedback and work towards targets which could be used to monitor and provide evidence of student progress. Attempts to offer more constructivist ways of learning were hard to achieve in the university without a relevant practical context and with limited time available, but the focus on external goals communicated to the schools did not encourage the school mentors to develop different ways to support student teachers as they learned through participation in school. Furthermore, the contradiction between the focus of the schools and the university, when supposedly engaged in the joint enterprise of educating teachers to teach reading, suggested a societal double bind where the process of school-based ITE was no longer focused on educating teachers but on serving the objectives of the schools and the external bodies to which they were answerable (Fig. 6.1).

6.3 Implications for ITE and induction

With conflicting objects at work and a resulting difference in perceptions about roles and responsibilities, this research points to a number of implications for the university, schools, mentors and students and gives an example of the possible impact of policy in this case which may be relevant for other ITE providers. It is important to note that none of these implications are directed as criticism of the university, schools, tutors or mentors. Each was fulfilling their role as set out by the systems of which they were a part. However, the tensions in and between these systems in some cases meant that committed and caring individuals were carrying out their roles in a way which was not the most useful for the student teachers. Fig. 6.2 summarises key elements of an ideal activity system for ITE and induction for the teaching of early reading, based on the

findings from the research. If school-based partners were to construct such a system, it might take a different shape and these differences remain a subject for further research (Section 6.6). With these limitations in mind, the following sections elaborate on the elements of the ideal activity system (Fig. 6.2) to suggest implications for work with student teachers and NQTs, in the university and schools. The elements of the ideal activity system might have benefitted the participants during their PGCE and induction, if applied consistently, and could offer a framework with which to review provision in other ITE partnerships.

Expectations: The school and university view the student/NQT as a learner.

Mentors understand different stages in new teacher learning about reading and the components and limitations of the university programme.

Language, resources and curriculum: Schemes and systems used in school are clear, consistent and critiqued. University tasks and placement guidance encourage student teachers' research and evaluation.

Object: Differences between school and university objects are discussed, and shared objects for ITE negotiated.

School and university community: Students/NQTs access 'layers' of support from school staff, including collaborative work, CPD and observations. They are protected from additional challenges.

University and schools provide opportunities for students to reflect upon and evaluate practice seen in school with peers, tutors and colleagues.

Roles and responsibilities: Mentors offer informal daily support and dialogue around teaching and learning and team teaching. The TA student-support role is developed.

Tutors work with mentors to develop their use of high-quality subject-focused dialogue and move away from an observation feedback focus.

New teachers receive a thorough programme of induction into schemes and systems for planning, teaching and assessing reading. They are offered particular support with managing individual needs, working with parents and national testing.

Fig. 6.2: An ideal activity system for ITE and induction for teaching early reading.

6.3.1 The university and tutors

In this study, the university contribution to preparing students to teach early reading was in part eroded by the new organisation of PGCE courses in England to include a move to an extensive period of time in schools. However, the role of the university could still be seen to be essential in a number of influential ways which could be developed to

support the learning of student teachers. From a practical perspective, the university was able to offer a safe place to begin to develop new subject, content and pedagogical knowledge before putting it into practice. The university was best placed to develop subject and content knowledge starting points for student teachers by introducing terminology and processes for decoding, such as phonemes, segmenting and blending, which was particularly important when the participants had little or no relevant pedagogical or content knowledge for teaching reading as they began their PGCE.

Noting the focus in schools on sometimes uncritical replication of practices for teaching reading highlighted the significance for student teachers of somewhere to learn outside of the school. University was the only location where theoretical ideas about learning to read were considered and these were limited by time in the university setting. However, one of the most effective ways that the university stimulated links between theory and practice was by setting classroom-based research projects with a reading focus and assignments which focused on theory and processes of learning to read. The university also provided a role model for promoting reading for pleasure and including authors in school. This message was visible in the day-to-day practice and learning environments of all the students and new teachers, some of whom were working hard to improve the schools' practice in this area. This showed the capacity for university teaching to help the students to question and enhance school-based practice.

