

**Developing an understanding of the factors that
influence teacher engagement in action research
and professional learning activities in two
English primary schools.**

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Abstract

This study explores how teachers in two primary schools in London interpreted and perceived their engagement in action research as a professional learning experience. The study also explored the factors that teachers perceive to impact upon their engagement in wider professional learning experiences in primary schools. This study is timely as there are few examples of research that have investigated whole-school teacher engagement in action research. As teacher engagement in research continues to be promoted at a national level, there remains a lack of qualitative research on the impact of engagement in collaborative action research on teachers within a primary school. This study is also timely because it has investigated theories of workplace learning in relation to conceptions of teacher learning experiences within a school. The extent to which the learning environments in schools afford formal and informal opportunities for teacher learning is presented as a factor for consideration.

The study took a case study approach to investigating teacher perceptions of engagement in action research. Questionnaires with twenty-four teachers and interviews with twelve teachers across both schools resulted in qualitative data which was explored and interpreted for emerging trends. Data analysis was influenced by a constructivist interpretation of grounded theory to provide deeper understandings of patterns that emerged in relation to perceptions of action research and experiences of workplace learning.

This study identified that there is a complex patchwork of influences that impact upon teacher engagement in professional learning, and that significant factors in this engagement include the expansiveness of the institutional learning environments and individual dispositions to learning. These factors influence individual teacher learning experiences in different ways. A model for teacher learning is presented in this study that reflects the key factors that need to be taken into consideration when planning for formal and informal teacher professional learning activities in primary schools.

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Chapter 1: Introduction to the study

1.1 Background to the study

The purpose of this thesis is to explore the professional learning experiences of two groups of teachers in two English primary schools, particularly in relation to action research. I aim to understand better the factors that influence the perceived quality of teacher professional learning experiences in primary schools, and to present a conceptualisation of what I believe school leaders need to take into consideration when planning for teacher learning. I have always held a strong belief that the greatest factor that impacts upon the quality of pupil learning experiences is the quality of teaching, and the single most significant factor that impacts upon the quality of teaching is the quality of teacher learning. This study is timely because it addresses the engagement of all teachers within each school in collaborative action research. The last decade has seen an increasing recognition in schools and other organisations that attention needs to be given to staff professional and personal development and growth (Darleen and Pedder, 2011; UCET, 2011, Cordingley et al, 2015). This study of teacher professional learning is important because recent research evidence on teacher professional development (European Commission, EACEA, Eurydice, 2015) has demonstrated that formal and traditional forms of in-service training, such as external courses and conferences, continue to prevail in almost all education systems. This study therefore examines the current research about workplace learning and teacher learning, and from this develops a conceptualisation that there is value in examining the learning environment of the institution in which teachers are working, and the professional learning experiences that they engage in.

In the United Kingdom (UK) and many parts of the world, improving teacher performance has become a high priority in education policy, and improving teachers' professional learning is seen as one of the most significant ways in achieving this goal for improvement. Campbell and Groundwater-Smith (2010) have detailed the renewed interest in teacher research across the UK, the USA,

Continental Europe and Australia. This thesis will examine factors that potentially affect teacher learning in schools, including both formal and informal learning activities. For the purpose of this study, I will use the term 'professional learning' or CPL as an overarching term for all activities that teachers may be engaged in either formally or informally that promote their learning, and typical examples include: teacher observation and modelling; team teaching; courses off-site; training day courses in school; after school professional learning meetings; on-line courses; coaching and mentoring; shadowing; networks within and across schools; collaborative learning; peer learning; professional reflection and action research.

This thesis brings together views from teacher CPL and workplace learning literature in attempting to understand the relationship between action research and teacher learning. Specifically, it examines the perceived value of teachers' engagement in action research upon their professional learning and practice within the context of two primary schools in London. I am aware that this is a heavily researched area of education. However, the overwhelming majority of previous studies have investigated individual or groups of practitioners who have chosen to engage in action research. Little analytic attention has been paid to the involvement of all teachers within an institution engaging in action research, and this may therefore include teachers who may be reluctant to engage in research processes. As government policy (DfE, 2010; Bloom, 2016) continues to encourage teacher research, this study will contribute to new knowledge through an examination of the perceived effects upon two groups of teachers engaging in collaborative action research.

A recent joint BERA-RSA report (2014) evaluating the role of research in teacher education, has acknowledged that research in the field of teacher professional learning continues to focus on smaller scale studies, and that the evidence base is inconclusive as a guide for national policy. As Papasotiriou and Hannan (2006) have argued, there are few empirical studies that provide information about teachers' perspectives. This aspect of individual teachers' perspectives on the value of action research as a model for whole-school

teacher professional learning and development has been under-researched. This study therefore addresses a gap in the literature and provides additional insight into the attitudes of two groups of teachers in two English primary schools in the London Borough of Redbridge to a collaborative action research model that they have collectively been involved in over a period of a year as part of the school professional learning programme. This study will build on the extensive existing literature base and contribute new knowledge in terms of the perceptions of a group of teachers who are all involved in action research within a whole school professional learning programme in partnership with a university.

1.2 Overview of the thesis

This thesis presents the results of a qualitative case study to assess the perceived relationship between action research and teacher professional learning in two primary schools in England. Theories of teacher learning are examined in terms of factors that inhibit or support the learning of employees. This will include an examination of the relative influences on teacher learning at three distinct levels: government policy; institutional learning environments; and individual dispositions. These perspectives will be examined to draw conclusions about the factors that are significant in supporting teacher learning in primary schools today. It is hoped that this study will be of interest to individual teachers and schools as well as the wider education community to inform the future delivery and development of action research and teacher professional learning in schools.

The following specific research questions have been investigated in detail:

1. What do teachers consider to be the advantages and disadvantages of action research?
2. What are the factors which teachers perceive affect their professional learning in schools, with particular reference to action research?

3. What can be learnt about the provision of teacher learning in primary schools from these findings?

My intention through this thesis is to evaluate the effect that action research can have at the local level on individuals and groups of teachers. This study will enable an examination of individual teacher perceptions of undertaking action research within the context of a whole school approach to action research. If the future of education is to involve greater numbers of teachers in engagement in research, this study will provide insights into factors that can be taken into consideration at the design stage to promote and support teachers' professional learning.

Previous studies (Brown and Mcatangay, 2002; Hodgkinson and Hodgkinson, 2004, 2005; Fuller et al, 2005; Elliot et al, 2002; Furlong and Salisbury, 2005; Binnie et al, 2008;) have predominantly detailed the experiences and attitudes of teachers who have voluntarily engaged in research or are individuals who are participating in teacher research within their schools. Peters (2004) has argued the fact that although there is agreement about the value of action research in improving teacher professional learning, there is also a recognition that if teachers' engagement in action research is to be successful, more information is needed about the conditions that support or impede this practice. This is particularly relevant when discussing teachers' perceptions and attitudes towards the value of action research as a model for teacher professional learning.

1.3 Context of the study

Within a complex and often contested educational scene and against a backdrop of changing conceptions of teacher professional learning, one aspect of government policy has in recent years included the promotion of teacher research as a significant lever to support teacher professional learning in schools. Over the last fifteen years, a number of English government agencies have actively supported the use of research to develop teacher professional

learning (UCET, 2011), and there is evidence to suggest that the Teacher Training and Development Agency and the Department for Education (TDA, 2004; Day, 2008; DfE, 2010; BERA-RSA, 2014; Bloom, 2016) are making continued efforts to promote teacher research in schools. There is evidence from the research literature (see, for example Bolam, 2000; Burns and Haydn, 2002; Pollard 2009; Pring, 2009; BERA-RSA, 2014) that efforts are being made at a national level to promote the idea of teaching as a research informed profession. However, it is worth questioning the extent to which this policy promotion will impact directly on teacher professional learning and signify a move away from the traditional acquisition model of teacher learning, characterised by teachers going off site to attend training courses. Concerns have even been expressed that forms of reflective practice are being loosely interpreted and employed deliberately as an instrument to meet government policy objectives (Clayton et al, 2008; Campbell and Mcnamara, 2010).

A number of writers (Brown and Mcatangay, 2002; Eames, 1990 in Whitehead, 1995; Clayton et al, 2008) have argued that these developments have raised the profile of action research as the preferred model or approach to educational research for those teachers engaged in practical research in schools. Some researchers (see, for example McNiff and Whitehead, 2002; Fazio and Melville, 2008; Elliot, 2007; Maaranen, 2009) depict action research as a means of engaging teachers in research through a cycle of reflection and review that can result in a change in practice or professional learning. If teachers are to be asked to undertake action research in their schools to support their professional learning, the aim of this thesis is to evaluate the most effective ways to manage this in order to maximise teachers' workplace learning experiences.

1.4 The rationale for this research

The rationale for this research has evolved from my own professional experiences as a teacher and school leader. I have detailed below some key experiences during my sixteen years of working in primary schools in London

that have impacted upon my understanding of the role of the teacher and teacher professional learning and development.

I began my career as a teacher in a primary school in East London in 1999. Against the advice of senior colleagues, I began my Masters in Education in my first term as a Newly Qualified Teacher (NQT). I did this primarily because I firmly believed that I needed to continue to learn and engage in practical research in order to continue to develop as a teacher. By the end of my third year, and having completed my MA, I was made responsible for the professional learning of all teachers at the school. I was committed to teacher engagement in research as a model for their professional learning. When I began this thesis in 2008, I was a deputy head teacher and leader of all staff learning within the institution – at the time, one of the ten largest primary schools in England. My role required me to consider what strategies could have the greatest impact on an individual teacher's professional learning and their effectiveness within their role. I am currently head teacher of another large primary school in East London. I believe that a head teacher should be seen as the head learner and I have continued to explore all the formal and informal opportunities made available in the workplace to support learning. I am aware that my role as a practitioner in schools will be reflected in the findings of this study, and I will acknowledge this accordingly. As a Professional Doctorate, it has always been my intention to reflect on the findings of this thesis, to inform future practice in both the schools that I lead and beyond.

Taking my own personal experiences in teaching as a starting point, I have always held the belief that our most effective teachers are those teachers who engage in professional dialogue and reflection upon practice, whether informally or formally, and are prepared to implement change in their classroom as a result. It is important to consider that this is a personally held belief that has been influenced by my individual career journey and the experiences contained within that. One of the outcomes for this study will be an appraisal of the factors within my own professional learning, in terms of the dominant political ideology promoted through government policy, the institutional learning environments

within the schools I have worked, as well as my own individual dispositions to learning, that have informed this viewpoint. In my current role, I remain responsible for staff learning. My role requires me to consider all the factors that impact upon the expansiveness of the learning environment within the school I lead, and how best to facilitate informal and formal learning of all staff.

My personal experiences of teacher professional learning over the last sixteen years have been dominated by the need to *train* teachers to be able to implement government initiatives, in contrast to individualised professional *learning* opportunities. It is significant, in relation to concepts of informal learning, that these experiences did not seem to result in deeper learning and collaborative practice. Whilst I was working in a school in 2008 that was deemed to be struggling, representatives of the local authority were particularly dismissive of our intentions to promote teacher learning through action research. I felt that this was a reflection of the impact of government policy in promoting teacher learning through short term externally developed courses. The notion presented by Local Authority advisors was that action research would be more appropriate for a more successful school, particularly when preparing for an inspection. My own experiences highlight the professional understanding that activities often included very little time for reflection on the impact that the introduced changes had actually made to pupils' learning. Schools and teachers had appeared to become dependent on outside intervention to support their professional learning at the expense of informal learning opportunities available in each institution.

An example of an extensive CPL programme that I participated in during the formative years of my career involved the delivery of the National Numeracy and Literacy Strategies. These strategies were introduced in the late 1990s to be employed by schools to raise standards of teaching and learning in Maths and English. They were supported by highly prescriptive materials to support teacher professional learning. By adhering to these highly prescribed models for teacher learning it could be argued that teachers' professionalism was being undermined. The activities were also designed in contrast to reflective models

of learning. Bolam (2000) has discussed how most activities took the form of short training courses that were weak at promoting sustained change to practice. Certainly, my own experiences in teaching from 1999 onwards involved me participating in a series of CPL programmes delivered to schools, specifically focussed on instructing teachers to teach with very little emphasis on the research and theory that underpinned the practice. These strategies also impacted heavily on the time available to schools for teacher learning activities. With such a strong focus on the need for schools to design their teacher learning programmes around government imposed initiatives, this left little room for other forms of teacher learning.

Other aspects of government policy that promoted performativity cultures in schools appeared to me to stifle opportunities for professional dialogue and reflection upon practice further. My own experiences as a newly qualified teacher in 1999 were characterised by the impression that teachers were to be judged on their performance in the classroom, particularly in terms of pupil progress. With the introduction of performance related pay, teachers were also in competition with each other. I certainly witnessed conversations where teachers saw their own success in terms of gaining better results than colleagues in their year group. These factors could also adversely affect the opportunities for collaboration. As Aubusson et al (2007) have noted, the transformation towards a professional learning community will involve an increased openness, as well as the commitment to take responsibility for the learning of others. If teachers were reluctant to undertake additional professional learning opportunities beyond the school CPL provision, then it could be argued that teacher learning was consequently dominated by the centrally prescribed professional development courses that focused on learning through acquisition with fewer opportunities for collaboration and reflection upon practice. A recent review of international reviews of effective teacher professional learning (Cordingley et al, 2015) has highlighted the significance of sustained learning activities over time, that facilitate experimentation in the classroom. This study is therefore of particular relevance in providing a practical

example of the implications of whole-school teacher engagement in action research over time.

My positionality as an insider researcher within this study highlights the absolute importance of reflecting upon my own personal experiences and beliefs and how these may impact upon my review of the literature, as well as the collection, analysis and discussion of the data produced in this study. Although I have personal understandings and experiences of working in schools and undertaking and leading teacher professional learning activities, this position of being an insider researcher does not necessarily mean that there will be a fixed influence. Although this study involves researching aspects of school practice that are familiar to me, and this needs to be effectively considered and acknowledged throughout the research process, the design of this study will also enable the development of theories and understandings personally unknown to me.

1.5 Historical context of teacher professional learning

The development of experiences for teacher learning in primary schools will be considered during the period from 1998, when I began my PGCE in primary education, to the present day. An overview of the historical context of teacher learning during this period is provided here to enable the reader to develop an awareness of national policy developments and how these influenced teacher learning within schools during this period from 1998 and up to the present day. Up until the early 1970s in the English education system, there was very little specific emphasis on teachers' learning once they had gained their initial teaching qualifications, and the organisation in most schools meant that teachers often worked in isolation in their own classrooms. As Tomlinson (1993) has outlined, the first national enquiry into in-service training was not mounted until 1970 and this suggests that the accepted dominant view on teachers' professional learning was that their initial education and training would suffice for their professional career. Different studies (Tomlinson, 1993; Earley and Bubb, 2004; Evans et al, 2006) have discussed the perspective that teacher

learning was not seen to be the prime objective of either government or schools. Schools were not expected to plan specifically for the professional learning of their teachers. However, researchers (Robinson, Freathy and Doney, 2014) have also argued how much of the earlier research on education prior to the 1970s detailed a focus on proving the professional qualities of teachers, and that there has been an increasing emphasis in recent years on a top-down education reform agenda that has served to deprofessionalise teachers.

The period after this, particularly from the 1980s onwards, begins to be dominated by the ideology of markets and competition, defined as 'new managerialism' by Hodkinson and Hodkinson (2005). In terms of professional learning, the early 1980s can be defined as a turning point when views of the purpose of teacher learning shifted to include, and perhaps be dominated by, the needs of schools and government. This period witnessed increasing government intervention into education, including a range of initiatives and legislation that changed the nature of teaching as a job, and the professional status and identity of teachers. A number of researchers (for examples, see Troman, 2008; Webb et al 2004; Graham, 1997) have even argued that these reforms and initiatives reduced the potential creativeness and individuality of the teacher.

Increased central government control over schools in England affected teacher learning as the school system became dominated by a culture of attainment driven and quantifiable performance measures from 1988 onwards (Elliot et al, 2002; Elliot, 2007; Yandell and Turvey, 2007). Although there was a perception within the teaching profession that teachers' professional autonomy was being questioned, it can be argued from a policy viewpoint that reforms were introduced to support teachers and provide a framework to support their activities in school, as well as enhancing the opportunities for teacher professional learning. Central government imposed a national curriculum supported by attainment targets, and schools were then measured by their success in meeting these targets through the reporting of national test results in

league tables and school inspections. Clayton et al (2008) have discussed the extent to which this created 'a professional experience characterised by overwork, high stress levels, pressure to make teaching conform to the requirements of a rigidly prescriptive National Curriculum, anxieties with Ofsted and school leaders' (p74). Recent education history has demonstrated that the impact of the performativity agenda, with Ofsted at its fulcrum, has influenced the teacher learning experiences in schools. The argument is that performativity cultures potentially neglect processes of teacher learning that take time. Ball (2012) has discussed performativity as the need for a school to focus its efforts on performance rather than experiential learning. It is important to acknowledge that this study of teacher learning in schools is located in the context of schools facing significant external pressures through the promotion of performativity through government policy and the inspection regime in particular.

Bolam's (2000) influential report on the impact of emerging policy trends on continuing professional development highlighted the assertion that the pendulum had swung too far in the direction of system-led training at the expense of individual professional and career development. A recent select committee enquiry report written by the Universities Council for the Education of Teachers (UCET, 2011) has flagged the significance of teacher learning opportunities in schools to be structured to reflect teachers' individual needs and that builds upon and complements their initial teacher training. This demonstrates that the need to provide teacher learning opportunities that reflect teachers' individual needs continues to be a key issue for teachers' professional learning in schools today.

In terms of teacher learning, key factors appear consistently when discussing the historical context of professional learning for teachers in UK primary schools. The legacy of isolation felt by teachers still exists to a certain extent. Even the increased collaboration between teachers that resulted initially from the introduction of the national strategies eventually led to teachers planning individually in their own classrooms (Webb et al, 2004). The role of the teacher is one that has traditionally been undertaken in isolation, with the admission of a

mistake regarded to be a weakness. Hargreaves (1998, in Troman, 2000, p339) has argued that when a teacher asks a colleague for help 'they place their confidence and perceived competence on the line'. Teacher learning has also too often been planned to meet the demands of government initiatives and to improve results, and this emphasis reflects common conceptions of teacher knowledge and how it is acquired. Opportunities for collaboration and reflection upon practice were rejected in favour of policy approaches to learning 'that assumed a crude version of learning as acquisition' (Hodkinson and Hodkinson, 2005, p111). This also indicates that the value of informal learning has been neither realised, valued nor nurtured, particularly in comparison to progress made in other industries. Hargreaves (2001) has detailed the significance of collaborative activities and the importance of social and informal learning in providing the best professional learning opportunities. In addition, BERA-RSA's (2014) recent review of evidence on teacher education has highlighted the value of collaborative learning and peer support, as well as the lack of these learning opportunities being made available to teachers in schools.

1.6 Thesis organisation

This thesis has seven chapters, and following this introduction, chapter 2 details a review of the literature regarding theories of workplace learning to begin to consider them in relation to teacher learning in schools. Although literature in the field in relation to informal learning in schools is sparse, the key concepts of situated learning and communities of practice (Lave and Wenger, 1991) have much to offer in any conceptualisation of the influences on teacher learning in schools. The chapter then goes on to focus specifically on the development of the model of action research as a tool to support teacher learning. A review of the existing literature on studies detailing teacher engagement in action research in schools is provided. This review identifies the potential affect upon teacher learning of engagement in action research and highlights the challenges that individuals and schools may face when engaging in action research.

Chapter 3 expands upon the workplace learning theories discussed in chapter 2 and considers the significant influences on the quality of teacher professional learning experiences in schools. An overview of the existing research literature is provided to demonstrate key factors that influence individual teacher learning in schools. Evidence is presented to demonstrate that there are three key levels of influence on teacher learning in schools in England; government policy; institutional learning environments; and individual dispositions to learning of teachers. Chapter 3 then presents the conceptual framework for this thesis. Analysis of the literature will demonstrate that these three levels of influence that emerged in chapters 2 and 3 impact in a related way on the quality of teacher professional learning experiences in schools.

Chapter 4 identifies the research methodology for this thesis and provides a rationale for the methodological assumptions upon which the study was designed. A discussion of the approaches, methods and materials used in the collection of data is provided. The method of inquiry and the instruments used to collect data to answer the research questions are outlined and ethical issues are considered.

Chapter 5 details and presents the results of the data collected through questionnaires and interviews. Teachers' reflections and perceptions of how their engagement in action research impacted upon their professional learning, and their initial perceptions of the effect upon their practice, are presented. The perceived advantages and disadvantages of engagement in action research are presented and these perceptions are collated within five data themes: changes to practice; the significance of relevant learning experiences to teachers; opportunities for collaborative learning; the time made available for learning; and impact upon teachers' professional knowledge, that emerged from thematic analysis of the data.

In chapter 6, key information and trends derived from the data analysis are discussed. This information is interpreted and a revised conceptual framework

is then presented to illustrate an analysis of how the findings in this study relate to previous findings on factors that impact upon teacher learning.

Chapter 7 outlines the original contribution that this thesis has made to the field of teacher learning and engagement in action research. A consideration of the implications of these findings in terms of future research in the field, and for future practice in schools, is discussed. The concept of a 'dynamic learning community' is presented as a model for schools to consider when designing opportunities for teacher learning.

Chapter 2: Conceptions of Workplace Learning

2.1 Introduction

The first step in answering my research questions was to identify the potential factors that influence teacher engagement in learning activities within schools. I made the decision to investigate workplace learning because I believe that the literature has much to offer in determining the factors that influence the perceived quality of teacher learning in primary schools. When I began this thesis, I had expected to focus primarily on activities specifically designed to support teachers' professional learning (CPL), for example action research. It was through an introduction to theories of workplace learning that I expanded my literature review and it is evident that conceptions of workplace learning in relation to teacher learning is an under researched area. I have specifically chosen to investigate situated approaches to learning and communities of practice to identify how the learning environment within schools potentially influences teacher engagement in learning, and the extent to which individual teachers elect to engage in the learning opportunities on offer in the workplace.

In this chapter, I will examine literature on theories of workplace learning, with a particular focus on teacher engagement in action research. The literature review in this chapter will identify that although there are relatively few examples of literature in the field detailing the impact of informal learning, situated learning or communities of practice, these key concepts have much to offer in any conceptualisation of the influences on teacher professional learning in schools. Communities of Practice literature is reviewed because it remains a significant model for understanding collaborative situated workplace learning. Its potential in promoting teacher professional learning will therefore need to be reviewed. I will begin this chapter by providing an overview of the development of situated learning and communities of practice, and examine the critiques which make the deployment of communities of practice such a contested theory.

It is the aim of this thesis to investigate the influences upon teacher learning in primary schools. In order to develop a deeper understanding of factors that influence and affect teacher professional learning, it is important to have a wider

awareness and understanding of factors that influence learning within workplaces beyond schools. The historical development of teacher engagement in research and of the model of action research as a tool for professional learning expands upon this discussion. I will conclude the chapter with an overview of the existing empirical research on teacher engagement in action research. Research studies have been referenced in terms of the extent to which they offer an insight into the perspectives of teachers; in relation to the impact of engagement in action research upon teacher learning in schools. This review will highlight the potential impact upon teacher learning of engagement in action research and highlight key factors for schools to consider when implementing action research.

2.2 Situated approaches to learning

I will highlight the work of Lave and Wenger (1991) because of their significant influence in contributing to the development of theories of workplace learning as a social activity or situated theory of learning. In the foreword to Lave and Wenger's (1991) original text, William Hanks discussed the innovative nature of their work, particularly in terms of the extent to which learning was located in the process of co-participation, and included a focus on the relationship between learning and the social situation in which it occurs. This consideration of situated learning has traditionally been more prominent in workplace learning literature than teacher learning (Hodkinson and Hodkinson, 2005). I have deliberately chosen to discuss situated learning through the lens of workplace learning literature because it is the premise of this study to consider its influence on learning in all workplaces, not just schools. The conceptual framework for this study will demonstrate the significance of situated learning in potentially promoting teacher professional learning in schools. I will present evidence in this study to demonstrate that the transferral of theories from workplace learning literature will be of value to school leaders in planning for teacher learning. It is widely acknowledged that situated learning is accepted as a key component of professional education and practice in health and social care, and researchers

(Mahlangu and Pitsoe, 2013) have acknowledged that little attention has been paid to the implications of situated learning to teacher professional learning.

Situated learning is considered to be particularly significant as it signalled a move away from the concerns of traditional learning theorists who had conceptualised the learner as a receptacle of (taught) knowledge (Fuller et al, 2005). Evans et al (2006) have characterised this methodological shift as the move away from training in the workplace to learning in the workplace. Whereas training is viewed as the formal learning opportunities provided by employers for employees to learn new skills, workplace learning encompasses a range of different forms of learning which may or may not be formally structured. The traditional model of training is reflected in the apprenticeship model in industry and the experience of teachers going off-site to attend courses away from work. An evaluation of the influences upon the formal and informal learning opportunities for workers within this concept of situated learning will be discussed. Billett (2001) has examined the extent to which institutions afford individuals or groups of individuals these opportunities for informal learning.

Returning to the discussion in section 1.6, in terms of government policy over the last forty years, Hodkinson and Hodkinson (2005) have discussed how Fordist forms of work organisation had viewed the need to develop workers' learning only in terms of enabling them to require specialised skills to complete specific tasks inherent to their role. This has no link to the social aspects of collaborative learning or the personal growth of the learner, and mirrors the role of the teacher who is sent out on a training course to develop a specific aspect of their practice without any consideration of the social environment and context within which they are both working and learning (Kennedy, 2005). Conceptions of teacher learning in schools demonstrated that the promotion of situated learning was stifled in schools, and that the learning undertaken by teachers during these individual days out of school was easily forgotten on their return (Conner, 1998). This assumes a deficit model of learning whereby weaknesses in a teacher's knowledge or skills can be identified and developed through the acquisition of content and subject knowledge, reflecting technically rational

assumptions of planned learning. The impact of government policy upon the quality of teacher learning experiences in schools has been highlighted through the performativity culture, described as a technology of power composed of league tables, inspection reports and target-setting to regulate practice in schools (Ball, 2000). Ball (2008) has emphasised the impact of performativity in influencing social relationships and cultures for collaborative learning in schools. This evidence of the influence of government policy upon teacher learning activities is significant and appears in the literature to be a worthwhile aspect to explore in further detail in this study.

The dominant model of theorising about learning in workplace learning literature is centred on a social and participatory perspective. Central to Lave and Wenger's (1991) work was the social community, and the processes, relationships and experiences that underpin the participants' feelings of belonging and how this influences the extent of their learning in the workplace. Their belief (Lave and Wenger, 1991) was that learning could be viewed as a feature of practice, present in all sorts of activities within the workplace, and not constrained to clear cases of training or apprenticeship. Engestrom (1987) developed the concept of 'activity systems', with a perspective on learning that is often subconsciously undertaken in the workplace. Evans et al (2006) have related this to the transition from training in the workplace to learning in the workplace. Their distinction can be interpreted as training activities that imply an intervention that is formally structured and involves the transferral of a body of knowledge.

Workplace learning is more encompassing and involves locating learning in social relations at work. Evans et al (2006) have discussed how expanded views of situated learning have conceptualised learning as situated in three ways: practical activity; culture and context of workplace; adaptation of the learning contexts to learners' experiences and interests. Situated approaches to learning recognise the importance of work experience and practical action in promoting learning experiences. Lave and Wenger's (1991) definition of

situated learning acknowledges that learning is not simply situated as part of practice but is instead considered to be an integral part of social practice.

In our view, learning is not merely situated in practice – as if it were some independently reifiable process that just happened to be located somewhere, learning is an integral part of generative social practice in the lived-in world (Lave and Wenger, 1991, p35).

This definition highlights the significance in situated learning of workplace learning activities centred on engagement in social practice. It is this engagement in social practices within the workplace that automatically facilitates professional learning opportunities. Fuller et al's (2005) study of teacher learning in secondary schools illustrated the impact of the situated learning that is often indirectly undertaken through normal working hours.

Billett (2001) has argued against describing workplace learning as informal learning because of the belief that all workers are participating in the deliberate structures and designs of the workplace. His arguments relate to the propensity of the workplace activities, as detailed above, in enabling the learning environment to provide a range of learning opportunities for workers. Billett (2001) details the rich learning that occurs outside of formal educational institutions and inside workplaces and cites the examples of the learning experiences of hairdressers and tailors. The argument is that rich learning is able to take place implicitly in such workplaces even if the primary purpose of the activity is not designed to support learning. For example, engagement in work activities incites changes in individuals' capabilities because the structure of the activities is universally pedagogic. This suggests that the propensity of the workplace learning environment to provide both formal and informal learning opportunities for teachers can determine the quality and sustainability of teachers' learning experiences. This indicates that it would be relevant to this study to investigate the extent to which schools may differ, in terms of the quality of the learning environments that they provide for teachers.

Within a learning environment that enables individuals to have both access to learning activities and guidance from more experienced co-workers, it is the extent to which the workplace affords quality learning opportunities for participants. These arguments are discussed further in the following section, in relation to communities of practice. Fundamental to the theorising of situated learning in the workplace is the assertion that conditions within a workplace can be purposefully created to increase the probability that work-related informal learning will occur.

2.3 Communities of practice

The term 'communities of practice' was introduced by Lave and Wenger (1991) to describe the learning that takes place as an integral dimension of social practice. Their seminal text, *Situated Learning: Legitimate Peripheral Participation* (1991) offered a new theorisation of learning and was initially aimed at a specialist academic audience, particularly for those within the field of education studies. Their work represented a backlash against the standard paradigm of learning in moving beyond the school-centric approach and described the learning that takes place beyond the classroom and beyond traditional conceptions of teaching. Lave and Wenger's (1991) theorisation on situated learning has been influential in the work of a number of theorists on workplace learning (see, for example Hodkinson and Hodkinson, 2004, 2005, Evans et al, 2006, Elliot, 2007). Communities of practice is widely considered to be one of the most influential concepts to emerge within the social sciences in recent years and is centred on this notion of 'situated learning'. Lave and Wenger's (1991) original work on communities of practice through situated learning proposed the significance of active social participation as central to the learning process, and challenged the notion of formal education as represented by the traditional model of teacher-learner. Lave and Wenger (1991) conceptualised learning as social participation and emphasised the learning that takes place within an institution beyond the formal contexts designed for learning.

According to Lave and Wenger (1991), a community of practice within a workplace is particularly significant for new entrants. Through participating in the social practice within the community, the new entrant learns about the expectations of their role. Working and belonging within this community contributes to the sense of identity of the workers and they therefore engage in learning within the social practices of the workplace and contribute to the learning of others. Wenger (2008) has defined Communities of Practice as,

Communities of Practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly. (p1)

It is interesting to note the rich learning that therefore occurs within the normal social practices of the workplace and contrast this with the emphasis in schools for teachers to learn off-site or on INSET days designed specifically to support teacher learning.

The concept of communities of practice has been heavily critiqued since its inception in 1991 (Fuller et al, 2005; Hodkinson and Hodkinson, 2003, 2004; Hughes et al, 2007). It is important to note that the central purpose of Lave and Wenger's original work was to promote a new situated theorisation of learning. Although the concept of communities of practice is a central component of this theory, Lave and Wenger (1991) acknowledge in their text that it was underdeveloped at the time and they highlighted that there remained areas for further elaboration.

'The concept of community of practice is left largely as an intuitive notion which serves a purpose here but which requires a more rigorous treatment'. (Lave and Wenger, 1991, p43)

Analysis of this intuitive notion of a community of practice, engaged in informal learning activities within the workplace, has demonstrated that it is appropriate for this study to investigate the extent to which the workplace, and a school in

particular, promotes opportunities for informal learning. The fact that it isn't necessarily rigidly defined does leave it open to interpretation.

One of the significant theoretical gaps identified in Lave and Wenger's (1991) work is that their focus is on the learning of newcomers, as the more knowledgeable established worker is viewed as a full participant within the workplace learning community. For the purpose of this study, I acknowledge that the expansiveness of the learning environment is significant in enabling NQTs to have a positive learning experience. However, I would argue that the learning environment within schools is significant for all teachers and there isn't a point where teachers become 'full participants'. Teachers with differing levels of experience can therefore continue to learn from each other. Lave and Wenger (1991) proposed legitimate peripheral participation as '*a descriptor of engagement in social practice that entails learning as an integral constituent*' (p35). They (Lave and Wenger, 1991) emphasised that legitimate peripheral participation was not to be seen as pedagogy or an educational strategy, but more as a way of understanding learning.

My analysis of the literature on communities of practice would lead me to argue against the concept of legitimate peripheral participation, because I consider it to be ineffective in explaining the learning experiences of members who had already become full participants. Hodkinson and Hodkinson's work (2003, 2004) has demonstrated that even when workers are considered to be long-term and established members of the communities of practice, they continued to be active learners. This suggests that legitimate peripheral participation is not the only form by which participants within communities of practice engage in learning. Fuller and Unwin (2004) have also acknowledged in their work that not all novices are the same and not all experts are the same. This indicates that skilled new entrants to the workplace may be in a position to share their learning with established members in the workplace (Daly et al, 2009), and this aspect is not covered sufficiently well in Lave and Wenger's work. Lave and Wenger's (1991) focus remained on the transition from 'newcomer' to 'old-

timer', and the cyclical process by which these communities of practice were reproduced.

'It is possible to delineate the community that is the site of a learning process by analysing the reproduction cycles of the communities' (Lave and Wenger, 1991, p98).

Eraut (2002, in Hughes et al (eds), 2007) discusses the inherent instability and unpredictability of modern workplaces and argues that this instability mitigates against this transition from newcomer to old-timer. As with Engestrom's (1987) model of activity systems, Lave and Wenger (1991) discuss factors within the institution that remain the same. Their work does not necessarily acknowledge that individual workers will hold different approaches to their learning, and that these approaches will influence the extent to which they elect to engage in professional learning opportunities. This analysis indicates that there is an inter-relationship between community and individual. Wenger (2008) has since acknowledged that the original conception of communities of practice failed to sufficiently acknowledge the learning of workers who were not seen as novices.

'Once the concept was articulated, we started to see these communities everywhere, even when no formal apprenticeship system existed. And of course, learning in a community of practice is not limited to novices. The practice of a community is dynamic and involves learning on the part of everyone.' (Wenger, 2008, p4).

Different studies (Fuller et al, 2005; Hodkinson and Hodkinson, 2004; Hughes et al, 2007) have shown that the exclusive focus within communities of practice of learning in the workplace is insufficient in acknowledging individual agency and individual dispositions to learning. Billett (2006) has argued for the significance of individual agency in mediating the learning opportunities on offer in the workplace. He (Billett, 2006) argues that the relationship between the individual and the social world is not simply one of subscribing to what is being socially suggested in the workplace, but that workers make decisions about the

worthiness of engagement in workplace learning experiences. The extent to which individual workers may differ in their engagement in professional learning activities is emerging as significant from the review of literature. It is worthwhile therefore to this study to investigate further individual teachers' dispositions to learning, and how they influence their engagement in workplace learning activities.

Hodkinson and Hodkinson (2004, 2005) have discussed the extent to which for the examples of communities of practice studied in schools, organisational structures and power relations were significant in determining the nature and extent of these communities of practice. Whereas the work of Lave and Wenger (1991) promotes informal learning, at the expense of formal learning or teaching, I would acknowledge the value of both. This embodies a further criticism of Lave and Wenger's (1991) model of communities of practice, in precluding the value of formal learning opportunities. Several researchers (Fuller et al, 2005; Fuller and Unwin, 2003; Hodkinson and Hodkinson, 2003) have discussed the dismissal of formal learning opportunities in Lave and Wenger's (1991) work. In defence of Lave and Wenger (1991), although they did claim that traditional methods of schooling stood in contradiction to their perspective on situated learning; their original text did not denounce the value of formal methods of schooling. They suggested that there was value in rethinking schooling from the perspective of legitimate peripheral participation.

'...learning through legitimate peripheral participation takes place no matter which educational form provides a context for learning, or whether there is any intentional educational form at all. Indeed, this viewpoint makes a fundamental distinction between learning and intentional instruction. Such decoupling does not deny that learning can take place where there is teaching ...' (Lave and Wenger, 1991, p40).

Wenger (2008) has since discussed the value to schools of applying the concept of communities of practice, both in terms of teacher learning and pupil learning, and has cited the value of peer-to-peer professional learning activities.

He argues that change will take longer in schools, as opposed to businesses, because a deeper transformation of conceptions of learning will need to take place. My own experiences in schools would indicate that a teacher could learn both through social participation in informal learning, and through formal teacher learning activities. Opportunities can also be taken to formally create opportunities for collaborative learning. Leaders within schools make decisions that create or remove barriers to formal and informal learning activities and therefore influence the expansiveness of the learning environment. A distinction can also be made between the concept of communities of practice and a community of learners. A school can be described as a community of learners, both in terms of students and teachers. The key difference between the two is an emphasis on the development of 'practice' through learning. As Lave and Wenger (1991) detail in their original text,

This leads us to distinguish between a learning curriculum and a teaching curriculum. A learning curriculum consists of situated opportunities for the improvisational development of new practice. A teaching curriculum . . . the meaning of what is learned is mediated through an instructor's participation, by an external view of what knowing is about. (p97)

Crucial to the learning within a community of practice is the engagement of individuals in that they participate in the activities of the community together. This suggests that teachers within a school could simultaneously be operating within communities of learning and communities of practice. Brown and Gray (1995) have defined workplace communities of practice as small groups of people working towards a common sense of purpose and that learning opportunities occur primarily through informal interaction in the workplace. Analysis of the literature in this section would indicate that a group of teachers could potentially be working within a community of practice, whilst simultaneously learning through formal activities for learning.

2.4 The development of action research as a tool to support teacher professional learning in schools

In the introduction to this thesis, the phrase ‘continuing professional learning’ (CPL) was expressed in terms of the need for teachers to continue to develop and therefore make changes to their professional practice and that CPL within the context of workplace learning involves an evaluation of the extent to which the workplace affords individuals or cohorts of individuals opportunities to learn and develop their practice. Hoban (2002) has argued how this presents a paradox in the teaching profession in that although central within a rapidly changing society, many teachers themselves are reluctant to change their practice. It is worth noting here however underlying implications regarding the purpose and practice of such change. The term Continuing Professional Learning (CPL) was presented in chapter 1 to describe all activities that teachers may be engaged in either formally or informally that promote their learning.

A 2007 study jointly commissioned by the General Teaching Council of England (GTC) and the Association of Teachers and Lecturers (ATL) aimed to summarise different research and evaluation reports that had been commissioned by government agencies to evaluate teachers’ professional learning. The report presented some significant assertions about the design of effective professional learning activities that can be considered to underpin the arguments for teacher engagement in research. However, consideration needs to be given to the perspectives held by these agencies when interpreting these findings, particularly in terms of stakeholder interests and perceptions of teacher professionalism that would support the development of collaborative practice with higher education institutions. Findings concluded that effective teacher learning involved:

1. sustained interactions and interventions (as opposed to individual training sessions)
2. teacher choice and influence over their professional development

3. activities designed to take account of the individual needs and priorities of teachers at different stages of their professional lives and careers
4. collaborative work within a professional learning community.

(GTC, 2007, p5)

All of these aspects can be closely related to a theory that will be presented later in chapter 3 as reflective of an expansive learning environment. There is a clear move away from the traditional acquisition model of teacher learning through individual courses to 'sustained', 'collaborative' learning opportunities that take account of 'individual needs' and allow 'teacher choice'. This could be interpreted to indicate theories of workplace learning in schools had really developed. However, this needs closer examination in terms of the impact on practice. It is also worth questioning the extent that teachers actually really had the opportunity to choose and influence their professional learning experiences, or was it still restricted to choosing from the government priorities on offer? A recent review of teacher professional learning (Cordingley et al, 2015) has demonstrated that teacher learning continues to be insufficiently sustained over time or evidence-based and with a lack of teacher choice. Burns and Haydn's (2002) study looked specifically at teachers' perceptions of teacher research and factors that influenced their engagement. This impact was assessed in terms of teachers engaging in small-scale studies into their own classroom practice within a consortium of schools in Norwich, and is therefore relevant in relation to this study. Although their findings cannot be considered to be representative of experiences across the country, case study evidence indicated that where schools were subjected to external pressures such as imminent external inspections, their commitment to research engagement diminished.

A further study (Sharp et al, 2006) commissioned by the National College of School Leadership (NCSL) and the GTC (General Teaching Council) discussed steps that schools could undertake in order to become a 'research engaged school'. It was a two-year research and development program that involved researchers from the National Foundation for Educational Research (NFER)

working with eight primary schools and seven secondary schools in five English local authorities. The report focused on the need to redefine the role of the researcher towards a focus on the practicality and accessibility of action research. Action research for participants within this context was defined as 'people doing it are interested in social action – what people think and how they behave – and are committed to taking action as a result of their findings' (p10). The involvement of government agencies in advocating teacher research was partly in response to the widespread belief that educational research was inaccessible to teachers and did not impact upon practice in schools. For example, Hargreaves' (1996) influential speech prompted a number of researchers to lament the lack of value for money in educational research and the lack of support for teacher research.

Action research is often the methodology used for school-based teacher inquiry because its design equips teachers with practical methods to develop knowledge from their experience which in turn contributes to the shared knowledge of the profession. This can be closely related to Marsick's (2009, p266) model of informal learning which has developed over time and grew out of scholarship and practice centred in learning from experience, including action research. Action research is presented by a number of stakeholders as a methodology for teacher professional learning, enabling learning in the school environment about the school environment, to develop and change practice (for examples, see Kemmis, 2010, McNiff and Whitehead, 2005, Somekh, 1998, and Lomax, 2002). It is important to note here some international research that demonstrates the impact of government policy in actually inhibiting the promotion of action research as a model to support teacher learning. Asimeng-Boahene's (2004) study on action research for teachers in Ghana for example, detailed key factors that impede the use of action research. Where teachers in this study became dependent on outside interventions for learning, and government policy promoted a conservative approach to teacher learning, such as learning by transmission, this appeared to impede the development and adoption of action research by teachers. In relation to the UK, Billett (2001) has

detailed how the system of inspection and statutory measures did not support the development and adoption of action research by teachers.

To complicate this picture further, however, there is evidence from the research literature (Burns and Haydn, 2002; Pollard, 2009; BERA-RSA, 2014; Pring, 2009) that efforts have been made at a national level to promote the idea of teaching as a research informed profession. Teacher research has been supported publically in recent years through policies and the practices of government agencies such as the TTA (Lyle, 2003; Pollard, 2010; GTCE, 2007; DfE, 2010). However, a number of writers (for examples, see Campbell and Mcnamara, 2009; James and Worrall, 2000; Goodnough, 2003) have argued that this policy shift has been much less about the promotion of teachers' individual learning and much more about the further promotion of the standards agenda. The intention has clearly been to promote teaching as a research based practice at a national level. However, associated formal and informal impositions have ensured that the research itself has been tightly controlled. Writers such as Hardy (2008) and Gewirtz et al (2009) have discussed the extent to which government funding was restricted to specific topics that actually underpinned the standards agenda. In this case, government policy was clearly influencing the types and topics of learning that teachers were undertaking. Research has demonstrated that systems in place ensured teachers were encouraged to choose projects that were linked to government priorities (James and Worrall, 2000) and that they were also discouraged to use investigative approaches because of externally imposed assessment requirements and accountability systems (Clayton et al, 2008; Hardy, 2008; Day and Hadfield, 2004). Goodnough's (2003) reflections on the facilitation of action research in schools mirrored this conception that top-down models of action research that had been externally funded placed unnecessary pressures on models and processes of action research. In relation to concepts of informal learning, some writers (Clarke et al, 2006; Howes et al, 2005) have theorised how frameworks that reduce external prescription and promote teachers' own active influence are positive in supporting teacher learning.

However, teacher research continues to be promoted at a national level. A Schools White Paper, 'The Importance of Teaching' (DFE, 2010), detailed the introduction in 2011 of a national scholarship scheme to support professional learning through teachers undertaking research in their classrooms. This scholarship scheme was reintroduced as round two in June 2012, yet only 600 teachers benefitted from the scheme in round one. Again, the impact of this scheme will be in question as those who apply will be teachers already committed to the value of teacher research as a valid form of professional learning. Another report (UCET, 2011) clearly highlighted the value of engagement in research on the professional learning of teachers, particularly in terms of its associated impact on the recruitment and retention of staff. Between 2012 and 2015, the only policy method by which government policy has promoted teacher engagement in research has been simply through the provision of evidence about what works through the Education Endowment Foundation. In a recently updated policy paper (2015), evidence of the promotion of teacher research is confined to an encouragement to teachers 'to send us their views on research or evidence gaps' (p1). There is insufficient evidence of an increase in teacher engagement in research in the past five years. Giving more autonomy to schools to decide teacher development, particularly in terms of pay, would not necessarily encourage schools to provide either collaborative learning experiences for teachers or promote engagement in research as teacher learning.