Students in the study suggested that building in regular times to revisit and reflect on school-based learning about reading in a university context was an important extra opportunity to think about teaching reading, away from the pressures and expectations of specific schools, and that this should be increased. This space and chance to reflect critically on practice could also be facilitated by visits from the university tutor. Tutors were valued for the general support and guidance given but they were often not utilised to their full potential as someone who could develop deeper discussions about learning in collaboration with mentors and students. The university tutor role could be enhanced by being given the time to work with mentors to develop a shared understanding of the nature and purpose of ITE for early reading and to encourage critical examination of practice in schools.

Findings from this study suggest that the university-taught content was perhaps too 'front-loaded' and that attempts to improve the quality of student experiences of teaching reading in schools through written guidance were unsuccessful. The participants wanted more university input spread over the course of the PGCE which combined theory and practice and was tailored to the stages of reading that the students encountered in school. This study indicates that the uneven distribution of learning about teaching reading in a time-poor PGCE route can only be addressed by more significant reconfigurations of the school and university roles. This process could include reviewing the balance and timing of university-taught content for different stages of early reading; considering student opportunities to evaluate and practise the teaching of reading in the 'safe' environment of the university; negotiating the use of artefacts such as handbooks and school-based tasks with students and mentors; and expanding university involvement in support and development for new teachers. The reconfiguration of ITE partnership working is an ongoing concern in most universities but it is clear from the experiences of the participants in this research that this must be negotiated equally between activity systems. To support students to become teachers of early reading, ITE must retain and enhance the contribution of the university and create a truly shared endeavour with partnership schools.

University support for early reading could also be improved by developing school-based mentors' understanding of the phases of student teacher knowledge, understanding and practice for early reading using the continuum proposed by this study as a starting point for discussion. Where mentors treated their student teachers as learners, they were able to offer more personalised and in-depth support in the process of becoming a teacher of early reading. In order to facilitate this important relationship, university tutors could work with mentors to understand the progression of student teachers' knowledge, understanding and practice for teaching reading. Mentors and tutors could identify common issues at different stages and how to support them. As the study did not gather specific information about university training and briefing for mentors, it is not possible to comment on the impact of this on mentor practice. However, directing mentors to carry out observations or conduct weekly meetings with their students did not appear to address the issues which prevented mentors from engaging in this deeper dialogue. The participants who gained the most from mentoring in school benefitted from deeper discussion about the reasons behind the teaching

choices made and ways to support individual learners; their mentors were focused on finding ways to develop the student teachers' knowledge, understanding and practice for teaching reading as well as the outcomes for pupils. It seems that, in order to achieve this, the university could facilitate mentors and tutors to share their understanding of the object of teacher education and be open about the contradictions that arise (Carroll 2006; Hutchinson 2011; Douglas 2012b; Ambrosetti 2014). It may be equally important to initiate discussion among the university team about the impact of the system's response to external expectations and monitoring on the student teachers' experiences and attempt to develop new practices which address the needs of the students and the institution as a whole.

6.3.2 The schools and mentors

One key implication from the study is that schools, student teachers and NQTs and mentors would benefit from greater awareness of the significant impact that school activity systems can have on student teacher knowledge, understanding and practice. If schools were aware of the activity system elements which made the most difference to the confidence and competence of student teachers, they might be able to review their contribution to ITE for early reading. The participants who felt most confident and gained a broader understanding of teaching reading in this study were supported by the whole school community's involvement at a relational and organisational level. Although this might be a challenge in already busy school environments, some schools in the study demonstrated that whole school support was possible. Senior leaders, other class teachers, teaching assistants and mentors facilitated opportunities to observe and discuss practice for reading throughout the school and involved the students and NQTs in team planning and assessment with the staff team. Schools could potentially adopt some of these ways of working and further enhance the experience of student teachers and NQTs by providing opportunities to plan and teach reading and phonics to a wider variety of groups and classes to ensure a full range is experienced. The success of this strategy, however, also relies on the quality of surrounding dialogue for such experiences. In addition, schools with NQTs might be able to support them more effectively if they were aware of pressures and concerns which impact on their confidence for teaching early reading, such as anxiety about meeting national expectations in reading and providing for pupils who have English as an additional language or special educational needs.