2.5 Action research as a model for teacher learning

The model of teacher research that will be examined through this study will be action research. Stenhouse's (1975) model of teacher as researcher is very much about teachers valuing the importance of lifelong learning and he is considered to be the foremost proponent of action research in schools (Hodkinson and Smith, 2004; Cresswell, 2005). An evaluation of educational researchers' perspectives on action research reveals the fact that there are conflicting views as to what constitutes action research. However, there is a clear emphasis in the literature on action research on action, change and

researcher as participant (Elliot, 2004; Campbell and Mcnamara, 2008; Thomas and Pring, 2004). The role of the researcher is particularly significant in action research in that s/he intentionally sets out to change and improve the situation that is being studied. The yardstick for the measurement of the validity of the outcomes of research therefore is valued less in terms of the theories generated and much more in terms of the changes made to practice.

Mills (2003) has stressed the distinction of action research as research undertaken by teachers specifically for themselves, to attain personal learning and support pupil learning, and Saunders (2008) has discussed how significant this teacher research is in enabling researchers to find answers to complex questions within local contexts. Her work describes a far more dramatic process in that the collective knowledge that is created is far more meaningful because it is created in those contexts where it will continue to be used and developed. Analysis of the literature (Lisle, 2006; Fazio and Melville, 2008; Jaipal and Figg, 2011) has demonstrated the value of action research as a model that facilitates the production of local knowledge through active engagement with the world in social contexts, with inherent motivations for teachers because the research is at a local level. A number of stakeholders (for examples, see McNiff, 2005; Altrichter et al, 2008, Elliot, 2007; Koshy, 2005) have adapted these aspects of action research to define a methodology specifically designed for individual teachers to undertake research within their own educational settings. They have investigated the use of cyclical models for learning through action research which, simply put, involve the researcher in planning, reflecting, observing, revising and then repeating the cycle. This model of action research is therefore promoting a process of action and reflection designed to improve practice. It also signifies accessibility in the fact that its methodological heritage supports practitioners who may not have a research background in undertaking research. Action research, as detailed here, is defined as professional learning of teachers, enabling them to learn in the school environment about the school environment to develop and change practice. Altrichter et al (2008), cite the work of Stenhouse in defining this model of action research as

'researching own practice in order to improve it and to come to a better understanding. It is action because they act within the systems they are trying to improve and understand. It is research because it is systematic, critical enquiry made public' (p6).

Although action research may have gained support within educational circles, it remains open to criticism that it does not represent a legitimate form of research and lacks rigour. Some view it as an informal process of research that does not conform to scientific and quasi-scientific conceptions of academic research, conducted by teachers and other educators who are not formal academic researchers. Researchers question the value of teacher research in terms of professional expertise and quality of outputs (for examples, see Cresswell et al, 2007, p551; Hillage et al, 1998; Burns and Haydn, 2002; Gough, 2004). Campbell and Mcnamara (2008) discuss the fundamental aim of action research to improve practice rather than the production of new knowledge, and that this is a significant distinction from other forms of research. The positionality of writers has also been questioned, particularly in terms of the promotion of a narrow model of action research and the potential reinforcement of professional learning opportunities directed through government policy. McNiff (2003) takes this argument further and questions the extent to which the principles of action research, as outlined by Stenhouse (1975) above, have been appropriated through government policy. Her argument is that the educational power of research, as a model for practitioners to engage with and make changes to practice, has in fact been taken away from practitioners and has been *'privatised as a weapon of control in the inexorable drive to eliminate public participation from serious economic, political and social debate'* (p1).

Action research is not primarily about creating new knowledge, but more so about developing practice. Arguably, action research is significant in creating new personal knowledge for a teacher in relation to his/her practice. The consequence of the research is the fact that the teachers would have developed their practical knowledge as well as having a positive impact on the subjects of their research. Action research is also flexible, and this is what makes it difficult

to define. Researchers are able to make decisions about the focus or the level of collaboration in order to make specific choices about the research design to meet the needs of the research question that is to be investigated. This flexibility enables practitioners to participate in research who do not have a research background.

2.6 Previous studies of teacher engagement in action research

This section gives an overview of existing research studies, particularly in terms of the influence of engagement in action research on teacher learning, including the challenges involved. The literature base is extensive and rather than list all the references here, key themes emerging from the literature will be discussed in turn, and referenced according to the research studies that contain evidence to support these. These studies therefore range in scale and context to provide a wide perspective of teacher learning. Teachers' participation in research has been highlighted as a significant change in professional learning experience for teachers who were accustomed to piecemeal professional learning opportunities driven by the technical rationalist development model that had promoted a target driven approach to managing teachers' learning (Edwards, 2005; Macgilchrist et al, 2004; Eaton and Carbone, 2008). The available studies of teachers engaging in action research serve to identify a number of factors that were seen to be decisive in promoting quality teacher learning in schools: opportunities for collaborative working; opportunities to work in different groups; mutual support between staff; a school culture where teacher learning was seen as an embedded feature of classroom practice. These findings will be related in this section to the research findings found in empirical studies that specifically investigated the relationship between action research and teacher professional learning.

All of the research studies referenced in this section have been included because they provide appropriate and relevant insights to support an enhanced understanding of the impact, strengths and possible tensions for teachers undertaking action research in schools. The research studies vary significantly

in terms of their scale and methodology, ranging from individual case studies (Goodnough, 2003) to wide-reaching critiques of the field of teacher research (Campbell and Mcnamara, 2010). In undertaking this review, the positionality of the authors and the rigour and significance of each study has been acknowledged and taken into consideration, as well as the inherent limitations of reviewing literature across such a range. I have included a number of relevant studies from across the world to incorporate wider perspectives and provide additional insights of teacher perceptions within different education systems. The findings of the studies have been synthesised where there is an identified significant correlation across them.

In terms of studies specifically evaluating the relationship between school based action research and professional learning, there is consensus on the potential value of action research in: its accessibility for teachers; improving practice; its potential related impact on pupils, parents and colleagues; the ability to stimulate and sustain teacher reflection and learning; developing teacher autonomy and professionalism; supporting individual, institutional and cultural change; and its capability in supporting teachers' wellbeing and personal development. However, the research evidence also demonstrates the impediments that may need to be overcome in order to facilitate these examples of success, including: the conflicting government initiatives that may be prioritised; the significance of leadership and institutional support in schools; the role of higher education and local authority personnel; the complexity of research processes; individual resistance; and the stress of teachers' workloads and time constraints. All of these factors will be discussed in greater detail in the following section and will be referenced accordingly.

2.6.1 Impact of engagement in action research upon teachers

Research studies have detailed the impact of undertaking action research on the development of teachers' professional skills, and all of those referenced in this section have recorded the perspectives of most teachers to be positive towards the value of action research as a model for their own and others

professional learning. Some of these studies (for examples, see Jaipal and Figg, 2011; Clarke et al, 2006; Papasotiriou and Hannan, 2006) have detailed the value of action research in terms of its accessibility for teachers. However, it is worth noting that this was not the view of all teachers, and the literature demonstrates that, even when this value of accessibility is taken into account, the process and implementation of action research in schools presented a number of complexities for teachers. For example, many teachers felt constrained in their attempts to undertake action research by a lack of time or knowledge.

All the studies detailed the positive impact of participating in action research on teachers' professional knowledge and skills. Key factors involved in the process of action research were highlighted as being particularly significant to the development of these skills, including: opportunities for collaborative working with other professionals within and beyond the school; supportive leadership and school structures; and time and opportunities for reflection. A range of studies, including small scale research projects involving up to ten teachers (Gewirtz et al, 2009; Goodnough, 2003), larger studies (Clayton et al, 2008; Warrican, 2006; Kember, 2002;), and a critique of teacher research (Campbell and Mcnamara, 2010), highlighted the significance of opportunities for collaboration to the action research and learning process. Through collaborative work with colleagues (Clayton et al, 2008) and academic partners (Campbell and Mcnamara, 2010), teachers felt that they were able to reflect upon their practice (Fazio and Melville, 2008), and became more knowledgeable about teaching and learning (Kember, 2002). Aubusson et al's (2007) research concluded that the action research cycle of activities was particularly significant in supporting collaborative learning and the development of a shared experience and understanding. Shared experience, shared gathering of data and shared reflection were seen as crucial to this development (Aubusson et al, 2007).

Models of collaboration varied, but of particular significance in many of these studies was the value placed by teachers on opportunities for professional

dialogue. This was seen as pivotal in empowering teachers to become more open about their practice, an aspect that may be indirectly discouraged through mechanisms such as performance related pay and associated professional learning models. A number of studies (see, for example, Aubusson et al, 2007; Clarke et al, 2006) highlighted the value of peer support, and peer observation and learning in particular, as critical to teacher learning. Both of these studies (in Sydney, Australia, and Liverpool, England respectively) evaluated the impact of action research on teachers, particularly in terms of the development of a community of learners. In both studies, peer observation was seen to be a key feature in the formation of a professional learning community, particularly in terms of its distinction as a model from teachers' previous experiences of observation with leaders and managers, which had predominantly focused on performance and judgements as opposed to learning and supportive development. These research findings correlate with the recent BERA-RSA (2014) report on the role of research in teacher education, which highlights the value to successful professional learning of collaborative enquiry and structured peer support.

Such findings may be seen as related to the community of practice model that was discussed in section 2.3. Areas of practice were viewed as being demystified by teachers, who felt that they had developed both their professional and personal skills. There was a direct impact upon teachers' strategies in the classroom in these studies (Harrington et al, 2006; Warrican, 2006; Aubusson et al, 2007; Bell et al, 2010; James and Worrall, 2000; Sneider and Lemma, 2000). Many of the teachers in these studies overcame long-held beliefs and made changes to their practice. Several studies detailed the impact of action research on the development of teachers' autonomy and professionalism. Lyle's (2003) study of action research in partnership with Swansea University discussed the extent to which action research encouraged reflection and consequent changes to practice that enabled teachers to become more autonomous in their professional judgements. Kennedy (2005) has discussed the significant capacity of action research as a model to develop professional autonomy. This perspective is reflected in a number of similar

studies (Kember, 2002; Gewirtz et al, 2007; Asimeng-Boahene, 2004) where the development of teachers' understanding raised their consciousness and professionalism and enabled them to question more and become more autonomous in their judgements. There is certainly evidence to suggest that engaging in action research has the potential to impact upon the development of teachers' personal skills. Here, the research literature (Elliot et al, 2002, Fazio and Melville, 2008; Goodnough, 2003; Asimeng-Boahene, 2004; Gewirtz et al, 2007) has highlighted teachers' perceptions that engaging in action research enhanced their self-confidence. The most common underlying theme in the research is the assertion that teachers' views changed about different aspects of teaching and learning and the role of the teacher, and they became more confident in their own judgements and in themselves.

There is evidence from the research literature that there were key aspects of the implementation of the action learning process in particular that facilitated teacher motivation. The significant value of collaboration and peer dialogue and observation has already been discussed. Other key factors include: the importance of research that was related to teachers' day-to-day practice (Elliot et al, 2002); a culture of enquiry that respected the voice of teachers (Aubusson et al, 2007); opportunities and time to engage in theory and investigate practice (Harrington et al, 2006; Clarke et al, 2006); teachers' willingness to engage in initiatives that were demonstrated to be effective (Warrican, 2006); the demystifying of research and its processes (Clayton et al, 2008); the specific value of collaboration with education researchers (Papasotirou and Hannan, 2006; Campbell and Mcnamara, 2010; Clarke et al, 2006); and being able to identify own focus (Day and Hadfield, 2004; Clarke et al, 2006). However, with all of these factors, the literature appears to suggest that there is a delicate balance between the extent to which these practices would enable the effective motivation and engagement of all teaching staff. This may appear to indicate the significance of individual dispositions to learning in influencing the extent to which teachers elect to engage in professional learning activities, such as action research.

Although the research detailed indicates relevant factors that impacted positively upon teacher learning and development, it is debatable as to whether these strategies will be successful for all teachers. It is worth noting the fact that the majority of teacher researchers in these studies were volunteers, and although most were very positive, there were still a number who did not engage and were not as positive. Some aspects, such as opportunities for professional dialogue, were generally more widely valued than others. However, there is evidence to suggest that there were a number of teachers who questioned the value of action research as a useful process (for examples, see Peters, 2004; James and Worrall, 2000; Warrican, 2006). Examples included: the reluctance to give up teaching time for research purposes (Warrican, 2006); negative views expressed at a school even after ten years of engagement in research (James and Worrall, 2000); and questioning the value of strategies such as reflective writing (Peters, 2004). The following section expands upon these perspectives, and outlines key challenges for the implementation of action research that are presented across the various research studies.

2.6.2. Challenges for teacher engagement in action research in schools

Many of the factors that were considered to be of particular importance to the quality and depth of teacher learning, as a result of participation in action research projects, also presented significant challenges to teachers. They can therefore be considered as critical to the perceived success of action research in supporting teacher learning. The factor that was considered to be the most significant in many of these studies (Burns and Haydn, 2002; Cordingley, 2004; Elliot et al, 2002; Aubusson et al, 2007; Claytone et al, 2008; Papasotiriou and Hannan, 2006; Sneider and Lemma, 2004; Day and Hadfield, 2004; Peters, 2004; Jaipal and Figg, 2011; Gewirtz et al, 2009; Goodnough, 2003) was that of time and the associated workload constraints. A lack of time was considered as significant in two ways. Firstly, teachers felt that they needed time in their busy, daily working lives to reflect upon their practice and to have opportunities for professional dialogue. In a number of studies (Jaipal and fig, 2011; Aubusson et al, 2007; Clayton et al, 2008; Gewirtz et al, 2009; Papasotiriou and Hannan,

2006) teachers articulated that they felt inhibited by the pressure of sustaining research over their normal working routines. The lack of time was seen as the biggest challenge (Gewirtz et al, 2009) because teachers viewed children as their first priority. In Goodnough's (2003) study, teachers wanted to have time to engage in professional dialogue with partners and to have opportunities to effectively plan and implement strategies. These activities were seen as time consuming if they were to be undertaken effectively and teachers wanted more time for this.

Researchers (Cordingley, 2004; Clayton et al, 2008) have argued that the development of teacher research is more likely to be achieved through structural change such as key statutory measures and the manipulation of the structures in place for the inspection of schools. There is an inherent tension therefore in that government policy may appear to seek to promote teacher research, yet this promotion is hindered by associated structural systems in place that serve to diminish its effective implementation in schools. Elliot et al (2002) make a related assertion in detailing the impact of performative culture in promoting an intolerance of time for teacher learning, and that a workplace culture of teacher research requires time as a crucial ingredient in its development. Again, this highlights the significance of instruments of government policy in influencing teacher learning experiences in schools.

This view of structural, and consequently institutional change, is related to the second significant aspect of time, in that quality change takes time. Evidence from teacher learning literature (Cordingley et al, 2015) suggests that if a school seeks to transform conceptions of teacher learning and make changes to accepted practices, these changes will take time. Learning communities need time to develop and become part of embedded practice. James and Worrall's (2000) research on building a reflective learning community demonstrated that even after ten years of engagement in research, there were still polarised attitudes among staff on the value of action research. Evidence from the research studies detailed in this section reflects the importance of time both to the action research cycle, and to the formation of a successful learning

community within a school. Two key factors can be viewed as particularly significant in supporting the formation of this learning community and the process of action research in schools; teacher motivation and leadership, and these are discussed in detail below.

A number of research studies (Peters, 2004; Aubusson et al, 2007; Clayton et al, 2008; James and Worrall, 2000; Campbell and Mcnamara, 2010; Bell et al, 2010; Papasotiriou and Hannan, 2006) emphasised the importance of motivating and engaging teachers, and giving them the confidence to view themselves as researchers. Teachers demonstrated a motivation for research that focused on classroom actions and aspects of teaching and learning (Galton, 2000). They wanted to have the opportunity to identify their own focus for their research (Day and Hadfield, 2004; Clarke et al, 2006). A key motivating factor is that teachers need to be able to identify and understand the value of research as they are not researchers by trade, they are practitioners. School leaders have been identified in previous studies as critical to the development of this engagement, motivation and nurturing of teachers in action research, and consequently school activities that promote action research. Leadership can make the difference between environments that are constraining for professional learning and those that are supportive (Marsick, 2009). Many of the research studies (Elliot et al, 2002; Fazio and Melville, 2008; Day and Hadfield, 2004; Clayton et al, 2008; Bell et al, 2010, Warrican, 2006; Asimeng-Boahene, 2004; Sneider and Lemma, 2004; Jaipal and Figg, 2011) emphasised the significance of leadership to the perceived success of the action research process in schools and support for teacher professional learning. This therefore needs to be taken into consideration when assessing the impact of action research on teacher learning.

There were key reasons identified in these studies for the importance of leadership in determining the relative perceived success of action research in schools. One was the pivotal role that leaders in schools held in providing a supportive environment to enable teachers to have the opportunities they needed to be successful in completing their research. This support also

extended to providing for the personal development of teachers through motivation and encouragement. If there is an acceptance that action research goes against the traditional models of teacher professional learning in schools, leaders are in a position to make decisions about pursuing an alternative model for teacher learning. The significance of time for teachers as a major impediment or support to the action research process has been discussed. Leaders were viewed by teachers and researchers as crucial in making decisions and promoting an institutional culture that underpinned the development of action research in schools. If opportunities for collaboration, and conditions that support professional dialogue and enable the development of a community of learners are accepted as critical to the success of action research, then the role of leaders in holding the most prominent position to influence the extent of these opportunities and conditions has to be acknowledged. This again indicates that schools will differ in the extent to which they provide effective conditions for professional learning. Warrican's (2006) research study demonstrated that although teachers felt action research was a good idea; most of them were not willing to give up already limited teaching time. They were reluctant to do so until the head teacher supported them and embedded it as part of school policy (Warrican, 2006). These views representing the importance of school leaders supporting action research at an institutional level are echoed in a number of research studies (Fazio and Melville, 2008; Clayton et al, 2008; Bell et al, 2010; Kember, 2002; Sneider and Lemma, 2004; Jaipal and Figg, 2011; Gewirtz et al, 2007).

Of all of the research studies detailed in this chapter, only one shares a distinct characteristic of this study, in that there was whole-school involvement of all teachers in action research. This study by James and Worrall (2000), detailing the building of a reflective community in partnership with a HEI at one school over a period of ten years, is therefore of particular relevance, because it goes beyond the traditional model of analysis focused on volunteers engaged in research and examines the perceptions of all teachers within a single institution. The impact and challenges detailed in James and Worrall's work are therefore of particular relevance to the research that has been undertaken for this study.

The rationale for involving all teachers in the project was the presumption that if it had been introduced as a voluntary programme, it would have allowed reluctant staff to opt out. It may be that it is those very practitioners who choose not to volunteer for such professional learning opportunities that would most benefit from a learning activity that promotes personal reflection upon practice. If action research is to have an impact on learning across the school, it can be argued that all teachers need to be involved. The impact of individual attitudes to action research is reflected in James and Worrall's (2000) work with teachers openly criticising the fact that participation in the project was not voluntary. The outcomes of the project in James and Worrall's study demonstrated that most teachers were very positive about their involvement in research and that for many, research and reflection had become part of their consciousness as teachers. However, even after ten years of involvement, there remained some teachers who were negative about the value of action research in supporting teacher learning.

Although the previous studies detailed have therefore identified the positive impact that engaging in action research can have on changing teachers' classroom practice, as well as the challenges involved, little analytic attention has been paid to the involvement of teachers who may be reluctant to engage in research processes. Hodgkinson and Hodgkinson's 2004 case study of the professional learning of two teachers described the experiences of two 'similar' teachers in the same school who had very different approaches to their learning. One teacher felt that they did not need to engage in collaborative learning because they did not think that they had anything to gain from the experience. I address this issue within this study by investigating the impact of engagement in action research for all teachers within each school. This will enable me to gain a wide range of perspectives and will be particularly relevant when considering the national context of encouraging all teachers to engage in research in the future.

2.7 Conclusion

Within this chapter, I have analysed recent approaches to teacher learning in schools. This will enable me to evaluate the value of teacher engagement in action research as well as wider influences upon teacher learning. Research on situated learning has demonstrated that any conceptions of teacher learning should examine the extent to which the school workplace affords quality learning opportunities for teachers. Literature has been presented to demonstrate how many of the ways in which teachers learn at work are unplanned and unintentional, and fundamental to the theorising of situated learning is that conditions within a school can be purposefully created to promote informal learning. Lave and Wenger's theory of 'communities of practice' has been critiqued and findings from the review of literature indicate that teachers within a school can simultaneously be operating within communities of practice and communities of learners. I have presented evidence to demonstrate the significance to teachers within schools to have access to formal and informal learning activities.

A number of significant messages emerged from the review of previous studies of teacher engagement in action research. Findings highlighted both the potential value to teachers of engagement in action research and the associated challenges involved. Key messages regarding the impact of action research included: the value of collaboration and peer learning, and for teachers to identify their own focus; the need for learning to be related to day-to-day practice; opportunities and time to engage in theory and investigate practice; teachers' willingness to engage in initiatives that were demonstrated to be effective; the value of collaboration with educational researchers. However, a balance needs to be reached to ensure that these practices enable the effective motivation of all teaching staff within a school. Key messages regarding the challenges included: lack of time to engage in research and workload constraints; lack of opportunities for teachers to select their own focus. Analysis of the literature also indicated that school leaders are particularly significant in determining the success of teacher engagement in action research.

The review of literature in this chapter has demonstrated that it is worthwhile to this study for me to consider the levels of influence upon teacher learning in our schools. Arguments have been presented to demonstrate that government policy has potentially influenced the professional learning activities made available to teachers in schools, including their engagement in action research. Additionally, theories from workplace learning literature have demonstrated the significance of the workplace in potentially influencing the situated learning of workers. It is worthwhile therefore to consider the influence of the institutional learning environment. At the level of the individual worker, evidence from the literature has also been presented to suggest that workers will not be influenced equally by the institutional learning environment and will hold different approaches to their learning. The next chapter will therefore examine more closely the influences upon teacher learning at these three levels.