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This research suggests that the experiences of student teachers and NQTs could also be more supported if schools and universities acknowledged and developed the role of the teaching assistant in teacher education for reading. In this study, teaching assistants were commonly used to provide information about individual and group reading levels, and schemes and resources. They were informally consulted on pedagogical strategies used with pupils and were frequently part of the teaching staff for phonics groups, assessments and planning. Of course, this was not always a successful strategy for the student teachers as the teaching assistants had often learned their practice through emulation. Therefore, this arrangement would need to be considered carefully and developed with the teaching assistants, school leaders, mentors, tutors and students so that it was not based on unexamined transmission of practice.

The participants reported benefitting the most from a school culture which made them feel comfortable and allowed them to seek advice from staff including senior leaders. For the students and NQTs, becoming a teacher of early reading could not be separated from the emotional journey of becoming a teacher. This research shows that the importance of 'feeling comfortable' in a school environment, even when focusing on subject-specific practice and pedagogy, should not be overlooked or undervalued by school communities or universities. Therefore, working with busy schools to find ways to nurture the affective elements of initial teacher education may be a necessary new step for ITE partnerships. This could be aided by a review of university requirements set for school placements and mentor training so that greater emphasis is placed on informal relationships and emotional support for student teachers.

The time and space offered to student teacher and NQT learning was particularly important in this study and was governed by leadership and organisational decisions within schools and the guidance and expectations of the university. During the PGCE course, it was essential that mentors were available during reading lessons so that they could informally guide the student teachers' decision-making and help them to identify next steps for pupils. The participants particularly valued day-to-day opportunities to discuss their teaching and pupil progress through team teaching with their mentors. Opportunities for regular dialogue with tutors and mentors about teaching reading, beyond the feedback loop, were notably limited during the PGCE and this worsened as

the participants became NQTs. The confidence and competence of participants was visibly altered by the availability of such opportunities for more in-depth dialogue about teaching practices and decision-making, thus highlighting the need to make this a focus for school placements and induction.

In schools where the students and NQTs felt well supported and made most progress, the mentors offered their student teachers access to relevant materials for teaching and provided a well-structured system for teaching reading and phonics which the participants could adapt. They also allowed the students and new teachers some elements of freedom to add their own ideas and interpretations to the scheme, even if this meant introducing new reading activities outside of the normal timetable. It seems essential that schools and universities find ways to assist teachers of the future to use these artefacts successfully whilst allowing and enabling them to adopt a critical perspective. The same awareness is needed during the induction year. Without this, school resources, schemes and systems may become the 'rules' for teaching reading and students and new teachers may not have the opportunity to develop deeper understanding about learning to read.

6.3.3 Student teachers and NQTs

This research revealed some tensions between student expectations of ITE and induction for early reading and the reality of this process in the current context. In order to help students to gain the most from their experiences, it seems that, at least in this ITE partnership, there was potential for clarifying the roles and responsibilities of the university and schools in this process. This could be most effective by involving student teachers and their school-based mentors in dialogue with tutors which outlines the content and purpose of university sessions and provides a transparent negotiation of support and directed tasks for early reading for the student from the beginning of the course. During the course of the research, students were involved in dialogue with mentors and tutors, but often separately and once they had begun teaching. The focus also tended to be on observation feedback and evidence collection towards the *Teachers' Standards* (DfE 2013a). Sharing the continuum of development for knowledge, understanding and practice in teaching early reading might also help student teachers to examine their own progress and prompt additional learning opportunities.

All students and NQTs could feasibly engage in the process of becoming a teacher of early reading with greater criticality if aware of the potential influence of activity systems over their learning. With this knowledge, and perhaps more space to reflect with peers at the university, they may feel able to examine and challenge practice for early reading. They may also be reassured that learning to teach is about the interplay between themselves and their learning environments and does not rely on innate ability or personal characteristics. Emphasising that they are capable of the practice seen in experienced and effective teachers of literacy by sharing features of practice from research and measures such as the Classroom Literacy Observation Schedule (Louden et al. 2005) could help them to have higher levels of confidence and aspiration and identify ways to improve. Transparency about difficulties experienced by NQTs could also better prepare them for this transition and enable them to seek sources of support.

6.3.4 Policy

Although it is inappropriate to make large-scale recommendations from a small context-bound case study, this research does provide an example of the impact of the current policy focus on performativity in ITE and induction emphasised by the *Teachers' Standards* (DfE 2013a) and the school-based model. This is not a new concern (Ellis 2010a; Ellis and Moss 2014) but shows that a focus on measurement and monitoring may have implications for the professionalism, autonomy and depth of understanding developed by student teachers and NQTs in the specific area of teaching early reading.

In this case, university and school responses to the monitoring of the teaching of early reading through reading-focused inspections of ITE and statutory pupil testing appeared to have sometimes limited student teachers' opportunities to learn. Whilst the participants demonstrated high levels of knowledge, understanding and practice for teaching early reading, this was a result of support from specific school activity systems or mentors and tutors who were able to balance the demands of student teacher learning with meeting other external expectations. In addition, policy changes to early reading and ITE which resulted in prescriptive practice for reading in schools and limited time for students to learn in the university may have had the effect of creating some student dissatisfaction with their preparation to teach early reading. It seems possible, therefore, that policy changes which might strengthen student teacher and NQT knowledge,

understanding and practice for teaching early reading and their satisfaction with ITE in this area could involve reducing the high-stakes focus on monitoring pupil and ITE outcomes in early reading; supporting the development of mentoring based on understanding learning to teach as a participatory process; introducing more flexibility about the time allocated to student experiences in the university and school contexts; and providing schools with more support and development for induction. Further research evidence would be needed to argue for any of these changes at a policy level but, whilst policy continues to create unintentional barriers to student teacher and NQT development, ITE partnerships could work together to develop their own expansive solutions as outlined in Fig. 6.2.

6.4 Activity systems analysis: strengths and limitations

The use of activity theory has been criticised as often unnecessary in educational research which could instead adopt a more broadly sociocultural perspective (Smagorinsky 2010). For example, the research focus for this study could be conceived as one which relates well to communities of practice, as Wenger (1998: 105) proposed participation in multiple communities through shared organisation or function and a nexus of multiple objects. However, third-generation activity theory offered a unique conceptual and analytical framework with which to examine how student teachers experienced movement between different systems by problematising the object and elements of multiple activity systems. The principles of disturbance, contradiction and historically accumulated tensions uncovered hidden assumptions, unexamined practices and the impact of external expectations on student teacher learning for teaching early reading. These important conceptual tools acted as a vital investigative prompt which enabled an insider researcher to step outside of her own experience and view the familiar anew.

Some caution must be exercised when analysing each activity system using a set framework of elements as these could be falsely perceived as rigid or fixed, whereas the elements of a system are at any point interacting and in flux. However, they provided a highly effective framework of categories with which to describe, analyse and compare the school and university systems which may have been overlooked by a broader sociocultural analysis. This was particularly important when tracking trajectories of participation and comparing the influences of different activity systems over time.

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Without the framework of elements, any assumptions brought to the research might have led the researcher to focus on one element over some others or omit one altogether. Instead, planning data collection and analysis using the activity system elements allowed greater depth, consistency and rigour of analysis than might have otherwise emerged.

The concept of object in activity theory was also critical to understanding the tensions at work in an ITE partnership. Criticisms could be raised of the diagrammatic representation of school and university systems working towards one object (Fig. 6.1), when objects are necessarily multiple, changing and also held by individuals (Engeström 2008, 2011). However, uncovering the dominant object motive in the schools and university activity systems at this particular moment in history explained the tensions and contradictions in the roles and responsibilities as perceived by the university and schools and the way in which resources and the community contributed to these goals. Examining the impact of these contradictions on the specific area of learning to teach early reading provided an important insight into issues faced by ITE. Activity theory as a conceptual and analytical framework potentially enables research and development in ITE to move away from myths of knowledge transmission and students as isolated actors to realise the importance of trajectories of participation constrained or facilitated by unique activity systems.