Chapter 3: The quality of teacher professional learning

3.1 Introduction

The findings of the literature review in chapter 2 demonstrated the value to schools of consideration of workplace learning theories in influencing the learning activities made available to teachers in schools. I will demonstrate in this chapter that there is a complex and messy relationship of influences upon teacher learning at three levels: government policy, institutional learning environments and individual dispositions to learning. I am aware that some readers may see my approach as reductionist. I would argue, however, that reducing complexity in this way provides a useful conceptual and analytical device to investigate perceptions of teacher learning.

The relationship even between pairs of influences at each level is complex and evidence from the literature will indicate that: government policy influences teacher learning experiences but that teachers equally have individual agency over their interpretation of these policies in the classroom; government policy influences the teacher learning strategies introduced in schools but that schools and school leaders have individual agency over how these policies are interpreted and mediated into schools; and schools provide institutional learning environments for teachers in schools that can be more or less expansive but that teachers have individual dispositions to learning and that this affects the extent to which they elect to engage in the learning opportunities on offer. The working conceptual framework for this study will be presented at the end of this chapter and will reflect the findings from the literature review. This conceptual framework will inform the implementation and interpretation of the empirical work in this study.

In the following sections, I will investigate this messy interrelationship and consider the influences on teacher learning at each of the three levels.

3.2 The influence of government policy

I acknowledge that 'policy' is a contested term and I am therefore aware of the limitations of using it as an overarching term. For the purpose of this study, I will use the term government 'policy' to represent the collection of policies that have been implemented by the Department for Education that have directly influenced teacher professional learning opportunities in schools in England. As Cairney (2015) has highlighted, policymaking can be broken down into a collection of discrete instruments. An instrument of government policy that will be presented as particularly influential in the context of this study is Ofsted, and the inspection framework that is used to judge the quality of schools. For the purpose of this thesis, I refer to Ofsted as a specific instrument to mediate and regulate wider governmental education policy. Evidence from the literature presented in section 1.6 demonstrated that government policymaking has been influenced by a technical rationalist model for education. This in turn has influenced specific strategies introduced into schools in England for the promotion of teacher professional learning and development. Examples of these strategies include: centrally designed national programmes for teacher learning e.g. Primary National Strategies; performance management and performance related pay; and the Standards model for the assessment of the quality of teaching.

Ball and Youdell (2008) have distinguished policymaking in education in England through their description of internal and external privatisation, and how these policies and associated tools have impacted upon teachers in schools. Within the wider model of technical rationalist policy detailed above, Ball and Youdell (2008) have defined internal privatisation to be the range of public management techniques that were deployed to make schools more closely resemble a business model. Examples included factors such as ongoing evaluation and assessment, high levels of accountability and performance-related pay. For the purpose of this study, government 'policy' will be defined in these terms of 'internal endogenous privatisation' and the range of strategies that were introduced into schools in England. I will be looking specifically at the

impact of strategies and instruments such as Ofsted, directly influenced by government policy, on teacher professional learning in schools. These strategies are presented as instruments within a wider government policy shift, characterised by a top-down approach that used market mechanisms and competition through assessment data, league tables and targets (Cairney, 2015).

A number of writers (Evans et al, 2006, Hodkinson and Hodkinson, 2004 and Eaton and Carbone, 2008) have highlighted the influence of government policy in setting the direction for workplace learning in schools. Hodkinson and Hodkinson (2005) detail two dominant trends in much practice over the last thirty years that have influenced teacher learning in particular: the ideology of markets and competition promoted in the 1980s and 1990s and the growth of accountability. The technical rationalist model as defined as the competitive, transmission model of education (Edwards, 2005) impacted upon teacher learning particularly in terms of the expectations upon schools in managing the learning of their employees. This learning is underpinned by the development of explicit teacher standards that can be considered to promote teacher learning that is at odds with workplace learning theories and enquiry based learning. Writers (Lyle, 2003; Bolam, 2000) have discussed the extent to which CPL was seen to be controlled tightly by government policy through the Teacher Training Agency (TTA) and accountability mechanisms. The deficit in this approach was that the standards model failed to take into account context specific knowledge that informs the practice of teachers (Kennedy, 2005). It might therefore be assumed that if policy systems are designed to demote the value of informal learning in schools, there will be fewer opportunities for teachers to engage in the activities associated with it. However, it is also important to recognise that the standards model was introduced to promote the professionalism of teachers and support teacher development. It cannot alone account for a lack of informal learning within an institution.

Comparisons can be drawn with studies elsewhere, in relation to opportunities for teacher learning. Hardy's (2008) study of the impact of policy on teachers'

professional learning in Australia highlighted the impact of similar policies to those promoted in the UK that served to deprofessionalise teachers and influenced teacher learning by fostering dependency on systemic requirements. Studies in England demonstrated the extent to which teachers felt undermined by the pressures created by the Education Reform Act (1988) and Ofsted in particular (James and Worrall, 2000). There is, in these studies, a clear indication therefore that teacher learning opportunities being promoted in schools, influenced by government policy, were at odds with theories of workplace learning. A clear distinction can also be identified between teacher learning opportunities prior to teachers gaining qualified teacher status and those after. Yandell and Turvey (2007) have demonstrated the extent to which teachers' learning on their Postgraduate Certificate in Education (PGCE) related well to Lave and Wenger's (1991) concept of legitimate peripheral participation. However, the transition to their Induction year does not currently enable the teacher to continue their learning as the standards model, which is applied to all qualified teachers, implies that they are ready to be full participants. Current research (UCET, 2011; BERA-RSA, 2014) reflects the assertion that this continues to impact upon newly qualified teachers in schools today, who receive no entitlement to structured early professional learning that builds upon their experiences in teacher training.

Evidence from the literature indicates that the policies promoted by government policy served to discourage situated learning. An example of this is evident through the standards model which serves to compartmentalise aspects of teacher learning. The standards model is defined as the set of teachers standards (the most recent of which came into effect September 2012) that all teachers are required to meet in terms of professional and personal conduct. For example, planning and behaviour management occupy separate sections within the standards, and critics have argued that this does not relate to the contextualised learning that teachers need to undertake in order to develop (Yandell and Turvey, 2007). However, it could equally be argued that a combination of financial restraints on schools and a current emphasis on school centred teacher professional learning may in fact enhance opportunities for

situated learning. Although schools have recently been given more autonomy for teacher development, this autonomy has been defined through schools having the authority to reward and pay their best teachers more. A significant policy action undertaken by the government since 2010 has been the introduction of a revised teacher appraisal system to help schools in managing teachers' performance which has strengthened links between performance and pay (DfE, 2015).

It appears that the culture of audit led performance neglected the recognition of processes of teacher learning that took time. Ball (2012) has discussed the influence of this 'performativity' culture as the need for a school to focus its efforts on performance rather than experiential learning. Pressures of league tables and the inspection process ensured that money available to schools has been targeted at government priorities (Hodkinson and Hodkinson, 2003), and teacher learning opportunities were restricted to external programmes that required teachers to leave their classrooms (Wilson and Demetriou, 2007). Yandell and Turvey (2007) have argued that the culture of audit-led performance had little tolerance for time, particularly in light of the assertion that professional learning takes time. One example of this is illustrated by the introduction of the performance management scheme to support the professional learning of teachers. The scheme itself is influenced by an ideological emphasis on learning opportunities made available to teachers that are characterised by the concept of learning by acquisition. Hodkinson and Hodkinson (2005) have asserted the proposition that policy approaches were dominated by a focus on this concept of learning by acquisition. Katsorou and Tsafos (2008) go further and detail the impact upon the professionalism of teachers when innovation is centrally designed by government agencies and changes are imposed upon teachers. They argue that the consequence is that teachers become facilitators, unable to make decisions of their own. Brighouse and Newsam (2012) have even compared recent education history with the systems in place in school in the latter part of the 19th century, with schools being treated as a mechanism to deliver a tightly controlled curriculum, and teacher delivery characterised by just the conveying of information. Recent

evidence (BERA-RSA, 2014) demonstrates that barriers to learning continue to persist, particularly due to the pressures on schools to meet the demands of accountability.

A contrast can therefore be identified between teacher learning approaches promoted through government policy that focus on learning by acquisition, in comparison to worker learning approaches, dominant in workplace learning literature, that focus on learning through participation. This highlights a significant factor in that much of the teacher learning opportunities that were taking place were not contextual. Whereas workplace learning theories highlight the importance of context and learning from experience, the taught knowledge prevalent in knowledge by acquisition does not. This is particularly evident when considering the value of a standards model that emphasises a list of competences that can be acquired but are not context-specific. In fact, in comparing the relative effectiveness of the models of teacher learning promoted in schools at the time, it is worth considering the findings of the report into effective teacher learning from an EPPI Centre review (2003, in Clarke et al, 2006) which highlighted the significance of collaboration, professional dialogue, and the opportunity for teachers to select their own focus.

A number of stakeholders (for examples, see Hoyle and John, 1995; Hodkinson and Hodkinson, 2004; 2005; Pedder et al, 2005; Elliot, 2007) have described the extent to which research findings on learning saw teaching transform from this process based on knowledge transmission to a process based on knowledge construction. As teachers grapple with these changing conceptions of learning, they may begin to evaluate the quality of their own learning experiences, particularly in terms of the extent to which they provide effective opportunities for knowledge construction. Knowledge construction in this context implies the opportunity for teachers to work together and co-construct knowledge. The professional learning opportunities that they were predominantly presented with, such as the Literacy and Numeracy strategies, involved telling them what to teach. These activities, combined with the underpinning mechanisms designed to determine and assess the quality of

teacher learning, such as the teachers' standards, inspection regime, and performance management accountability systems, encouraged teacher learning by acquisition. Pedder et al (2005) cite research that demonstrates the extent to which attempts to improve workplace learning through predominantly target-driven approaches are often counter-productive.

An emphasis on performance management for teachers, and in particular target-driven approaches, strengthened the dominance of teacher learning that focused on government imposed priorities. As an individual teacher's performance management was more often linked to school priorities (Friedman and Phillips, 2004), the interrelationship between government priorities and teacher learning was strengthened. This indicates that teacher learning for its' own sake, or activities to meet their individual learning needs, were marginalised. Evans et al (2006) have discussed the fact that teachers were reluctant to leave their classrooms because they felt that their priority was on developing pupils through improved performance in tests in the classroom, as that was how they would ultimately be judged. This may then have impacted upon the informal learning opportunities available for teachers to learn in schools, particularly in terms of collaboration with colleagues. In addition, professional learning opportunities may have been rejected by teachers because they did not wish to spend time away from their classes (Bauer and Gruber, 2007; Elliot et al, 2002). Many teacher learning opportunities were therefore dominated by the training courses delivered to schools and local authorities to support the implementation of the national curriculum and associated strategies.

There is also evidence from the literature that during this period in the late 1990s and early 2000s, there were in fact more professional learning opportunities available to teachers, with schools writing policies specifically for the professional learning of their staff. However, others (Earley and Bubb, 2004; 2007) have argued that these policies were focused on supporting the interests of the school, and not necessarily the individual. These interests held by the school were also directly influenced by the demands of national policy.

Arguments have been presented (see, for example Troman, 2008; BERA-RSA, 2014; Webb et al, 2004; Vulliamy et al, 1997; Conner, 1998; Brown and Mcatangay, 2002) to demonstrate how the learning of teachers was increasingly being regarded by the UK government as essential if national targets of creating more effective schools and raising standards of pupil achievement were to be achieved. Although there was therefore a greater emphasis on teacher learning in schools, it was tightly controlled. The teacher learning activities implemented by schools were heavily influenced by the strategies of governments to raise standards. For example, McMahon's (1999) report on teacher learning highlighted the fact that the five INSET days, which were introduced to raise the profile of teacher professional learning in schools, were more often used for administrative purposes and based on the needs of the school development plan and not individual teachers. This increased emphasis on teacher learning, promoted by national government policy, did not therefore mean that schools necessarily provided more expansive learning environments, and recent research evidence (Cordingley et al, 2015) indicates that this is still reflected in schools today.

However, it is also worth noting that these highly prescribed CPL opportunities were often very well received by teachers and schools, and lauded in terms of their impact upon teachers' professional learning. The findings of Webb et al's (2004, p65) study revealed that teachers perceived that the Numeracy and Literacy strategies had 'contributed to their professionalism by making them more effective teachers'. Conner's (1998) study of teachers' participation in a course to support geography teaching in primary schools demonstrated that participants were particularly positive about the impact upon their professional learning and practice. It is worth questioning at this point the impact of government policy on the learning opportunities made available to teachers, and acknowledging that the relationship is a complex one. For example, research (Czerniawski, 2013) has demonstrated that the development of an audit culture and the practice of performativity and competition between schools have actually provided a wider and richer range of professional learning activities. However, as Earley and Bubb (2004) have argued, these activities

are more often designed to meet the needs of the institution rather than the individual. Although the policies discussed may appear to have potentially restricted opportunities for individual teacher learning, there is also evidence to suggest that the teacher learning activities made available to teachers were certainly not universally negative.

Examples have been illustrated in this section that highlight the negative impact of the narrowly designed standards agenda and the accountability measures that accompanied it, particularly in terms of restricting teachers' participation in their individual, specific learning development. However, as highlighted in the examples above, there is research evidence (see also Howes et al, 2005) that found that the standards agenda directed teachers to focus on the individual development of all the learners in their care. Essentially, as Howes et al (2005) have described, national policy drew attention on the need to have high expectations for all. Teacher learning was therefore viewed to be significant only in terms of the direct impact of professional learning activities upon pupil learning outcomes. Opportunities were also made available for teachers to undertake research through the government funded Best Practice Research Scholarships programme (Furlong and Salisbury, 2005). However, it is worth noting, in reference to individual teacher choice, that each applicant was required to select a topic from a centrally approved list. Examples presented in this section have demonstrated evidence that teachers benefitted from nationally prescribed models for teachers professional learning. There is contradictory evidence about how teachers perceived such learning opportunities.

It is certainly worthwhile to examine the perspective that these strategies introduced by the government did have a positive impact on teachers' professional learning, particularly in terms of developing their knowledge, understanding and practice. Research evidence (Hodkinson and Hodkinson, 2004, 2005; Evans et al, 2007; Conner, 1998) has demonstrated that the impact of these initiatives on teachers' professional learning differed from school to school and from individual to individual. Evans et al (2007) have highlighted the

positive impact that such strategies had on groups of teachers. It is also worth highlighting the positive impact of such enforced professional learning activities on teachers who had previously been reluctant to engage in professional learning independently. Webb et al (2004) have discussed how many teachers in England were critical of the practice of colleagues prior to 1988 and that this was directly related to the lack of available guidance. In fact, having specified curriculum content and learning objectives had led to improvements in practice for these teachers (Webb et al, 2004, p91).

3.3 The influence of institutional learning environments

For the purpose of this study, I have used the term ‘institutional learning environments’ to represent a range of specific activities that can be promoted within schools to support teacher professional learning. These include formal activities that teachers have opportunities to engage in that support professional learning, for example collaborative planning. Evidence will also be presented to show that activities within an institution, such as collaborative planning, can be designed to additionally incorporate opportunities and encouragement for informal learning. These activities are investigated within the context of literature that discusses the concept of expansive and restrictive learning environments. Analysis of the literature will demonstrate that institutional learning environments within a school can be more or less expansive in supporting teacher learning.

Evidence from research (for examples, see Eraut, 2004; Kemmis, 2010; Darleen and Pedder, 2011; Howes et al, 2005) suggests that schools did take opportunities to make decisions for themselves in terms of their responses to the demands made upon them by government policy, and that they were not inflexible to external impositions. Hardy’s (2008) study of the impact of policy upon practice in schools in the Australian state of Queensland demonstrated the effects of policy pressures on schools in the restriction of funds and the direction of teacher learning activities towards one-off training sessions that reflected the need to rapidly transmit information. Although this study does not

represent practice in England, it reflects similar policies and consequent pressures that were felt in schools. However, the manner in which these policies were introduced into schools and internal decision making influenced the impact of these policies on teacher learning. Researchers, including Darleen and Pedder (2011); Hardy (2008); and Hodkinson and Hodkinson (2005), have detailed how managerial emphases determined the response to the agendas set by government policy and that this therefore determined the direction of teacher learning. The significance of leadership, in mediating the impact of government policy on teacher learning, will be demonstrated to be a key factor in determining institutional learning environments and workplace learning in this section. Pressures exerted by government policy impositions were clearly evident, but they could be restricted. Hodkinson and Hodkinson (2005; 2003) have demonstrated that the manner in which these policy changes were mediated and introduced in schools directly influenced the negative or positive impact they subsequently had on teacher learning.

It appears evident from the research literature that institutional learning environments have an influence on workers' access to formal and informal learning opportunities. Researchers (Evans et al, 2006; Billett, 2006; and Howes et al, 2005) have discussed the individuality of school learning environments and the extent to which the hidden workplace curriculum impacts upon the richness of learning that occurs outside more formal conceptions of learning opportunities. In their review of the impact of informal learning at work, Fuller et al (2003) have detailed how the workplace offers opportunities for workers to learn alongside colleagues and through the undertaking of their roles. This relates to Lave and Wenger's (1991) emphasis on situated learning. Fuller et al's (2005) study of workplace learning in secondary schools illustrated the impact of this situated learning that is often subconsciously undertaken through normal working hours.

One factor discussed in detail involved the significance of the quality of working relationships within individual subject departments. Where there was a high degree of collaboration and mutual support, this was seen to be an influential

factor in promoting learning opportunities for those workers, through such informal activities as advice or occasional instruction. Learning was seen to be an integral and often unconscious part of their lives within their working communities (Fuller et al, 2005, p60). Different studies (Eraut, 2004; Marsick, 2009) have signalled the significance of the quality of relationships in particular in playing a key role in workplace learning. Eraut's (2004) research found that in many contexts encountered, the informal support of a colleague was often more supportive to teacher learning and development than the support of formally designated helpers. For many teachers, some of their most effective professional learning opportunities had occurred by accident (Daly et al, 2009). Analysis of the literature suggests that relationships in the workplace, determined by individual school learning environments, are necessary to promote the development of teacher confidence. This could be because confidence comes from taking risks, meeting challenges, and feeling valued, and these experiences will only develop if the environment encourages and values mutual support and collaboration.

3.3.1 The expansiveness of the learning environment

If the argument of the value of informal workplace learning is related to schools, it could be suggested that deep teacher learning can take place if workplace activities are designed to additionally incorporate opportunities for learning. An example would be the extent to which the school provides an environment that supports collaborative working through practices such as year group planning or peer learning through lesson observations. Consequently, some school learning environments may be viewed as more supportive and conducive to teacher learning than others. Teacher learning requires effective conditions for professional dialogue (Li, 2008; BERA-RSA, 2014) and these learning conditions are dependent on institutional learning environments that promote informal learning opportunities.

Research evidence undertaken by Darleen and Pedder (2011) on professional learning in England highlighted the finding that higher achieving schools had a

greater capacity to support teacher professional learning because of a greater emphasis on the development of conditions that promoted social capital; such as trust, opportunities for collaboration, and networking. Returning to Hodkinson and Hodkinson's (2004) study of workers in different subject departments within the same secondary school, evaluation of the data emphasised the extent to which collaboration within the departments impacted upon the learning of the teachers. Where these departments were assessed as being more closely collaborative, greater informal learning opportunities were observed as part of the daily lives of the teachers involved (Hodkinson and Hodkinson, 2004). These findings are mirrored in Jurasaitė-Harbison's (2009) study of teachers' workplace learning in the United States and Lithuania. Her research also highlighted the importance of collaborative learning activities in facilitating teacher professional learning.

It is evident therefore that the propensity of the working environment to provide informal learning opportunities impacts upon the quality of learning for workers. If formal opportunities for learning are also taken into consideration, to what extent can a school promote a positive learning environment for its staff? The concept of expansive and restrictive learning environments, was initially developed by Fuller and Unwin (2004, 2006, Fuller et al, 2005) who observed considerable differences in the quality of learning for apprentices in different firms in the steel industry. These differences were considered to be as a result of the variation in quality of the learning environments. Hodkinson and Hodkinson (2005, p123) have described the expansive learning environment to be one that presents wide-ranging and diverse opportunities to learn, in a culture that values and supports learning. Researchers (Evans and Kersh, 2004; Wilson and Demetriou, 2007) have also discussed the significance of recognising the value of tacit skills and in particular the strong link between tacit skills, learning outcomes and the workplace learning environment.

If aspects of the expansive learning environment are therefore related to research on teacher professional learning, key factors to promote teacher learning may be identified. These include the extent to which the environment:

provides opportunities for collaborative working (Cordingley, 2004; Daly et al, 2009); is mutually supportive (Elliot, 2007); supports teacher learning as an embedded feature of classroom practice (Pedder et al, 2005); supports opportunities to learn out of school (Evans et al, 2006); and offers opportunities to work in different groups (Macgilchrist et al, 2004). Hodkinson and Hodkinson (2005) describe a restrictive learning environment characterised by teachers working in isolation with no explicit focus on teacher learning and few expansive learning opportunities provided for teachers either in or out of school.

Research findings (Aubusson et al, 2007; Jaipal and Figg, 2011) have demonstrated that creating the organisational environment alone did not necessarily lead to deeper learning experiences for teachers. Both of these studies evaluated the impact of action research and learning approaches on teacher engagement and professional learning. Aubusson et al's (2007) large-scale study of teacher learning in schools in Australia found that it was not simply a question of giving time and space for teachers to meet. Ongoing guidance and support, in the form of facilitating discussions and evaluations of progress, were critical in promoting deep reflection on practice. These findings are mirrored in Jaipal and Figg's (2011) work with eight teams of elementary teachers in Canada, where simply giving teachers time to talk was not enough to promote changes to teacher learning. It was found that changes to teacher learning only took place when collaborative experiences provided critical reflection. The findings from these studies appear to suggest that the activities designed within a school to promote formal and informal learning need to take into consideration opportunities for professional dialogue that facilitate reflection upon practice.

3.3.2 The significance of leadership in schools

In addition to the expansive learning environment described above, the research literature suggests several key factors at the institutional level that have a positive impact in supporting teacher learning. The social community has been identified as being particularly significant in influencing workplace

learning. This community is made up of individuals and it is the extent to which they are individually positive, supportive and collaborative (Furlong and Salisbury, 2005) that maintains the collective expansive learning environment. Even if an individual teacher is not supportive of professional learning opportunities, leaders in the school can be pivotal in creating a group climate for learning (Eraut, 2004; BERA-RSA, 2014). It has been suggested (Pedder et al, 2005) that the expansive learning environment can act as a mechanism to even out individual differences and foster greater collaborative learning opportunities. Leadership within the organisation is of critical importance in modelling and promoting collaborative learning. The commitment of the head teacher and senior leadership team was considered to be crucial to teacher engagement in learning opportunities (Evans et al, 2006; Daly et al, 2009; Burns and Haydn, 2002). Leadership can make the difference between environments that are constraining for professional learning and those that are supportive (Marsick, 2009).