6.5 Researcher experience

Conducting this study as an insider researcher after eight years as a PGCE tutor meant that I was inevitably influenced in some ways in my approach to the methodology, data collection and analysis. However, as a researcher who was no longer part of the PGCE team during the research, I experienced a new relationship with the student teachers. With the pressures of assessment and monitoring removed from our interactions, I could take the time to focus on their thoughts and experiences as much as the practices they demonstrated. Being able to visit them in each placement and once they moved to their first teaching post was a luxury that I rarely experienced as a tutor and it highlighted the value of a continued relationship for both student and tutor. I also experienced this unique relationship as a challenging splitting of perspectives, one in which I saw everything twice, first with my tutor eyes and then, as though out of body,

watching and examining practices and systems which had previously been so familiar as to be almost unnoticeable.

In some ways, my professional role was both challenging and supportive for the research process. My insider knowledge of ITE meant that my understanding of organisation and language was shared with the participants and was a supportive basis for interaction. In contrast, during data collection, at times I was seen by the students and the mentors as a representative of the university and expected to explain practice and issues. Although I maintained an impartial stance, it was very difficult to accept criticism as data and not to attempt to 'defend' or answer it. However, the reality of becoming a teacher of early reading from a student and mentor perspective became much clearer through the research focus than in my working role. Practice and organisation were examined and illuminated by the shift in perspective provided by concentrating on the students' and mentors' experiences. The research approach, which focused on the influence of interlinking elements within the activity systems, allowed me to understand the motives and pressures at work for the tutors, mentors and students which protected me from adopting a judgemental stance or attributing difficulties to the individuals involved.

Because of my history, I was surprised to find the limited influence of the carefully constructed university school-based tasks and the lack of mention of the *Teachers' Standards* (DfE 2013a). As a tutor, I believed that these were valuable ways of directing student teacher learning and that it was sufficient to explain the workings of these tasks to students and mentors. I knew that these were used inconsistently but assumed this was dependent on clarity of expectations or time available, not the lack of a shared understanding and negotiation of purpose and priorities. I had also been complicit in following and creating mechanisms which answered the external monitoring agenda and provided an evidence trail without fully examining the impact of this on student teacher learning, and I had begun to believe that target setting and audits were part of the learning process rather than mechanisms for accountability to external monitoring, a view I now question.

From my previous experience as a tutor and teacher, I knew that student teachers fared better in some school locations than others. I assumed that mentoring would be an important contributor to students' progress but this study enabled me to understand

much more about the specific mentoring influences that helped or hindered student practice. I believed that the feedback loop was necessary and I had underestimated the importance of informal dialogue and collaborative teaching. I think to some extent this stemmed from my unconscious belief that mentors should act as experts and teach the students, whereas their expertise was needed but in much more subtle collaborative ways. Whilst I realised that students perceived some school environments as more welcoming than others, I had not considered the multiple elements which make up each unique school activity system or fully grasped the potential impact on student teacher learning. Through the process of analysis, I became aware that I, to some extent, had attributed student success or failure to their intrinsic personal qualities and abilities. In the case of Laura, who failed a placement, I too would have followed the university activity system expectations to set her targets using the tools provided and, when this proved unsuccessful, I suspect that I would have doubted that she was capable of being an effective teacher.

The students demonstrated very high-quality teaching despite the evident tensions between activity systems. Even this uncovered my own hidden assumption that new teachers could not rival the practice of those with more experience. I had also assumed that they would feel restricted by the current systems and policy in place for reading. Although this did have a negative influence in some ways, I realised that I was basing this expectation on my own experiences of teaching reading in different policy climates. The students had no comparison and so, to some degree, were more accepting of the current policy and practice for teaching early reading. As a university tutor, my contact with NQTs in recent years had been very limited and I hoped that their experiences would have differed from my own. However, I was concerned that the NQT survey indicated some dissatisfaction with preparation to teach early reading. Once again, my expectations were challenged: the isolation and responsibility of the NQT role sadly, in many cases, was still an issue and yet the students were already much more effective teachers of early reading than I had been in my first year of teaching.