The leadership within the school therefore appear to be in a position to make decisions that can have a positive or negative impact upon the learning environment, both in terms of conscious decisions to provide formal learning opportunities and unconscious decisions that promote a positive learning environment. Schools are able to make decisions on the allocation of resources to support teacher professional learning both within school and outside school and the practical activities that are provided to support teacher learning. Examples of these activities include opportunities for: observing others; mentoring and coaching; collaborative working; and opportunities to take risks and make mistakes (Marsick, 2009; Darleen and Pedder, 2011; Evans et al, 2006). These examples appear to suggest that teachers were constrained or supported by the resources that were provided for them and that leaders were crucial in making decisions about the allocation of these resources and therefore the determination of an expansive school learning environment. Leaders will have the ability to influence the activities in the workplace to the extent to which learning becomes an integral part of everyday practices as well as the extent to which they provide positive or negative support for their

teachers' learning (Eraut, 2004; Hodkinson and Hodkinson, 2005). Formal and informal processes that foster a climate in which teachers are encouraged to learn (Pedder et al, 2005) and learning is promoted at all levels of the organisation (Macgilchrist et al, 2004) will be coordinated by leadership within the school. As Eraut (2004) has argued, the informal role of managers in the workplace is more important in developing this social climate than their formal responsibilities, and that people's learning at work is significantly influenced by the interpersonal skills and learning orientation of their manager. This aspect of learning-focused leadership appears to be highly significant.

However, there is also evidence to suggest that the influence of leaders in supporting teacher learning can be limited and constrained. The demands of government policy have been discussed in the previous section and it is clear from recent history that they have significantly impacted on decision-making in schools. Schools have, during this period, been under considerable pressure from School Improvement Partners (now known as Associate Advisors) appointed by the Local Authority, as well as expectations of Ofsted inspections. These pressures have influenced the teacher learning activities for staff in schools because school leaders are expected to demonstrate effective practice, and that this effective practice is defined through national policy measures. Evidence has also been presented to demonstrate that the vast majority of teacher learning courses targeted at schools are designed to effectively prepare schools to meet the expectations of Ofsted, and are marketed accordingly.

Evidence from a number of studies (Hardy, 2008; Peters, 2004; Wilson and Demetriou, 2007) has provided examples of head teachers who have been committed to more expansive learning practices in order to support authentic long-term learning experiences. However, in these studies, the argument is that conflicting policy practices and school learning environments served to ensure that there remained a focus on learning related to imposed strategies underpinned by a pedagogy of learning by acquisition. Leadership is crucial in leading decision-making within schools on teacher learning and leaders are in a position to set, prioritise and determine the expansiveness of the learning

environment. Analysis of the literature indicates that it is up to leaders to make bold decisions and embed further opportunities for formal and informal learning, to promote and underpin a positive learning environment.

3.4 The influence of individual dispositions to learning

I have used the term 'individual dispositions' to learning to discuss the assertion that teachers have individual agency in the extent to which they choose to elect to engage in the learning opportunities on offer in the workplace. Evidence from the literature indicates that their engagement reflects individual attitudes that are influenced by their dispositions to learning. Evidence will be presented to demonstrate that teachers in the same institution, and therefore to a large extent equally influenced by government policy and institutional learning environments, can hold very different perspectives on the quality of their learning experiences.

A number of writers (for examples, see Burns and Haydn, 2002, Pedder et al, 2005, Hodkinson and Hodkinson, 2004, 2005, Fuller et al, 2005, Evans et al, 2006) have referred to the influence of past experiences and individuals' dispositions to learning in directing teachers' engagement in the learning opportunities offered in the workplace. Hodkinson and Hodkinson (2004) have shown that these dispositions are partly constructed through individuals' experiences in the workplace, as well as their own life experiences. Billett (2001) has emphasised the importance of individual agency in shaping engagement in work practices and what is learnt. In this section, evidence will be presented to highlight the significance of individual life biographies and personal dispositions to learning in impacting upon teachers perceptions of professional learning

Taking past experiences as an example, Fuller et al (2006, p66) have discussed the fact that people come to a workplace already formed with beliefs, understandings, skills and dispositions to life, to work, to learning. These past experiences contribute to the development of each person's individual life

history. Adults will have previously acquired skills from formal education as well as their work and life experiences. This aspect of prior work experiences in impacting upon individuals' learning skills has been discussed by several writers (see, for example Evans and Kersh, 2004; Darleen and Pedder, 2011). Evans and Kersh (2004) found that beginners start by valuing formal qualifications on learning and only begin to value informal learning outcomes as they progress or move into more expansive learning environments. These past experiences can also impact upon teachers' dispositions and beliefs, and these will consequently impact upon how much they learn. Goodnough (2003) has discussed the extent to which this combination of beliefs and values, which have been shaped by their individual past experiences, are therefore unique. In these studies, these collective understandings and perspectives are seen as having an impact on how individual teachers value individual teacher learning activities. Teachers were seen to consider the extent to which the learning opportunities made available related to their learning styles, their philosophies on teaching and learning, their beliefs and ideological perspectives. In relating the individual to the institutional environment and activities that are promoting worker learning, Evans et al (2006) have attempted to clarify the relationship between individuals and the opportunities and barriers to learning they may encounter at work. A distinction is clarified between the extent to which the organisational and pedagogical context affords access to diverse forms of participation and the extent to which individuals elect to engage in these activities through the exercise of individual agency (Evans et al, 2006, p30).

There is therefore a strong consensus across several research studies that individual dispositions to learning and life biographies appear to impact upon each individual's current and future workplace learning. The literature appears to indicate that personal dispositions to learning may influence the extent to which teachers view their workplace learning environment to be more or less restrictive or expansive. The extent to which teachers are prepared to take risks with their learning can also be investigated. Peters (2004) has discussed how this aspect of learning and change to practice can be an uncomfortable process for professionals because they may find it difficult to adapt to new practices.

Goleman (1996) promoted the concept of emotional intelligence and related this to adult learning in terms of the extent to which individuals can manage uncomfortable emotions. Evidence across a range of research studies (Hardy, 2008; Kember, 2002; Lyle, 2003) have found that these individual dispositions are significant in determining the extent to which teachers elect to positively engage in teacher learning activities in schools. For example, Hardy's (2008) study into teachers' professional learning found that for many teachers, networking was seen as an unnecessary imposition, and that this was a consequence of individual dispositions towards the value of collaboration.

There may also be additional factors within the individual's life biography that influence his/her decision making. For example, Evans et al (2006) have presented evidence to demonstrate that external factors such as the individual's situation at home, may affect the extent to which they take opportunities for professional learning in the workplace. This research (Evans et al, 2006) clearly implies that individual dispositions to learning need to be taken into consideration when planning professional learning in the workplace. These studies suggest that, as important as it is to recognise the structure of the workplace learning environment in shaping the design and availability of workplace learning opportunities, consideration must also be taken of the fact that individuals do have agency and can therefore decide the extent to which they choose to engage in and begin to derive benefit from the activities on offer. Individuals participating in the same learning environment may experience that environment as more or less expansive or restrictive depending on personal factors such as their socioeconomic and educational background, dispositions to work and learning, and aspirations (Evans et al, 2006, p39).

In discussing these individual dispositions that each worker brings to the workplace, it is also worth considering the impact of professionals' tacit skills on their learning. Thomas (in Thomas and Pring, 2004) compares the tacit skills that teachers gain from their day to day experiences to the concept of intuition and craft knowledge. In this context, these tacit skills are related to the knowledge that is built of all the information and evidence that is consciously

and subconsciously accumulated by the practitioner both deliberately and fortuitously about their workplace learning environment. This craft knowledge is considered as having an impact on the extent to which workers engage in professional learning. It also influences their self-perception as learners. Eraut (2004) has highlighted how teachers may find it difficult to make changes to practice and routines because they automatically imply a negative view of previous practice. Teacher commitment to evaluating their practices and professional learning cannot therefore be taken for granted. Snieder and Lemma's (2004) research involved asking teachers what positive learning qualities they wanted to see in their colleagues to support collaborative learning. The answers given were heavily influenced by the value afforded to positive individual dispositions in particular, such as risk-taking and collaboration. This appears to indicate that dispositions to learning need to be taken into consideration when planning activities for teacher learning in schools.

Hodkinson and Hodkinson's 2004 case study of the professional learning of two teachers described the experiences of two 'similar' teachers in the same school (therefore affected by the same pressures of government policy and influences of institutional learning environments) who had very different approaches to their learning. Their personal experiences in schools and craft knowledge had led them to view the same learning opportunities in different ways. Practitioners can make their learning environment more restrictive or expansive dependent upon the personal choices they make, in terms of their attitudes towards the learning activities on offer. From a simple perspective, one can be positive and proactive about a learning opportunity, or negative, and this will clearly influence the level of learning involved. Evans et al (2006, p98) refer to a study of Australian colleges where experienced workers resented being labelled 'learners' because that somehow implied that they were not competent in their jobs. A practitioner with a more positive disposition to learning may interpret this same situation as a positive affirmation of his/her expectations as a lifelong learner!

Both government policy and school learning environments represent strong influences on teachers' past and current experiences, and therefore impact upon their individual dispositions to learning. However, the research evidence presented in this section suggests that individual dispositions to learning are shaped and developed through a teacher's career by their ongoing life and work experiences. This indicates that professionals with positive dispositions to learning may develop more negative dispositions, and vice versa. It is worthwhile therefore to recognise that these individual dispositions are not fixed and can change. A number of research studies (Gewirtz et al, 2009; Kemmis, 2010; Hodgkinson and Hodgkinson, 2003) have demonstrated this. One clear theme developing from the research evidence presented in this section and related to the value of informal learning, is that learning, and consequently an individual's learning experiences through their life, can be haphazard and unplanned. Teachers' dispositions to learning and to their own career shift and develop as part of their work and life experiences. Gewirtz et al (2009) have asserted that undertaking research based teacher professional learning can change individual dispositions because it enables the person to feel more confident and positive about his/her learning. Even then, there has to be an equal acceptance of the significance of individual agency.

Evidence discussed in this section has indicated that intrinsic motivation and positive dispositions to learning cannot be taken for granted. Research evidence has demonstrated that many teachers come to schools already possessing beliefs, understandings, skills and dispositions to life and learning. Dispositions will also have been formed as a consequence of their prior life experiences as well as their experiences in schools and other workplaces.

3.5 Conceptual Framework

Following the review of literature for this study, I have reduced the effects on teacher learning in schools to three key levels: government policy; institutional learning environments, and individual dispositions to learning. Analysis of the literature appears to suggest that these three related levels of influence impact

upon the perceived quality of teacher professional learning experiences. It is the central argument of the conceptual framework that a combination of these interrelated factors, at a macro, meso and micro level, frame teachers' engagement in the professional learning activities made available to them in schools.

The three key levels that influence teacher learning are presented in the diagram below. At the centre of figure 3.1 is the perceived quality of teacher professional learning experiences in schools. A more detailed conceptualisation of the framework is provided in figure 3.2. Analysis of literature in this study has highlighted that these key factors influence teacher professional learning in primary schools. They influence both the range of professional learning opportunities made available to teachers in schools, and the way in which these activities are mediated at an institutional level and interpreted at an individual level. The double arrows in figure 3.1 represent the interrelationship between these three factors.

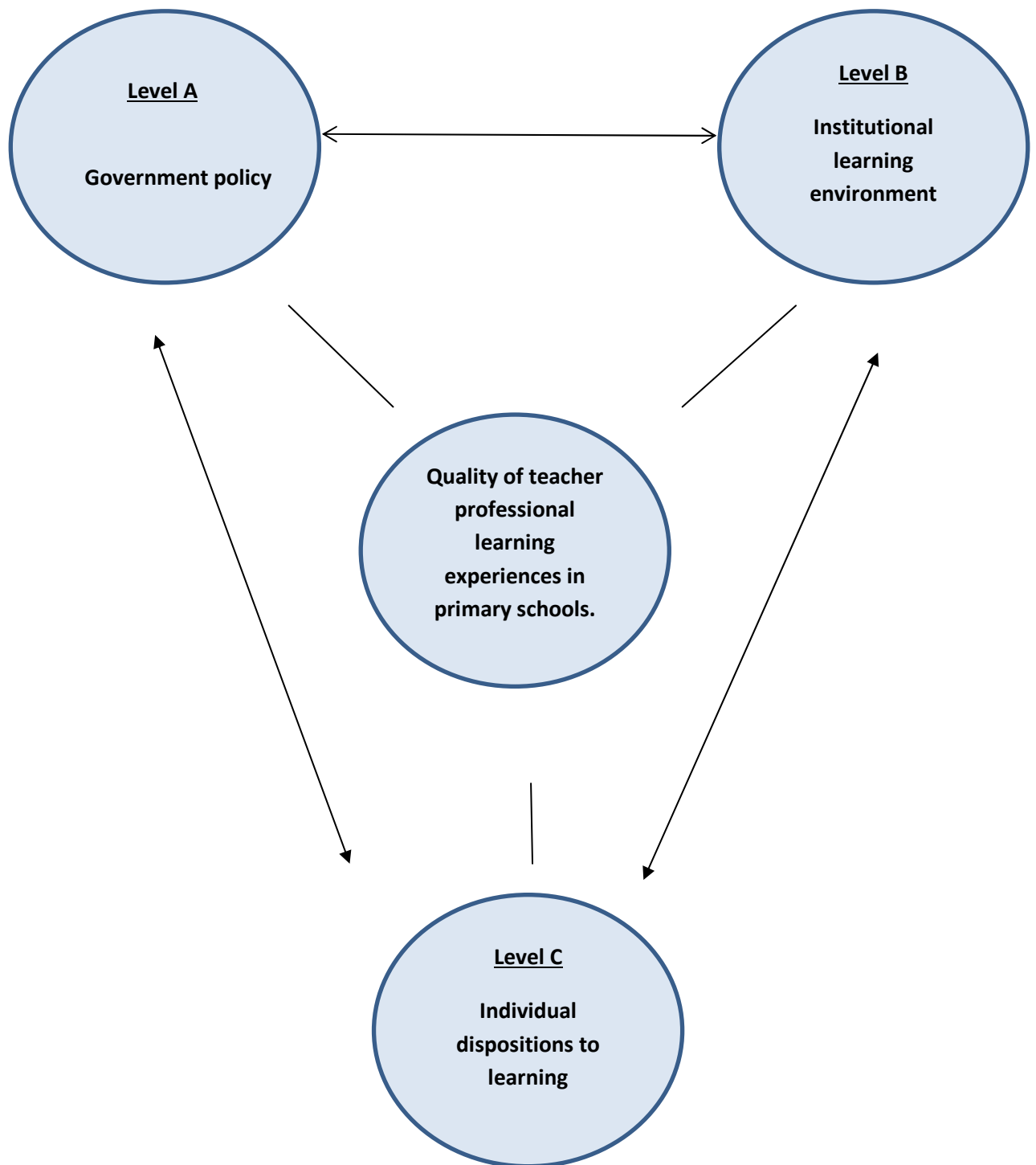


Figure 3.1 The levels that influence the quality of teacher professional learning experiences in primary schools

Each factor in its own right represents a complex patchwork of influences. Level A encompasses the influence of government policy upon teacher learning activities and experiences in schools. This embodies the ideology of markets and competition and technically rational assumptions of planned learning in influencing decision-making at a national level. Review of the literature has indicated that government policy has influenced teacher learning in schools through centrally designed national strategies and indirectly influenced a narrow promotion of teacher learning strategies in schools through a national framework for school inspection (Ofsted) and the standards model for defining teacher professionalism.

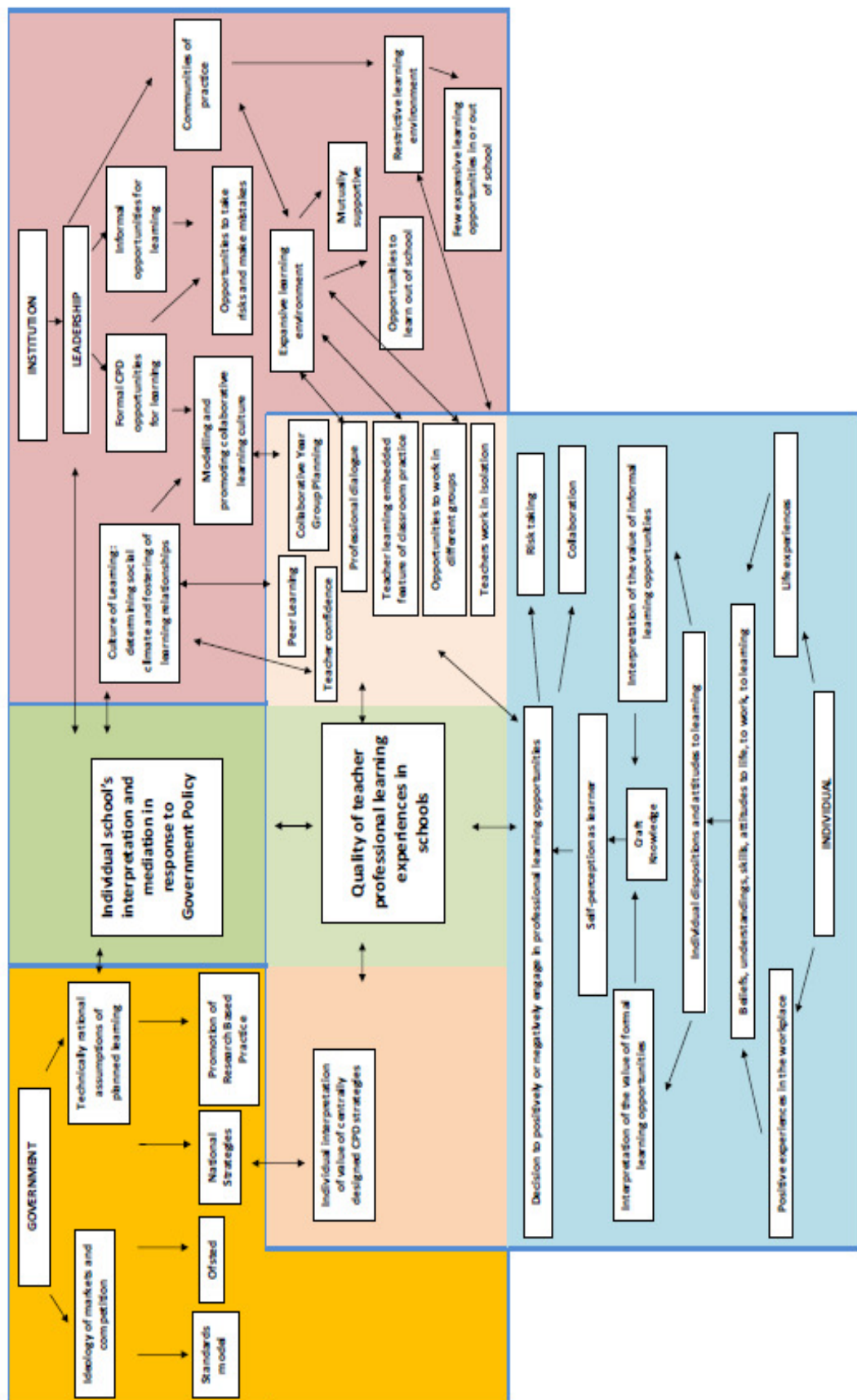
Level B considers the influence of the Institution and the extent to which it provides an expansive or restrictive learning environment for teacher learning. This level includes both formal and informal learning opportunities and acknowledges that both factors are significant in influencing teacher learning.

Level C considers a teacher's individual dispositions to learning and how this influences the extent of their engagement in professional learning activities in schools. This level encompasses a range of variables that influence teachers' individual dispositions to learning, including their life histories and work experiences. Analysis of the literature has shown that these individual dispositions to learning are not fixed and that teachers can become more or less positive about their professional learning experiences.

In order to research teacher professional learning, I developed a framework which enabled me to consider the implications for teacher professional learning in schools, particularly in terms of the interrelated levels of influence which the literature reviewed shows serve to promote or inhibit the quality of teacher learning. For each of these three key levels, I have included all the specific aspects within each level that I consider to be influential in impacting upon the quality of teacher learning experiences in primary schools. Each of these aspects were identified and highlighted in the literature review in chapters 2 and 3. This conceptual framework is represented below in Figure 3.2, and will be

used to examine the impact upon teacher professional learning of engagement in action research, as well as their wider experiences of teacher learning in primary schools.

Fig 3.2 Conceptual Framework of factors that impact upon teacher learning in primary schools



This conceptual framework is designed for my thesis, specifically in terms of providing a starting point for analysing the factors that influence teacher learning in schools.

In figure 3.2, government policy is seen to be influenced by the ideology of markets and competition and technically rational assumptions of planned learning. These ideologies are manifested through government policies such as the standards model and the implementation of national strategies. In addition, the promotion of teacher research is acknowledged, as well as the significant influence of Ofsted in determining professional learning opportunities. The review of literature indicated that schools are constrained by the pressures of the performativity agenda and that this potentially limits the expansiveness of the learning environment in schools. However, the conceptual framework also acknowledges that individual teachers can interpret the relative value of the learning opportunities determined by government policies, and individual schools mediate and interpret the implementation of policies.

Although this framework acknowledges the significance of social and situated learning in influencing teacher learning, it also acknowledges that individual dispositions will influence the learning process. Individual dispositions to learning are also seen to be influential in teachers' decisions to positively or negatively engage in the professional learning opportunities on offer. As depicted in Figure 3.2, features such as teacher confidence, collaboration, and risk-taking, can be considered as inputs that influence both individual dispositions to learning and the development of communities of practice. These inputs are denoted in the diagram by arrows facing both ways. The conception presented is that through engagement in such activities as peer learning, teachers are collectively learning and promoting a positive learning environment in their school, and that this engagement can in turn positively impact upon individual dispositions to learning. The potential result is that over time, despite staff changes, this community of learners is able to reproduce itself through continual engagement in these activities as part of a wider expansive learning

environment that promotes formal and informal learning opportunities. Thus, the expansiveness of the learning environment is promoted by individual teachers and gradually reinforced and reproduced over time, and that teachers transform themselves through participation; developing more positive dispositions to learning.

Communities of practice was presented in section 2.3 as a significant model in influencing teacher learning in schools because as detailed in Wenger's (2008) definition, a group of school teachers can represent a community of practitioners 'who share a passion for something they do and learn how to do it better as they interact regularly' (p1). However, the conceptual framework in this study acknowledges that all learning that takes place within an institution does not have to occur within a community of practice. As Wenger (2008) acknowledges, 'having the same job or the same title does not make for a community of practice unless members learn and interact together' (p2). It is for this reason that communities of practice is positioned within the conceptual framework for this study as influencing the potential expansiveness of the learning environment. The conceptual framework acknowledges the significant influence of school leaders in determining the extent to which the learning environments promoted within schools influence the potential development of communities of practice.

As section 2.3 has already indicated, professionals in Wenger's (2008) study met informally to discuss their learning and practice. The conceptual framework for this study acknowledges that teachers may equally meet informally and discuss and develop their understanding and learning. However, it is equally acknowledged that leaders within institutions can promote activities, such as peer learning and collaborative planning. These activities provide opportunities for teachers to engage in collaborative learning, and consequently, develop the community of learners within the institution.

Examples in the conceptual framework of activities that can be considered to promote informal learning include the extent to which teachers have

opportunities to engage in: peer learning; collaborative year group planning; professional dialogue; opportunities to work in different groups. Evidence from the literature indicates that these activities determine the expansiveness of the learning environment. Analysis of the literature indicates that individual dispositions to learning aren't fixed, and that the greater the opportunities for teachers to engage in such activities, the greater the influence upon teachers': self-perception as learners; confidence; and attitudes to learning. The learning experiences that teachers engage in in schools inform their craft knowledge. This in turn influences teachers' decisions to positively or negatively engage in learning opportunities.

3.6 Conclusion

The review of literature in chapters 2 and 3 has identified key aspects for consideration in terms of the relationship between action research and teacher professional learning. Examples were highlighted of the influence of government policy in determining the teacher professional learning opportunities in schools. Ofsted, and associated accountability measures, have restricted teachers' participation in their individual professional learning. Equally, evidence has been presented to show that schools and school leaders in particular, have mediated the influence of government policy and made decisions for themselves in response to policy demands. Schools can range in the extent to which they provide expansive or restrictive learning environments for teachers. I also discussed the term 'individual dispositions' to learning to illustrate the assertion that teachers also exercise their individual agency, in the extent to which they choose to elect to engage in the learning opportunities on offer in the workplace.

A model of teacher learning has been presented which outlines the significance of three related levels of influence that impact upon teacher learning experiences in schools: government policy; institutional learning environments; and individual dispositions to learning. The conceptual framework that has been presented has highlighted the significance of informal workplace learning on

teacher professional learning. The conceptual framework, as detailed in figure 3.2, reflects the findings from the review of literature and represents what I believe are the significant influencing factors that impact upon an individual teacher's learning in schools. The framework represents a dynamic process in which factors influenced by government policy, institutional learning environments, and individual dispositions, impact both upon the learning opportunities made available to teachers in schools and their interpretation of the value of those activities.

The literature review identified key aspects of the relationship between action research and teacher learning that will inform the methods and approaches to the collection of data to answer these questions. These approaches, methods and materials are presented in Chapter 4, and they will include an emphasis on understanding the impact of these three levels of influence on teacher learning in schools.

Chapter 4: Methodology and Research design

4.1. Introduction

Within this chapter, I discuss the methodology and research design for this study of factors that influence teacher learning in primary schools, particularly in relation to action research. The research design is outlined and the use of case study methodology (Yin, 2009; Bassey, 1999) is justified to evaluate the relationship between teacher engagement in action research and their subsequent professional learning. This chapter is organised into three sections. The first section, 4.2, includes a discussion of ethical issues and the implications of researcher positionality and how these are addressed. A brief overview of the context of the two schools and the projects they were engaged in is also provided.

This discussion is supplemented in section 4.3 with an overview of the principles of case study research as a methodology to support educational research. Case study is presented as an appropriate inquiry-based methodology for this study through the trialling of a teacher professional learning programme and an evaluation of its perceived effects upon teacher learning. I have employed case study methodology to provide a unique example of real people in real situations; teachers in primary schools. The aim was to enable a clearer understanding of the different ways in which participants considered and responded to engagement in action research.

Section 4.4 proceeds to discuss how the research design was implemented through the use of questionnaires and semi-structured interviews with teachers in each school. The validity and use of questionnaires and semi-structured interviews as tools to collect data to answer the research questions is discussed, and a description of the data analysis methods is provided.

4.2 Implementing the study

4.2.1 Approaches to research

Morrison (2002) has detailed the critical decision of the researcher when preparing his/her research design to be to select the approach that best addresses the questions that the researcher seeks answers to. As a school leader, one goal of this study was to develop a framework upon which a secure understanding could be built of the value of action research as a model for whole staff teachers' professional learning. I therefore needed to consider the foundations of educational research to enable me to make effective decisions about my research design for this study. My journey from the original research questions involved an evaluation of the research paradigms of positivism, interpretivism and critical educational theory. Cohen et al (2007) have compared the foundations of what is widely considered to be research to the methods used by scientists to construct theories. This traditional scientific model of research has been defined simply by Cresswell (2005) as setting a question, collecting data to answer this question and analysing the data to come to conclusions. My own professional experiences as a teacher and school leader are at odds with this traditional model, and have enabled me to understand the significance to learners of engagement in shaping and constructing their own learning, and therefore, the significance in educational research of personal constructs and subjectivity.

This study will draw upon an interpretivist epistemological perspective, where epistemology is defined *as the study of how knowledge is constructed about the world, who constructs it, and what criteria they use to make meaning and methodology* (Usher, 1996, p31). The positivist viewpoint is that in educational research, knowledge is hard, objective and transferable. The tensions come with educational research through an interpretivist lens that suggests knowledge is personal, subjective and unique. Researchers (Cresswell, 2007; Mills, 2003) have stressed the importance within qualitative research methods of the participant's view, particularly in terms of those views within a specific

context and the meanings people personally hold about educational issues. I suggest that the study of human beings is unique from this standpoint in that they do not respond in a mechanical way and these traditional principles cannot therefore be applied to educational research to draw robust conclusions.

An ontological standpoint is equally polarised between the positivist and interpretivist paradigms. Cohen et al (2007) have discussed ontology as being concerned with the nature of the world and whether social reality is external to us (objectivist) or is a product of our own cognition (subjectivism). A traditional educational research model would only be appropriate if it was felt that social reality was out there in the world, awaiting discovery and external to our individual consciousness. As Morrison (2002) has discussed, interpretivists would argue that all educational research needs to reflect people's experience, and that reality is not a given that is out there waiting to be discovered but a personal construct in which people can understand reality in different ways (p18). This reflects the growth in acceptance of Mode 2 knowledge (Hodkinson and Smith, 2004), which is problem-focused and context-driven, and where knowledge creation is viewed as an embedded social practice. The epistemological and ontological assumptions particular to my interpretation of case study research determine that knowledge does not only exist objectively outside of the person, but is also subject to the internalisation of experiences. An acceptance of this is therefore required if a research study is searching for the perceptions of participants. This is manifested in this study through the interpretation of teachers' individual experiences and their personal perceptions of the value of their engagement in those experiences. As an educational researcher, I hold a subjective position in terms of an ontological perspective. A premise of this study is that our social reality is dependent upon participants' construction, and that they individually construct it in different ways. Interpretivism, both from an ontological and epistemological perspective, is therefore considered to be the most appropriate approach to this study.

4.2.2 Sampling strategy

The choice of sampling strategy was inevitably influenced by the nature of my engagement in an Educational Doctorate and my position as Deputy Head Teacher in school A. I was investigating my own practice and therefore school A needed to be included in the sample. A second school was chosen to provide a wider set of data and to make comparisons of teacher experiences and perceptions in different schools. I approached the University of East London, and they directed me to a second school who were participating in the same action research module as school A. Fifty-one full-time primary school teachers working at two primary schools in East London were invited to participate in the study. This sample of fifty-one teachers included all the class teachers at the schools. This sample was selected in order to provide an initial sweep of data through questionnaires to gain a perspective across as many participants as possible. Each of them had been actively involved in a programme of activities related to action research to explore an aspect of their own classroom practice.

The two groups of teachers represented a non-probability and purposive sample (Cohen et al, 2007), where I was aware that these groups did not represent the wider population but were of specific interest to this small-scale study. As I am seeking to gain the perspectives of teachers engaged in action research, purposive sampling is appropriate as I'm studying a particular cultural domain (school) with knowledgeable participants (teachers). A purposive sample is when a researcher chooses specific people within the population to use for a particular study. For this thesis, I needed to study teachers and I included a second school that was participating in the same professional learning programme as the school in which I was working. I am aware that a disadvantage of purposive sampling is the high probability of researcher bias. I acknowledge this as a challenge and discuss the implications in 4.2.3.

Within the study itself, there were two samples. All fifty-one teachers were invited to complete questionnaires at the end of their projects in order to gain a wide overview of different perspectives of the processes that they had

participated in. Additionally, six teachers from each school were purposefully selected to provide further data to enable me to gain an even deeper understanding of some of the themes that emerged from the questionnaires. Purposive sampling applied to both individuals and sites (Cresswell, 2005) and is reflected in the fact that I specifically selected two schools in which all teachers had participated in action research. For the interviews, the sample of six teachers was chosen using a method of maximal variation sampling, which is a purposeful sampling strategy where the researcher samples individuals that differ on some characteristic (Cresswell, 2005, p204). For this study, I selected six teachers at each school that reflected a range of years of experience in teaching. A brief overview of the biographies of the teachers interviewed is provided in appendix 7. This sampling strategy was selected to provide a wide range of viewpoints and not to provide comparisons of teachers' experiences at different stages of their careers.

Both of the primary schools involved in this study are located in North East London. School A is a four-form entry school with year groups from Nursery to Year 6, and School B is a three-form entry school from Nursery to Year 6. A brief contextual overview of each school is provided in appendix 8. Each of the two schools participated in a whole-school action research project led by senior school staff in collaboration with lecturers from the University of East London. The projects were designed and written collaboratively and focused on an overarching theme, and during the course of this study, the theme was 'Assessment for Learning'. This involved teachers in researching theories of assessment for learning and ways in which they could encourage greater and more meaningful pupil assessment in their classrooms. Individual year groups within each school had the opportunity to interpret this theme into a particular research focus designed to meet the specific needs of the cohort that they were working with. Details of the research focus for individual year groups within each school are provided for the reader in appendix 6. However, structures for designing the research questions and analysis and evaluation were uniform across both schools. The model of action research used by the teachers was provided for them by university staff and focused on groups of teachers

identifying a research question and designing an intervention to be studied. An example of such an intervention included teachers introducing 'talk walls' in their classrooms, where children were encouraged to talk about their learning. In addition, similar professional learning strategies were employed within both schools, including peer learning and the sharing of good practice in professional learning meetings. The sampling aimed as far as possible to include individuals engaging in the same kinds of professional learning activities across the two schools.

The relationship between the university and the schools was designed to ensure that teachers' project proposals, first and foremost, met the needs of the schools. University staff were there to support the process and were not primarily interested in the outcomes of the studies. The process was designed to give self-control to the collaborative teacher teams (within year groups) with the university link person supporting the groups of teachers in conducting their research. Although guidance was therefore given and provided throughout, the focus of this guidance was on supporting teachers in understanding the methodological processes of the action research cycle. The teachers were given responsibility for deciding upon which aspect of their practice, within the overarching theme of 'assessment for learning', that they wanted to investigate. A second school was selected for this study to provide a wider evidence base beyond the perceptions of teachers within my own school, and to provide opportunities to contrast and compare.

All class teachers received a non-coercive request to participate in the study through a questionnaire. The final sample of respondents to the questionnaires was small ($n=24$), with 15 respondents from School A and 9 from School B. Follow up individual interviews, in a semi-structured format, were used with a purposive sample of 12 respondents to the questionnaire (six from each school) to explore issues arising in more depth. Both the questionnaire and the interviews included questions to explore the teachers' perceptions of the value of action research as a model for teacher professional learning. The questionnaire also collected relevant biographical data on professional histories.

Both data collection methods included opportunities for the discussion of teachers' experiences of teacher learning and engagement in action research. Written notes were taken during the interviews, and there were opportunities in the questionnaires for teachers to write detailed written responses. I am aware that it is standard practice to audio-tape interviews rather than taking written notes. However, I wanted my practice during the data collection to reflect as closely as possible to teachers' normal experiences in schools. I therefore felt that by writing notes as the interviewer would enable the interviewee to feel more relaxed and to be more open in their responses. The data from the questionnaires and interviews will be presented in chapter 5 as textual fragments to illustrate the responses. It is also important to note that the participants were aware that their responses were being given to a peer and fellow educator, and in the case of school A, a colleague or line manager. It is important therefore to acknowledge that the data presented represents the responses of teachers; in terms of discussions they would have with a fellow teacher about their experiences of teacher learning and action research in large primary schools in an outer London borough.

4.2.3 Implications of researcher positionality

It is important for me to examine and define my positionality as an insider researcher. As Coghlan and Brannick (2008) have noted, insider research projects are variable in the extent to which the focus of the researcher and that of the organisation can be different. For this study, it is also different in both schools, as I am employed in school A. Coghlan and Brannick (2008) have detailed a continuum for both the researcher and the organisation in terms of the extent to which the focus of either or both can move from a commitment to intended self-study to no commitment. My assertion in this study is that I am attempting to identify an understanding of the relationship between teacher engagement in action research and their professional learning. I am therefore investigating the perceived impact of a collaborative learning programme of action research on teachers' learning. I was not responsible for the design of the action research programme in each school or the implementation of it.

However, as a senior leader, I accept that I would have been associated by participants as having a senior responsibility for decisions regarding teachers' professional learning, and presumably a vested interest in its success in school A. The focus was primarily therefore on studying the impact of a programme of action research on participants to inform future practice. It was not to study the impact of my leadership of teacher learning in school A.

The key factor for me to consider was the extent to which I could balance my role as school leader and educational researcher, particularly in school A. It is not my intention to diminish the influence of my inherent bias or the limitations of being an insider researcher, but to acknowledge and accept it. There is an inherent advantage of being an insider researcher because I am aware of the cultures and informal structures and systems of schools. Although this can be seen as an advantage to have this insider knowledge, it can also be a disadvantage because my awareness of structures and cultures in schools, and school A in particular, may make it more difficult for me to stand back and assess critically. One of the outcomes of this study is to enable me to develop my future practice. Therefore, I believe that it is essential for me to study the impact of teacher perceptions of professional learning within my own institution and acknowledge that my positionality will influence the outcomes of this study. I want to investigate the value of using questionnaires and interviews with colleagues within my own school because this will also impact upon my future practice.

The need to ensure 'open dialogue' was the key issue for me to resolve. Unlike school B, where I was able to give questionnaires to and interview teachers whom I didn't know, I was interviewing and collecting questionnaires from teachers that I would continue to lead and work alongside. Collecting evidence from school A is central to the research aim for this thesis because one of the outcomes of this study is for the results to inform my future practice. I wish to develop a clearer understanding of the effective leadership of teacher learning in schools, and as such, it is vitally important that I am able to gain a clear understanding of teachers' engagement in action research and professional

learning activities. Key issues taken into consideration to ensure authentic responses included confidentiality, anonymity and informed consent. The questionnaires were therefore specifically chosen to provide the value of anonymity to participants. Within my role as interviewer, I acknowledge that participants may have found it difficult to distinguish between my role as researcher and school leader. However, my acknowledgement and awareness of my status as an 'insider' influenced the manner in which I conducted the interviews and consciously articulated the possible tensions. It was my intention that my understanding of and interests in their experiences as teachers and learners would elicit honest and open responses.

The relationship between interviewer and participant needs to be considered carefully, particularly in terms of the assumptions that can be made between researcher and participant. Platt (1981) has highlighted the significant assumption made within the interviewing process that the interviewer and respondent are anonymous to each other. Of course, this was not possible for me in school A, and also to a lesser extent, in school B. I needed to accept this as a limitation of my engagement as an insider researcher. However, I also attempted to limit the influence through the way in which I presented my research interests to the two groups of teachers. Busher (2002) has discussed how the contexts in which educational research is undertaken has an impact on the way in which researchers and participants engage with each other. This implies that the researcher needs to consider the design of the questionnaire and interview schedule in great detail, in order to minimise the possible impact of respondents' perspectives on contextual relationships upon the transparency of their responses. I took care to consider the extent to which teachers genuinely felt that they could volunteer to take part in the collection of data and did not feel compelled to do so because of my position within the school. There were therefore two factors that were taken into consideration: the need to ensure teachers were able to make informed choices about their involvement in the project; as well as ensuring the authenticity of response. The question that needed to be considered from my point of view was the extent to which teachers felt that they could be open in their responses, and that they didn't feel

exploited in any way. I needed their questionnaire and interview responses as data for my study. They would not necessarily have personally gained from the experience. Kvale (2006, in Chadderton, 2012) has argued that all research can be viewed to be exploitative in nature as it is usually designed to meet the needs of the researcher, and not necessarily the needs of the participants. The purpose of the data collection in this study is not to provide purely authentic responses, but to acknowledge my engagement in the research and interpret the responses accordingly.

In addition, I wanted to ensure that the responses most reflected teacher perceptions. The purpose of this study is to understand the thoughts and perspectives held by teachers in terms of their wider experiences of teacher learning in schools, and their thoughts on the value of action research in particular. My aim was to provide an authentic understanding of their working lives in schools in order to inform future practice. I am aware that my personal involvement in this study means that my research findings cannot be considered to be neutral. By this, I mean that I needed to be aware that my position would impact upon the participants' responses to me. However, it is worthwhile to acknowledge that the relationship is complex. In reference to my positionality in school A; although I was a school leader, I was not acting as line manager or performance manager for the interviewees at the time. It could also be argued that I had built up positive and trusting relationships with staff, and that consequently, they may have felt that they could be even more honest and open in their responses.

Trowler (2011) has discussed the extent to which the impact of being an 'insider researcher' does not imply a fixed value, and will be unique to the institution and researcher. This indicates that the impact of researching within your own institution will depend on the relationships between staff and the research design of the study. There may be aspects that are familiar to the insider researcher as well as aspects that are previously unknown. I can be considered as an 'insider' in both schools as I am a member of the same profession. As I was, in addition, employed in a senior position in School A, I needed to consider

the manner in which I distributed the questionnaires and conducted the interviews in greater detail than I needed to in School B. For example, I conducted interviews with colleagues that I had worked very closely with, as well as those who I was less familiar with. Power relations also needed to be taken into consideration. I needed to assess to what extent I was linked to the school as part of the establishment. The question I needed to consider was the extent to which teachers may feel inhibited in expressing their true feelings about the programmes that they were involved in, particularly if their opinions were critical of leadership. I therefore had to make explicit to the participants that my research was separate to my work in school A. In school B, it appeared to me that it was easier for teachers to view me as a researcher as this was the only capacity in which I had interacted with them. I also ensured that I was introduced to the participants by a classroom colleague rather than a member of the leadership team. In school A, I had to be more explicit in explaining my positionality and intentions.

The key for any researcher is to be able to acknowledge these complex relationships both in terms of collecting data and subsequent analysis of it. This can be explained through the recognition that who a researcher is, in terms of their background and experiences, impacts upon their interpretation of the research (Stanley and Wise, 1993). I made certain to encourage participation within each interview by making each participant feel at ease, and each of them was presented with a copy of my data summaries to authenticate. This ensured that I maintained transparency in terms of the research outputs. Trowler (2011) has also discussed the particular advantages to the insider researcher when undertaking research, and when one of the research questions addresses the implications of your findings for future practice. Both of these aspects are relevant to this study.

Munn and Drever (1995) have highlighted the potential difficulty of collecting information from people that a researcher knows and works with. I considered the extent to which questionnaires and interviews were the most appropriate tools to gain the thoughts and ideas of teachers at my school. It may be that

people are less likely to be frank if you are interviewing them in person, than if they are able to provide information anonymously (Munn and Drever, 1995, p3). If this is the case, then the anonymity offered by a questionnaire may facilitate more honest and open responses. My dilemma was in ensuring to what extent my respondents actually truly accepted this offer of anonymity. Foucault (1990) has discussed how membership of institutions constrains the actions of individuals, distorting the views that they may feel that they are allowed to give. There could be the danger that despite my intentions to ensure anonymity, respondents may feel that they could still be identified through their responses and this could adversely affect the richness and honesty of the data. There are advantages of researching within your own institution, as you are more likely to gain a high proportion of returns from questionnaires. Burton et al (2008) have discussed how distributing the questionnaire in person can make a significant difference to the response rate. Munn and Drever (1995) go further than this and suggest that high response rates are an advantage of questionnaire use by teacher-researchers. The establishment of personal contact has been described as being significant in enabling cooperation from the respondents (Bell, 2002).

It is essential therefore that I acknowledge my positionality and reflexivity in interpreting the data within this study. Reflexivity is significant to this study because an interpretivist approach accepts that the researcher is not independent and is central to the construction and interpretation of data. Cresswell (2005) has discussed how reflexivity explores the concept of the relationship between the researcher and the object of research, and the extent to which involvement affects interaction with the objects of research. Ezzy (2002) claims that the personal experience of the researcher is an integral part of the research process and researchers (Cohen et al, 2007; Newby, 1997) have argued that the notion of reflexivity is central to a case study such as this, because the researchers are intrinsically participants in the research and part of the context of study. Again, from an epistemological perspective, this implies that knowledge is out there to be discovered and that knowledge can be equally gained from the researcher and the participants. Carr and Kemmis (1986) have attempted to define the value of reflexivity in educational research in that it

provides the difference between knowledge about education and educational knowledge. What needs to be taken into consideration in a case study is therefore the impact of the researcher's own perspectives and actions on the participants and consequently the outcomes of the research. I am aware that being reflexive enables me to consider the relative strengths and limitations of being an insider researcher. A strength is my knowledge of the context of primary schools and teacher learning at the centre of this study. This experience enables me to have a strong understanding of participants' responses. However, I am also aware that these experiences, and consequently my beliefs, have the potential to influence my observations and interpretations. Ongoing awareness of these strengths and challenges is therefore essential.