6.6 Limitations and directions for future research

Some limitations were placed on the study by the lack of recent research available which focused on the experiences of primary PGCE students and on teaching reading in England. The starting point for the study and later discussion of findings therefore drew

on studies of secondary ITE and international studies, primarily from Australia, the USA and Europe whose school systems and ITE are culturally and organisationally different from those in England. This may have made differences in findings more pronounced. The design and analysis of the study itself was also limited by a cultural perspective shaped by the insider researcher's experiences of the English educational system and might have been interpreted differently by a different researcher. Similarly, the interpretive approach required retrospective attribution of meaning when analysing interviews and observations. Although measures were put in place to ensure validity, there are inherent limitations in interpreting the perspectives of others.

Adopting a collective case study methodology with a small number of participants was chosen to achieve depth of qualitative information in this longitudinal study but meant that, with the convenience sample of volunteers, the findings may not have been representative of the PGCE cohort at large. However, the nature of a collective case study is that it offers opportunities to consider both individual experiences and patterns and similarities across a number of participants, and there were certainly common patterns of knowledge, understanding and practice as well as influences from the activity systems in the study. In retrospect, it would have been desirable to include one or more student teachers with an undergraduate degree in English language or literature, in order to consider whether their subject knowledge of English had any influence on their view of the teaching of reading or their experiences in schools. The original sample of participants included a mature student for whom English was an additional language but unfortunately she decided that she did not want to continue to be part of the research. The perspective of a student teacher learning to teach reading in her non-native language would have added a valuable further insight to the study. Although the participants had a range of different experiences before joining the PGCE, there was also a noticeable shortage of volunteers or participants in the over-30 category. Again, a further study might do well to include more mature students, parents and established career changers to enhance the reliability of the sample.

Just as the voluntary convenience sample of participants placed a limitation on the ability to generalise findings from the research, so did the case study focus on experiences in one ITE partnership. Some specific findings about difficulties with communication between the university and the school partners as well as reflections on university-taught content and set tasks may not be representative of other ITE

programmes. Similarly, the time-bound nature of the case means that there have already been changes to the arrangements for ITE and induction in the partnership studied. However, the common threads of disturbance and contradiction between university, school and external expectations for student teachers learning to teach reading are likely to be a feature of the changing context for ITE nationally. The influence of current school practice and schemes for teaching reading on the experience of student teachers and the proposed continuum of development should also have currency in ITE partnerships in other locations. One aspect of the ITE provision in this partnership which was not investigated by the study was the experience of the 'School Direct' students, as only full-time PGCE students were chosen for the research. The 'School Direct' students spend most of their course in school and their ITE experiences are more closely directed by their host school or a cluster of co-operating schools than the university. It would be interesting to involve them in a similar study to investigate similarities and differences in their perceptions and practice.

Whilst some improvements could be made to the research by extending the sample of participants, it could be argued that a study incorporating different methods of data collection and a smaller number of participants could also have offered further insight. In particular, the study revealed the importance of mentor dialogue about early reading with the student teachers. Some recording and analysis of student and mentor dialogue on the subject of early reading and perhaps more attention to the way in which their written feedback on the subject of early reading changed over time could have illuminated why certain mentoring relationships were more successful than others. However, access to everyday mentoring conversations would possibly be very difficult to achieve without causing some researcher influence on the process, and for the purpose of this study, it might not have provided sufficient detail about changes in students' practice. In addition, although beliefs and identity were not the chosen focus of this study, they were obviously a potential influence on the student participants, in particular their beliefs about effective teachers of reading. Whilst these elements were discussed in the analysis, the questions related to beliefs and identity could have been increased to provide more data. As a result of limited data on this subject in the reported study, the researcher had to be wary of overstating these findings.

Other limitations caused by the design of the study include the limited respondent validation. Most participants did not comment at all, despite regular email feedback.

This may have been because they were happy with the interpretations but it is more likely that they were too busy to read the feedback during the process. Two participants did raise concerns as they were anxious that their view sounded critical of the university or school. The researcher then found ways to reassure the participants about their anonymity and the importance of their honesty but this dialogue could have affected the later interviews. There was also a possible impact of adopting an activity theory perspective before embarking on data collection. Although there were no specific examples of where this had obviously distorted the data, there was a danger that the analytical frameworks used influenced the way in which the data were collected and therefore predisposed the researcher to find that activity systems had an influence on student teacher knowledge, understanding and practice for teaching early reading. However, adopting an activity theory framework for research design could not have influenced the specific influences and difficulties identified within the different elements of the activity systems.

The researcher role, as a non-participant observer no longer working on the PGCE course, meant that there was some possibility of retaining professional distance. However, this distance limited the amount of data collection available and so perhaps prevented more regular conversations and observations of the participants' teaching which could have offered a 'thicker' perspective. Building a relationship with the participants in the study was essential for the quality of the data and the comfort of the participants. To some extent, this enabled the researcher and participants to form a more real and honest relationship which offered dialogue about teaching and learning. However, there may have been influences that were not intended; for example, the participants may have adjusted their teaching following discussion with the researcher. It is impossible to remove or quantify the researcher influence in this case but it should be considered. It was also likely that just by becoming research subjects, the participants spent more focused time reflecting upon and analysing this aspect of their practice than their peers.

It is important to acknowledge that the design and analysis of the study would have been transformed if an alternative theoretical perspective was employed. For example, following Bourdieu's theories of cultural capital, habitus and social reproduction (Bourdieu 1977, 2011) might have resulted in selecting methods and tools to examine

the impact of participants' socioeconomic background and education on becoming a teacher of early reading or the potential difficulties created by the habitus and language of universities and schools. Alternatively, adopting a more broadly sociocultural perspective might have led the researcher to move away from a focus on the activity systems involved in ITE and induction to analyse the influence of specific interactions during the student teachers' journeys. However, this study has demonstrated that conceptualising student teachers' and NQTs' experiences as a product of multiple activity systems offers a particularly effective way of reviewing the systems within ITE partnership working and identifying the strengths and challenges with a focus on teaching early reading.

It is clear that there is potential for what Engeström (2001: 137) termed 'expansive learning' between the multiple activity systems of schools and the university, and that the next step would be to engage in developmental work research with mentors, students and tutors. As previous research has suggested (Ellis 2010b; Hutchinson 2011; Douglas 2012b), this could offer opportunities to understand and address the influences and barriers at work in ITE partnerships. Open dialogue between tutors and mentors about their goals and expectations appears to be especially important in the context of recent and rapid change to increasingly school-centred ITE. There is a danger that without shared understanding in ITE partnerships, assumptions based on historic working practices and relationships will arise (Douglas and Ellis 2011). One possible starting point for future work in this ITE partnership would be to share the proposed continuum of student teacher development for early reading and wider findings about the influence of activity systems on the student teachers and NQTs. This evidence could then be used as a stimulus for the activity systems involved to develop new ways of working which support teachers of the future. Unanswered questions also remain about the specific impact of school activity systems on knowledge, understanding and practice for teaching early reading as new teachers progress through their careers. Research in this field could provide an important insight into their long-term professional development. In addition, this small research study could be developed in other locations as a way of generating new practice and gathering further evidence about the impact of central policy on student teachers' experiences and outcomes.

Finally, this study indicates that there is a shared continuum of development for students when becoming effective and confident teachers of early reading. However,

this is highly dependent on the nature of the activity systems involved in ITE and induction, and the transition between them, more so than any individual beliefs, qualities or prior experiences. It suggests that a focus on the external monitoring of outcomes for early reading may present student teachers and NQTs with a double bind between the expectations of the university and schools. In conjunction with curriculum prescription for early reading and recent changes to school-based ITE, this contradiction may have reduced student teacher and NQT opportunities for critical evaluation and analysis of practice and pedagogy in this field and, in some cases, hampered individual progression through the continuum of knowledge, understanding and practice. If this is the case, it is important that ITE partnerships work together to resolve this issue and examine the impact of institutional responses to external monitoring on the teachers of the future. Activity theory, through developmental work research, offers a way forward for universities and schools to work together to reconfigure the elements of the activity systems involved in ITE and induction in order to most effectively support individual trajectories of participation as student teachers become teachers of early reading.

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