4.2.4 Ethical issues

Ethics, in the context of educational research, has been most associated with traditional research paradigms employed by researchers where the focus is on using participants to gain information to answer their own research question (Cohen et al, 2007). Coghlan and Brannick (2005), however, have pointed out that this is in contrast with research such as this case study because it is built on participation within the system being studied where the members understand the process. *'Hence, ethics involves authentic relationships between the researcher and the participants in the research'* (Coghlan and Brannick, p77). In designing the questionnaire and interview schedules, consideration was given to ensure that at each point my own transparency in communication was maintained to enable these 'authentic relationships' to be nurtured. I met with each teacher individually to clarify my role as researcher and to reiterate the fact that participation was voluntary and responses would be anonymous. In analysing the data, it is important for me to acknowledge that the comments made by teachers through the questionnaires and interviews are not representative of all teachers or the true authentic voice of teachers' engagement in action research. By this, I mean that the outcomes of my study represent the combination of teachers' perspectives and my own perspective as

a teacher and school leader over a number of years. The findings of this study are therefore my interpretation of teachers' descriptions of their experiences. In summary, whilst I acknowledge my positionality in this study is influencing teachers' responses, I still feel confident that the perspectives shared by teachers are sufficiently of value to inform my future practice.

All work undertaken during the course of this study was carried out in accordance with university ethical procedures and in line with British Educational Research Association (BERA, 2011) guidelines. I had to ensure that my proposed case study research complied with the School of Education guidelines on research ethics and I obtained ethical approval. This process enabled me to reflect in greater detail on the significance of aspects such as informed consent, anonymity, confidentiality and wider ethical issues when undertaking research. A copy of the University Research Ethics Committee approval form is provided in appendix 5. All participants were informed verbally and in writing about the study and participation was on a voluntary basis. All teachers were participating in the school professional learning programme and they completed an anonymous questionnaire discussing their involvement within that programme. Great care was taken to communicate to all staff that their involvement in data collection was voluntary and would be anonymous. I also clarified the fact that the data collection was part of an external research project that had no bearing on their individual positions within the school. For those teachers who were selected to be interviewed, written consent to participate was obtained and participants were given the option to withdraw from the study at any time. Participants were also given the opportunity to be interviewed by someone other than myself if they so wished, although none chose this option. All data was treated in a way that protected the confidentiality and anonymity of the teachers involved in the study. All participants had the choice available to them of not participating in the study in the first place. Coding was used during the gathering and processing of interview notes.

As a qualitative researcher, I have acknowledged my own involvement in the research undertaken in this study. This is of particular significance when

considering the fact that I was working and leading in one of the schools in the study. An ethical framework was therefore of primary importance in validating the authenticity of the data that was produced, and I attempted to be as transparent as possible in all communication with participants. In addition to being an insider researcher in school A, my position as deputy head teacher with specific responsibility for teacher professional learning, required me to consider how I managed the data collection in the school to ensure authenticity. I was therefore inherently aware that a tension existed in school A between my status as a researcher and as a colleague and leader. To a lesser extent, even in school B, power relations need to be taken into consideration with my role as a senior leader in a local school possibly compromising my role as a researcher. The only consideration available to me was to ensure that this influence was minimised to enable the collection of as authentic responses as possible.

4.3. Educational case study

A case study was selected because as an active participant in the study, it was my intention to evaluate the perceptions of teachers' engagement in action research in the schools studied. Yin (2007) has discussed the goal of case studies to understand complex social phenomena and real life events. He describes a case study as an empirical enquiry that investigates a contemporary phenomenon in depth. Case studies have the potential to offer rich information and a range of insights into the phenomenon, and often use a combination of quantitative and qualitative data. The main advantage of a case study is that it has enabled me to study one aspect (teacher learning) of a real world problem from both literature and the perspectives of participants (teachers). Yin (2009) has identified three types of case studies: exploratory, descriptive and explanatory, and has acknowledged that these purposes are not mutually exclusive. An exploratory study involves the analysis of a phenomenon in preparation for further deeper research. A descriptive study goes further than this and investigates particular features of a phenomenon. Explanatory research analyses or explains why or how something happened. I would present this

case study as being both descriptive and explanatory. It is descriptive because I am investigating the features of and impact of teacher engagement in action research. It is intended to move towards explanatory because I am attempting to analyse both the perceived impact of engagement in action research and also wider influences upon teacher learning in primary schools.

Bassey (1999, p58) has detailed a prescriptive definition of research case study, particularly for those researchers working within or studying an educational setting.

‘An educational case study is an empirical enquiry which is:

- conducted within a localised boundary of space and time (i.e. a singularity)
- into interesting aspects of an educational activity, or programme, or institution, or system,
- mainly in its natural context and within an ethic of respect for persons,
- in order to inform the judgements and decisions of practitioners or policy-makers,
- or of theoreticians who are working to these ends, and
- such that sufficient data are collected’

Taking each of the points detailed in Bassey’s description, the research design and purpose of this study relates closely to the model detailed above. This study represents an empirical enquiry as the research methods began with the collection of data through questionnaires and interviews with teachers. This collection of data has taken place with teachers in two schools over the course of a year and the study is therefore conducted within a localised boundary of space and time. The specific feature of this study, and what I believe will be of future interest to practitioners and policy makers, is the study of the perceived impact of teachers’ collective engagement in action research on their professional learning. This study will be of interest because it will describe the personal viewpoints of teachers involved within a model that is being promoted

at a national level to support teacher professional learning. As Cohen et al (2007, p254) have argued, case studies strive to portray what it is like for groups of actors to be in a particular situation, and seeks to understand their perceptions of events. It is intended that the outcomes of this research will determine my own future practice, inform practice at a local authority level and interest planning at a national level.

The definition highlighted above has emphasised the importance within case studies of exploring a project in order to focus on its effectiveness. The case may be structured and analysed to evaluate the extent to which the project impacts upon the participants involved. In this case, I am investigating the perceived impact of teachers' engagement in action research in schools. Bassey (in Coleman and Briggs, 2002, p110) has described one of the strengths of case study research to be the fact that it is located in its natural context. He emphasises the value of case study research in that 'it entails being where the action is, taking testimony from and observing the actors first hand' (p110). It is intended that at the completion of this study, the case study will effectively reveal the experiences and perceptions of the teachers involved, through their questionnaire and interview responses. This study represents a summative account of teachers' perceptions of their engagement in action research, and this case study interprets and evaluates this evidence in relation to the research literature. The primary purpose in undertaking this study is to develop my knowledge and understanding of effective practice to promote teacher professional learning. I am therefore directly involved in the research and will need to be aware of this and acknowledge it when gathering the data and interpreting the findings, to ensure authenticity and critical rigour. An option for me could have been to use an action research model for this study. However, the research design for this study would not reflect pure action research as it is not the aim of this study to implement changes to my practice. I have justified the use of case study methodology because it is my aim to evaluate and report teachers' perceptions of the value of action research and factors that affect their professional learning in schools. I have chosen case study methodology because as the researcher, I am integrally involved (Yin,

2009; Cohen et al, 2007), and I am researching in an environment that is familiar to me (Opie, 2004). These findings will be used to inform future practice.

Cohen et al (2007) have described the purpose of case studies to understand individual or group perceptions of a phenomenon, and this description is therefore appropriate for a study to develop an enhanced understanding of teachers' engagement in professional learning activities in primary schools, and action research in particular. Case studies are designed to explore one or more cases in depth and focus on naturally occurring phenomenon. This aspect can be closely related to the purpose of this study to identify factors that influence teacher learning. I decided to undertake a case study of teachers' engagement in action research across two primary schools to strengthen the findings of the research, and this model can therefore be related to Yin's (2009) description of a multiple-case study. Yin (2009) has argued for the perspective that multiple-case studies are preferred over single-case studies, because they offer more robust analytical conclusions and therefore increase external validity.

In summary therefore, case study is an appropriate methodology for this study because it involves: a study localised within two schools; an investigation of the impact of teachers' engagement in a specific teacher learning programme; an evaluation of the perceptions of practitioners in their natural contexts; a study design that will provide evidence that will contribute to future practice in education. These activities are therefore considered to be effective in finding answers to the research questions.

4.4 Research methods

One significant characteristic of case studies is the use of multiple sources of data. In this study, data gathering methods constituted of questionnaires and semi-structured interviews. Of thirty questionnaires distributed in school A and twenty-one in school B, 15 and 9 were returned respectively. Semi-structured interviews were then undertaken with six teachers from each school. Data was

collected from both the complete and smaller sample in the order outlined below:

- Questionnaire for all participants at end of module in school A (30 questionnaires were distributed and 15 returned).
- Semi-structured interviews with 6 participants in school A.
- Questionnaires for all participants at end of module in school B (21 questionnaires were distributed and 9 returned).
- Semi-structured interviews with 6 participants in school B.

4.4.1 Questionnaires

I chose a questionnaire as a research tool because I felt that it would enable me to gain a wide range of perspectives held by teachers. Each questionnaire contained a combination of open and closed questions. Research literature has detailed key advantages of questionnaire use that are relevant to the research aim of this study, including: efficient use of time (Burton, 2003); anonymity and distance between researcher and respondents (Wellington, 2000); continuity of experience (Munn and Drever, 1995) and avoidance of interviewer-bias (Frankfort-Nachmus and Nachmus, 1997); straightforward to analyse (Williams, 2003); high return rate for questionnaires distributed in person (Munn and Drever, 1995); and rich data (Coghlan and Brannick (2005). These aspects were particularly relevant to this study, both in terms of my position as an insider researcher (anonymity, avoidance of bias where possible) and ease of data collection (use of time, return rate).

A questionnaire is considered to be a complex research tool that presents significant advantages and disadvantages, and these are primarily dependent on the purpose and context for which the questionnaire is designed and implemented (Peterson, 2000). It can be used as a quantitative or qualitative tool which demonstrates its flexibility and this also illustrates the significance of its design. As Cohen et al (2007) have noted, an important consideration will be to utilise the opportunities available at the design stage to minimise the

disadvantages and maximise the advantages, such as the quality of response, the value of anonymity, the continuity of experience, and the ease of analysis. As a researcher, I was also aware of the significant limitations of questionnaires, particularly when utilised within interpretivist research paradigms and qualitative research methods. Three significant aspects can be highlighted for consideration: question design; questionnaire design; and, the maximising of response rates. As a qualitative research tool, the use of open questions will enable the researcher to 'catch the authenticity, richness, depth of honesty and candour – the hallmarks of qualitative data' (Cohen et al, 2007, p330). Qualitative open-ended questionnaires are also a particularly effective tool in site-specific case studies such as this in capturing the specificity of a particular situation. It is the time and care taken by the researcher at the design and pilot stage that will determine the effectiveness of the questionnaire in answering the research questions (Verma and Mallick, 1999). The purpose of this study was to gain an understanding, across an entire staff of teachers, of their differing perceptions of the value of action research. A questionnaire enabled me, with relative ease, to capture teachers' initial perceptions. Although the response rate in school A was only 50% and school B 42%, this enabled me to gain a breadth of perceptions across each school.

A questionnaire provided distance between me as the researcher and the respondent, which enabled the advantages of anonymity and continuity. Wellington (2000) has suggested that the value of anonymity is pivotal in enabling data collected by questionnaire to be 'richer, perhaps even more truthful, than data collected in face-to-face interviews' (p106). The value of anonymity here is in the fact that the respondent may be more willing to share their views in writing if there is that guarantee of anonymity. Certainly, the potential of greater anonymity that questionnaires provide is considered to be a significant advantage to the researcher (Frankfort-Nachmus and Nachmus, 1997). A further advantage of this distance between the researcher and the researched is the continuity of experience, in that all the respondents were presented with the same questions in the same manner. There is no possibility that, as in the case of an interview situation, information could be presented in

different ways to different respondents, or attempts made to clarify questions further. Munn and Drever (1995) have discussed the significance of this in that the stimulus presented to respondents is controlled. The value of this was felt when I came to analysing the data in that I was consciously aware that all respondents had been presented with the same set of questions in the same order in the same manner.

Factors that are considered to be advantageous in questionnaire use may also present potential disadvantages. The merits of maintaining distance between the researcher and the respondents have been discussed. However, this will lead to additional pressures at the design stage to those highlighted above. Being physically removed from the process of interviewing with questionnaires meant that I needed to take greater care in writing the questions because there wasn't the flexibility of further clarification that an interview allows. Oppenheim (1966, p33) has identified how eliminating the interviewer means that the questionnaire has to be much simpler and that no additional questions can be given and no probes requested, and Peterson (2000) has discussed how the misunderstanding of questions can lead to invalid data. I took great care in designing the language of the questions to be as straightforward and open as possible for the respondent. My status as insider researcher was of value here because I was aware of the context specific language that teachers within each setting would understand. This is why I elected to use both questionnaires and interviews as qualitative research tools in this study. One advantage of interviews was the fact that they provided the flexibility of further clarification where appropriate, to interpret the meaning of questions, or to probe and explain answers (Munn and Drever, 1995). The questionnaires used in this study included both open and closed questions. The closed questions enabled me to draw general conclusions about the strength of feeling and confidence the participants felt about the research they were involved in. The open responses required a greater length of time to analyse but provided deeper evidence of context specific issues.

The questionnaires given to teachers involved three sections, and an example is provided in appendix 3. In Section 1, teachers were asked to consider their own definitions for teacher professional development and action research. Section 2 included three questions that focussed on teacher perceptions, indicating the extent to which they felt participating in the action research projects had impacted upon their professional learning and their teaching, and the value of action research as a tool for professional development. The response categories in section 2 involved the use of a Likert scale and ranged from 'Not at all' (-3) to 'Very much' (3). Verma and Mallick (1999) have discussed the merits of closed questions that are not restricted to matters of fact but can be used to find out the opinions of respondents, through the use of rating scales. In relation to the research aims, I thought it would be useful to seek a quantifiable opinion of teachers' perceptions of the value of engagement in action research, as well as a fuller understanding of thoughts and opinions. Taking these factors into consideration, I decided upon a combination of open questions and closed questions that incorporated a rating scale. The advantage of combining open and closed questioning is that pre-determined close-ended responses can net useful information to support theories and concepts, and open-ended responses permit you to explore reasons for the close-ended responses (Cresswell, 2007, p217). The focus of section 3 therefore allowed for more detailed responses about their experiences in undertaking action research and enabled teachers to consider the ways in which participating in the action research projects may have impacted upon their professional learning and their practice. I employed these open-ended questions to ascertain teacher perceptions and to enable the participants to best voice their experiences without being constrained by the views of the researcher.

4.4.2 Interviews

Semi-structured interviews, as opposed to structured or unstructured interviews, were selected to complement and supplement the qualitative findings from the questionnaires. Yin (2009) has discussed the value of interviews in the construction of case studies. A copy of the interview questions is provided in

appendix 4. This enabled me to cover the same questions with each participant, whilst enabling me to have the freedom to explore in greater detail individual responses by asking for clarification where appropriate. These interviews were carried out at the beginning of the term immediately following the term in which the projects were completed. It is therefore important, once again, to acknowledge the fact that when participants discussed the impact of their engagement in action research upon both themselves and their pupils; this was a perception of impact very soon after engagement in the projects themselves. Kvale (1996) has described the main task in interviewing to be to understand the meaning of what the interviewee says. The primary purpose of selecting semi-structured interviews to complement the data collected through questionnaires was to provide further deeper meanings and understandings of the participants' perspectives on engaging in action research and the consequent impact on their learning. It also enabled me to explore the themes outlined in the literature review in Chapters 2 and 3, particularly in terms of the influences of government policy, institutional learning environments, and individual dispositions to learning. Research literature acknowledges the benefit of gaining deeper understandings (for examples, see Wragg, 2002, and Richards, 2005) and details the extent to which interviews are particularly beneficial as follow-ups to questionnaires, in order to further investigate responses.

Although interviewing is therefore an appropriate research technique for this study, it is important to ensure that the possible pitfalls, clearly outlined by a number of researchers (for examples, see Oppenheim, 1992, and Wragg, 2002), are taken into consideration. One such consideration was the need to avoid 'interviewer bias', and to ensure that the questions I devised for the interview did not in any way lead the interviewee to answer in a particular way. Researcher positionality was discussed in section 4.2.3 and I needed to carefully consider my role as a senior leader, in order to ensure accurate and authentic responses. Although efforts that I made to negate the impact of these possible 'power relations' have been discussed in this chapter, it seemed more pertinent for me to clarify my role as a researcher and expectations for the

interview than with the questionnaires, because they were conducted face-to-face. The interviews were designed for participants to provide perceptions of their engagement in professional learning activities. I wanted the interviews to provide both opportunities for teachers to share their perceptions of teacher learning and to enable me to clarify and expand upon my interpretations.

Arrangements were made to interview the six teachers in each school on one occasion during the course of the study. The interviewees' responses were recorded in writing by me as the interviews were conducted, and copies of data summaries were subsequently provided for the participants to verify. The interviews were structured to gather data about the teachers' perspectives on action research and their own professional learning. In this respect, the value of the semi-structured interviews was justified in enabling me to gain an even deeper understanding of the issues and themes that emerged within the data analysis produced from the original questionnaire. The design of the interviews therefore constituted a guided approach, with key questions defined in advance. This enabled me to have additional flexibility in relating the interview to particular individuals and circumstances, which supplemented the data collection from the questionnaires. As Cohen et al (2007) have noted, this approach also has the advantage of increasing the comprehensiveness of the data and enables the systematic collection of data for each respondent.

4.4.3 Analysis of the data

The aim was for a sufficiently rich body of data to be produced to provide new understandings of the impact of undertaking action research on teachers' professional learning. In this study, qualitative data from interviews was used to expand and substantiate upon the qualitative data from the questionnaires. Within this section, I will briefly outline the methods employed for successful analysis of this body of data.

During the course of this study, I have been influenced by Charmaz's constructivist interpretation of grounded theory (Glazer and Strauss, 1967),

which acknowledges the researcher's relationship with the participants. Charmaz (2006) discusses how the process of exploration of the data will bring surprises and spark ideas in the researcher, leading to the development of key themes and ideas. This process is then repeated through successive levels of analysis until the categories become more theoretical. These basic premises for qualitative data analysis were employed in this study to identify themes and ideas from the data. The qualitative data from the questionnaires and interviews was used to provide deeper understandings of patterns that emerged in relation to perceptions of action research and teacher learning. In addition, the questions were designed to provide data to address the conceptual framework, in terms of the impact upon teachers' learning of: government policy; institutional learning environments; and individual dispositions. I acknowledge the conceptual framework as a sensitising device in both influencing the conducting of the semi-structured interviews and the interpretation of the data. Charmaz (2006) has discussed the value of sensitising concepts as background ideas in informing the research aims and providing starting points to build analysis.

In this study, grounded theory methods (Cohen et al, 2007) were used to analyse the qualitative data that was produced from the questionnaires and interviews. This facilitated the identification of emerging patterns and relationships between the data that was received from the interviews and questionnaires. Conclusions have then been drawn from the particular (detailed data) to the general (codes and themes) (Charmaz, 2006). Once the data from the questionnaires for analysis had been prepared, it was read through in order to obtain a general sense of the material. The data was then coded with individual significant aspects of the text assigned a code label. Coding procedures were therefore used as a data analysis strategy. This information was then used to describe and identify themes which will be presented in chapter 5 and discussed in chapter 6. Open coding was used to explore the data and identify units of analysis to code for meaning, and this supplemented the data analysis from the questionnaires. The construction of theory from the data produced in this study followed the model promoted by Charmaz (2006)

which maps out an alternative vision to that promoted by its founding thinkers, Glaser and Strauss, and supports the model of reflexive practitioner research that I have undertaken for this study. Coding was undertaken as discussed above, and I wrote memos on each code to enable the development of ideas. These memos facilitated the further comparison of data to explore these ideas. The memos were then sorted to fit conceptual categories and highlight relationships. I also took the opportunity to link theories constructed from the data to the conceptual framework detailed in chapter 3, particularly in terms of the three levels of influence on teacher learning.

Having collected the questionnaire and interview data, I spent a considerable amount of time reading and re-reading the data in search of the emergent themes. It was my aim to identify key issues raised and to combine all similar themes in a coherent way. I undertook this analysis separately for the questionnaire data and the interview data. I was aware that I was looking for emergent themes as well as analysing the data for any evidence that reflected the themes identified in the literature and the conceptual framework. I worked through the data in successive stages to ensure there was sufficient evidence to demonstrate that the identified themes reflected the data across a range of responses. Some initial themes that emerged were therefore combined through the stages of analysis. For example, professional knowledge is presented as an overarching theme in chapter 5 to reflect the combination of a number of smaller themes that emerged from the data.

Once I had identified themes across the questionnaire and interview data, I collated the data to indicate where themes were consistent across both sets of data. The final aspect of the data analysis involved reflecting upon the themes that had been generated in relation to the research questions and the factors that teachers perceived to influence both their engagement in action research and their wider professional learning. These successive levels of analysis resulted in the five overarching themes that are presented in chapter 5. I also identified responses across the range of data that related directly to the conceptual framework.

The data was analysed through initial content analysis (Strauss and Corbin, 1990) and the overarching themes that are presented in chapter 5 emerged because of the range of teacher responses across both schools that contained references to them. Content analysis has a long history in research and has increasingly been used to analyse text data obtained from narrative responses in questionnaires and interviews to classify text into categories that represent similar meanings (Weber, 1990). Exploration of the data through coding has enabled me to identify key themes and ideas (Charmaz, 2006). I am aware of the critical perspective of this approach to preparing teachers' responses in questionnaires and interviews for analysis. It could be argued that through my own analysis, I do not sufficiently acknowledge each individual teacher's context or nuanced responses. I have also elected to not use coding or analysis software. The quantity of data produced in this small-scale case study was sufficient enough for it to be of benefit for me to be personally involved in all the analysis. The research questions identified for this study enabled me to have a combination of pre-set codes regarding teacher perceptions of their experiences of teacher learning, and be able to analyse the data to decide upon emergent codes that represent the ideas, concepts, actions, relationships and meanings that emerged from the data (Miles and Huberman, 1994). The qualitative data analysis and grounded theory related strategies discussed in this section enabled me to construct theories from the interpretation of the data produced.

4.5 Conclusion

This chapter has illustrated my journey from the original research questions detailed in chapter 1 and this thesis on the value of action research to teachers' collective learning experiences. This journey was influenced continually by epistemological and ontological concerns, as well as the practicalities of being an insider researcher and ethical and methodological considerations. This chapter has justified the validity of case study as a methodology to answer the research questions. As a school leader, I have outlined the methods I have chosen to deploy to enable me to gain an effective understanding of the value

of action research as a tool to support teacher learning in school. I have chosen to use small-scale case study methodology because this study represents an empirical enquiry of teacher learning within two schools, and the purpose of this study is to inform my future practice. I have demonstrated the effective consideration of ethical issues and the fact that all work undertaken during the course of this study was carried out in line with British Educational Research Association (BERA, 2011) guidelines. I have also discussed the significant importance to this study of acknowledging my role as insider researcher, and particularly in school A, researcher positionality, and the consequent challenges involved. I have provided an informed justification of the use of questionnaires and semi-structured interviews as data collection tools to provide authentic and valid data for analysis. The next chapter details the results of the data collected from the questionnaires and interviews. Significant trends identified from the data are reported, particularly in terms of those trends considered to be worthy of further discussion.

Chapter 5: Findings

5.1. Introduction

This chapter presents the findings of teachers' reflections and perceptions of how their engagement in action research impacted upon their professional learning, and their initial perceptions of the impact upon their practice. For ease of reference, these perceptions are collated within five specific data themes that emerged as significant from the data analysis: changes to practice; the significance of relevant learning experiences to teachers; opportunities for collaborative learning; the time made available for learning; and impact upon teachers' professional knowledge. The following summative analysis in this chapter considers each theme in turn and illustrates how participants' responses were related to them, as well as the extent to which they relate to theories discussed in chapters 2 and 3.

For ease of reference, the themes and underlying factors that emerged through coding of the questionnaire data, and teacher comments, are summarised in the table in appendix 2. Data findings will also demonstrate the influence upon teacher perceptions of their engagement in action research and wider opportunities for professional learning of government policy, institutional learning environments and individual dispositions to learning. In terms of the quantitative data in the questionnaires, the differences between the two schools do not appear significant enough to indicate a big disparity in perspectives across the two schools, and the data is presented in appendix 1. The key themes that will be discussed in this chapter demonstrate perspectives that were significant across both schools.

5.2. Changes to practice

Responses in the questionnaires and interviews demonstrated that the majority of teachers (83%) across both schools felt that engaging in action research projects led to a perceived improvement in practice. Many of these improvements were related to changes to practice implemented by the teachers as a result of the strategies explored during the course of their research

projects. 83% of teachers across the two schools discussed the value of incorporating new strategies into their teaching practice. Key factors discussed included the value to teachers of trying out new ideas and making changes to practice to improve teaching. One teacher (QA12) spoke of the value of action research in *'motivating teachers to challenge themselves and amend and adapt their teaching. This translates to more effective teaching when new initiatives are trialled and sometimes implemented permanently'*. Of the twenty-four respondents to the questionnaires across both schools, twenty specifically mentioned making changes to their practice, including: *'changes to story time'* (QB7); *'inclusion of success criteria'* (QA1); *'introduction of talk wall'* (QA14); and, *'make me try new things in the classroom when I wouldn't otherwise have done'* (QB7).

In terms of the changes made to teaching practice, these were more specific to the individual teacher and their year group focus, rather than to the individual schools. However, it is worth noting that it is not possible to measure the relative success of these changes or their sustainability due to the short term nature of this study. Some teachers did make direct comparisons between their professional learning, changes to teaching practice, and the perceived impact upon children's learning, as a result of their involvement in the research projects. Examples included: *'enhanced children's learning and confidence through role-play and discussion'* (QA1); *'helped children comprehend and talk better'* (QB1); and, *'encouraged children to be more creative'* (QA14). Twelve of the twenty-four respondents across both schools did make specific references about the positive impact of the projects on children's learning.

A number of the interview questions prompted teachers to consider the impact of their engagement in action research upon their teaching practice. When asked to discuss the advantages of action research as a model for teacher professional learning, ten of the twelve teachers interviewed across both schools specifically valued the opportunity to learn about new strategies from research and implement them in their classrooms. Seven of the teachers, for instance, discussed the value of trying new things in the classroom that they would not otherwise have had the opportunity to do. One teacher (IA4)

discussed the value of action research in that it allowed '*people to take risks and try things out that they wouldn't normally do, for fear of mucking up that half term*'. She was able to give specific examples of changes that had been made to her own and colleagues' practice as a direct result of engagement in action research. Other teachers discussed the opportunities made available, including: '*do things differently to improve teaching and learning*' (IA1); '*try things without pressure*' (IA5); '*picked up stuff I wouldn't normally do*' (IA6); and, '*chance to try out new ideas and make changes*' (IB6). These reflections appear to suggest that further additional opportunities were made available for teachers to implement changes to their practice through their engagement with action research.

A further question, where teachers were asked to reflect upon the impact of engagement in action research on their professional practice, resulted in nine of the twelve interviewees across the two schools making specific reference to changes in practice. The perceived changes made were dependent on the elements of practice that individual teachers were exploring, but included specific changes to teaching practice initiated as a result of engagement. Furthermore, when asked to discuss any additional impact of engagement in action research, three of the twelve teachers made specific reference to the extent to which they felt that there was a direct correlation between undertaking action research and changes to and perceived improvement of practice. One teacher (IB4) discussed the extent to which engagement in action research improved his teaching, whilst another teacher asserted that undertaking action research should '*definitely be part of the role of the teacher*' (IB5).

Many of the teachers said that they were able to experiment in their classrooms in a way that they felt that they had not been able to through previous models of teacher learning activities. Responses reflected that for many teachers, they felt able to trial ideas and strategies that they otherwise would not have had the opportunity to do so. Although the vast majority of teachers across each school (88%) reported improvements to their practice, it is worth noting that there were three teachers (12%) that felt that engagement in action research did not lead to notable improvements in practice. Evidence from the data in this study appears

to suggest that within a whole-school programme, many teachers will perceive that engagement in action research can have a positive impact on both teacher learning and teacher practice.

5.3 The importance of relevant learning experiences for teachers

The importance of relevance to teachers' engagement in professional learning activities emerged as a key theme through participants' responses to questions discussing the advantages and disadvantages of action research as CPL, and the comparison between action research and their previous experiences of school based professional learning activities. The term 'relevant learning experience' is used to define perceptions of the extent to which teachers felt the learning activities were relevant to them and met their individual learning needs, and the underlying factors included the extent to which teachers felt able to choose the focus of the research and were actively involved. One teacher (QB4) discussed the value of *'being responsible for own area of focus. . . doing something meaningful to me and the children I teach*. Relevant learning experiences were mentioned by another teacher (QB5), who discussed the perception that *'learning is actually based on your own experiences in the classroom. More meaningful, relevant and immediate to teachers' own needs. Teachers are directing their own learning and more responsible for outcome'*.

This aspect of relevant learning was also evident in teachers' perceptions of their negative experiences of teacher professional learning activities, where there was seen to be a lack of choice, relevance and context for teachers, and consequently a less valued professional learning experience. When assessing factors that teachers felt had inhibited their professional learning, five of the twenty-four teachers across both schools discussed a lack of relevance to individual learning needs. One teacher (QB1) discussed the *'lack of courses aimed at my grade'*, whilst another (QB3) discussed negative experiences of teacher learning as *'anything stopping me from being responsible for my own learning'*. Where there were responses from participants discussing the disadvantages of action research as a model for teacher learning, a number of teachers discussed the importance of relevance. For example, one teacher

(QA5) felt that engagement in action research didn't have '*a huge impact on my teaching*' and that her learning experience in the early part of her career had been more useful '*because it feels like I've heard a lot of the things before or discovered it myself through practice in the classroom*'. The responses across both schools also appeared to relate to the significance of action research in potentially enabling a more personalised and contextualised learning experience. This teacher (QA5) went on to say that she considered the most valuable part of action research to be the opportunities to share activities that teachers '*had done in their classrooms*'.

The importance to teachers of professional learning opportunities that were contextualised and relevant to their own and current learning needs, emerged as a key theme across a range of questions in the interview data across both schools. In discussing negative experiences of teacher learning, five (out of twelve) teachers discussed learning opportunities that were not immediately relevant to them. This was particularly evident in the difference between the perceived expectations for teacher learning held by the school and the teacher themselves. Responses included: '*difference between what school wants and what you want*' (IA2); '*we should have been asked about our professional development first, not have it imposed*' (IA3); and, it is '*not motivating if I don't have context*' (IB3).

A link emerged between teacher motivation and engagement and the extent to which they felt that the topic of study or learning was relevant to them. In responding to a question asking interviewees to consider the advantage of action research as a model for teacher professional learning, eight of the twelve teachers interviewed across both schools specifically referred to the perception that the learning was personalised for them in that it was directly linked to their own class. It was generally believed that opportunities for developing teaching and learning through action research enabled them to focus on the needs of their own class and that any changes implemented as a result of the study impacted directly on their own children. One teacher (IA2) discussed the 'main advantage' in terms of the assertion that it was:

'about your own class, not generalising, really specific . . . you go out and do other things, not specific. Your own class, your own children, can be about what you want to engage in'.

Others discussed the motivation of *'getting to select the topic'* (IB1) and learning that was *'work based'* (IB6).

When asked to discuss the disadvantages of action research as a model for teacher professional learning, a lack of relevant learning experiences, and consequently motivation, was considered by three of the twelve teachers to mitigate the success of the model. One teacher (IA1) spoke about the use of retrospective whole-school data not being relevant to her current class, whilst another (IA3) bemoaned the fact that *'I didn't have initial idea so went with another member of the team . . . so didn't have ownership. If you have idea, you have motivation to complete it'.*

A lack of relevant learning activities was also related by some participants to the perceived limitations imposed on their professional learning activities by government policy and Ofsted in particular. When discussing the value of action research, one teacher (IA2) felt that action research would *'never have ultimate priority, we dropped everything when Ofsted came'*. In discussing other ways in which participating in action research impacted upon them, two teachers at school B chose to specifically discuss the perceived negative influence of government policy. One teacher (IB2) asserted that teachers were just *'deliverers of content rather than reflective practitioners'*. Another reflected on the value of action research, but also the limitations, by claiming,

'We are empowered but with guidelines, play game dictated by national policy. No point learning and developing if unable to make choices, feel constrained by government policy/school leadership decisions. Don't get best from people' (IB1).

Interestingly, in relation to the findings from the literature review, two teachers discussed the value of the centrally produced National Literacy and Numeracy

strategies, considering them to be '*a good training tool*' (IA1) and '*well thought out*' (IB4).

Individual dispositions to learning can also be taken into consideration when considering the extent to which teachers felt that their engagement in action research provided a relevant learning experience. One teacher (QA7) did not value the model of researching and learning over time. '*Would rather have separate Insets like in my other school e.g. one week Guided Reading, another week Guided Writing, another week planning. This would really help me*'. This demonstrates that the perception of this particular teacher is that the model did not relate to her preferred model for teacher learning and prior experiences. This can be related to the complex relationship between individual dispositions and institutional learning environments, in terms of the assertion that teachers' perceptions of learning experiences are affected by their life histories and their prior learning experiences.

Evidence emerged across the interview responses to reflect the influence of individual dispositions to learning and to action research. This was evident not only when teachers were discussing their own learning, but also when discussing the dispositions to learning of their colleagues. For example, one teacher expressed in detail her own life experiences and how they had influenced her own attitudes to learning and participating in the action research project, in comparison to her colleagues.

'Unless you have an open mind, it won't be a positive learning experience. Some people don't have open mind. I'm always worrying about things and thinking about improving my practice. I'm quite competitive, that could be why. Even if I didn't have anything else, my work ethic has been fed into me since I was young because my mum and grandma had a strong work ethic, work has to be done and to the best of your ability all the time' (IA5).

She also went on to discuss '*blockers*', articulating that it was '*not about school culture, about the individual, not everyone has same priorities*'. It is interesting to note that this particular teacher was from Spain and appeared to be bemoaning the '*work ethic*' of some of her colleagues. Other teachers talked

about colleagues that were *'not willing to share, everyone is different down to individual personalities'* (IA1) and that different people had *'different learning styles'* (IB2).

Personal preferences for learning were also discussed. Examples included a preference for *'actually doing things practically rather than theory, learning from others, don't like planning on my own'* (IA3), *'trying things out'* (IA2), *'I like to be shown how to do things rather than just told'* (IA5), and *'I don't feel encouraged if I'm told what to do and not allowed to just get on with it'* (IB3).

There was also evidence to suggest that these individual dispositions weren't fixed and could develop over time. Examples from the teacher responses included the gaining of *'confidence from various experiences'* (IB3) whilst others talked about developing *'collaborative skills'*.

'I like to read ideas in books and try it. Different teachers learn in different ways, others like to work in collaboration, talk it through. I've had to learn to work in collaboration, got to give as well as take' (IB4).

The value of engagement in action research in positively influencing dispositions to learning was also suggested, with one teacher discussing how action research *'opened educational arguments for me, before I had a narrow confined view'* (IB2). Another discussed how *'it got me back into writing and wanting to study more'* (IA1). The relationship between action research and individual dispositions was discussed explicitly by one teacher, suggesting that some teachers may be fixed in their learning dispositions, when explaining that *'individual dispositions prevent people from accessing action research because of more immediate priorities. Haven't got time, work-life'* (IB2).

There were also reflections in the teacher responses of the value in being positive and having positive dispositions to learning. As one teacher stated, in response to a question asking her to share her negative experiences of teacher learning, there *'isn't anything negative, not useful. PDM (Professional Development Meeting) may not be relevant at the time but useful later'* (IA1). Another commented on the *'need to take responsibility for own learning'*. One

teacher felt she was more positive than others because she was at the beginning of her career in teaching.

'I'd only just qualified. We were more open to change, creativity, trying new things. Maybe different for more experienced teachers. Some teachers just don't want to share things, set in their ways' (IA4).

Conversely, one teacher also shared her own potential negativity when explaining, *'when I go into a meeting, I may be in a negative frame of mind. To do with my own attitude'* (IA3). Another teacher discussed how her positivity for learning may be inconsistent, insisting, *'it's if I've got the time and effort, sometimes I have more than at other times'* (IA6).

Evidence from the data collected in this study indicates that the extent to which teachers feel that their professional learning experiences are sufficiently relevant to their own learning needs and the needs of their children, will influence their perceptions of the value of those learning experiences. In addition, it appears that different teachers value different styles of learning and different types of learning activities, reflecting possible individual dispositions to learning.

5.4 The value of collaborative learning to teachers

The value of collaborative learning emerged as a significant theme with the majority of teacher responses (75%) across a range of questions. Collaborative learning is defined here to reflect teachers' responses that indicated the value of additional opportunities made available for teachers to work and participate in learning opportunities alongside colleagues. Responses detailed in the table in appendix 2 appear to indicate that it was considered by teachers, when discussing action research and previous experiences of teacher learning, as having a pivotal impact in influencing perceived positive experiences of teacher professional learning. In particular, the influence of institutional learning environments on teachers' learning, both in terms of the informal opportunities for learning facilitated by activities within school and formal opportunities for teacher professional learning is apparent.

When questioned about the impact of their involvement in the action research projects on their professional learning, fifteen of the twenty-four respondents across both schools spoke specifically about the positive impact of working in partnership with colleagues. A range of responses highlighted the value of this partnership working. Responses, related to action research, demonstrated that the encouragement of certain practices served to promote and establish a more positive learning environment, including opportunities to '*learn from others when you work in teams*' (IA3), '*learn from planning and working with your year group leader*' (IA4), and '*informal support from colleagues*' (IB2). In addition, a positive environment was discussed, including a '*protected environment, where you feel you can make a mistake*' (IA1) and the opportunity to '*try out different things, it's encouraged here*' (IB3). The examples indicate a range of benefits from collaborative learning, if consideration is given to the perceptions of teachers in this study. It is also worth considering, in light of these positive responses, the extent to which teachers actually feel that they get sufficient opportunities in school to collaborate with colleagues.

Action research itself does not have to be a collaborative activity, and the value of collaboration was seen by respondents to be a valuable learning activity in its own right, regardless of its relation to action research. Responses indicated the extent to which a positive school culture impacted not only on the formal activities in place to support learning, such as collaborative planning or team teaching, but also in underpinning informal opportunities for learning. This was also linked to individual dispositions for learning when working with colleagues, and the importance to teachers of '*working in teams in safe, open, trusting environment*' (IB2) and how learning '*happens a lot informally with members of own team and across the school*' (IB1). Conversely, when discussing the disadvantages of action research as a model for professional learning, problems related to the need to have '*equal input in team*' (IA5) and '*disagreements in group*' (IA6), as well as the importance of '*leadership support*' (IB1). In addition, '*organisational difficulties*' were also considered to be problematic, in terms of '*organising peer learning*' and '*additional workload*'.

However, four of the twenty-four respondents discussed the aspect of collaboration as particular to the action research project, in comparison to their previous experiences of teacher learning. The inherent value of collaboration, as distinct from the model of action research, is supported by the fact that when the teachers were asked to share the factors that had supported their professional learning and development, collaboration with peers was listed as the most popular factor. This was also related to the significance of institutional learning environments, and examples illustrated both the value of collaborative learning and the learning environment in influencing a positive school culture. One teacher (QB3) commented on the value of a *'collaborative and non-punitive school culture of high expectations for teachers'*. Another teacher (QA9) discussed the extent to which a *'supportive friendly staff team are an advantage to informal professional development'*. As one interviewee (IA3) went on to discuss,

'Sharing good practice. These are just my personal preferences. I'm not very good at initiating ideas, like the creative curriculum. But I respond very well in team situations and to the ideas of others in a safe, open, trusting environment. When I worked in a bank, it was a different type of learning, but I would still seek out advice where necessary. I like to be shown how to do something rather than just be told.'

These examples also appear to demonstrate the inter-relationship between individual dispositions and institutional learning environments. The factors that enable positive learning experiences through collaboration include: the value of high expectations; seeing good practice; supportive friendly staff; and a supportive school. Although these aspects all appear to demonstrate the value of a positive learning culture within a school, they are also dependent upon the level to which individual participants demonstrate a positive attitude to these learning experiences. The fact that words such as 'supportive' and 'non-punitive' are used may indicate that colleagues demonstrate positive attitudes to not only their own learning, but that of their peers. In addition, it could be argued that teachers would need to demonstrate positive attitudes to their own learning to see the value of seeing good practice in other classrooms.

The value of opportunities for collaboration with colleagues and collaborative learning emerged as the most dominant theme across all the responses in the interviews. Nine of the twelve teachers interviewed across both schools discussed collaboration when asked to share their more positive experiences of professional learning. Specific activities included the opportunity to *'work with experienced colleagues, advice about strategies'* (IA1) and *'team teaching'* (IA2). It was also evident from the responses that collaboration encompassed both formal and informal opportunities. One teacher discussed, the value of *'informal support from colleagues, advice and guidance'* (IB2), whilst another articulated the value of learning from *'planning and working with a Year Group Leader, gleaning knowledge from them both informally and formally'* (IA4).

For many teachers, the learning environment could also be restrictive and unsupportive in promoting teacher learning, with awareness that some colleagues are *'unapproachable'*. However, this particular teacher (IA1) also discussed how a positive learning environment was underpinned by a positive *'culture'* and how this was promoted, for example, *'in a supportive environment, I was supported, I now do the same for less experienced colleagues, everyone has to be on same wavelength, to want to share practice/strategies'*. Other teachers discussed their previous experiences of working in schools where *'staff creativity was stifled'* (IA2), and *'lack of structure to way things managed, not enough opportunities for collaborative learning'* (IB5). Another teacher (IA6) went further in making comparisons and discussed a *'much more helpful and positive school culture in school 2, few opportunities for teacher learning at previous school, everyone for themselves. If I asked for help, it may be perceived that I can't do anything'*.

It was evident that colleagues could also prove to be negative in inhibiting teacher learning. Eight of the twelve teachers interviewed across both schools mentioned colleagues, including school leaders, when sharing some of their negative experiences of professional learning. One interviewee (IA1) discussed how *'not everyone is approachable. You get to know who you can/can't talk to. Sometimes people not willing to share, down to individual personalities'*. Others discussed instances where a year group leader could restrict learning, including

'not equal input in planning' (IA4) and *'leadership set in their ways'* (A2). Opportunities for collaborative learning appear to be highly valued, and as one respondent explained, negative experiences of learning included *'not really many opportunities for collaborative learning and working with and from each other'* (IB5).

Specific activities were mentioned by teachers that involved collaborative learning, including *'peer learning'* and *'coaching'*. The key factors were the opportunities made available to see *'teachers model practice'* (IA2), *'observing someone in a safe, supportive manner'* (IB1). Central to conceptions of collaborative learning was the opportunity to engage in professional dialogue, both formally and informally, and the extent to which the school learning environment offered scope for these activities.

Collaborative learning was also specifically related to action research, with teachers discussing how it was *'great to talk about reading to see if there is a common understanding'* (IA2), and that you get to *'talk about practice'* (IA5), *'discuss strategies'* (IA6), *'share ideas and try things when implementing'* (IB6). Again, there were associated disadvantages to the action research model if collaborative learning was indirectly inhibited. For example, *'in a team, everyone needs to input, otherwise unfair'* (A3), and *'lots of disagreement in group so didn't get as much done'* (IA2). However, as one teacher suggested, *'everyone needs to learn from each other a bit more'* (IA4).

The data appears to indicate that teachers valued opportunities to collaborate and work together with colleagues, and that the model of action research enabled greater opportunities to collaborate through teacher learning activities. Evidence presented in this study has also demonstrated that the perceived success of the collaborative learning was also dependent upon how mutually supportive colleagues were. In addition, there was also evidence in the responses of teachers, that these professional conversations moved beyond being merely supportive and were challenging enough to support deeper learning. It is significant from the data that the vast majority of teachers (75%) felt that they were able to engage in more collaborative learning through action

research than their previous experiences of professional learning and that it was highly valued.

The importance of school leaders in influencing teacher learning was identified across a range of participants' responses. The value of leaders and the support of leadership teams emerged as a key aspect when respondents discussed factors that had supported their professional learning and development in the schools that they had worked. It emerged as notable both in terms of the promotion of action research and the development of an expansive learning environment. It is important therefore in any analysis of factors that affect teachers' professional learning and implications for the effective leadership of teacher learning in schools. One teacher (IB5) discussed the value of *'leadership awareness of the need for investment of time and resources for CPD'*. Equally, when discussing factors that had inhibited their professional learning and development, the perception of leadership as an important influence emerged as a key factor, with responses including, a *'lack of monitoring other than through observation'* (IB5). The concept and practice of collaboration can therefore be viewed as important, both in terms of peers, and leaders and managers. With peers, the data appears to indicate the value of sharing of ideas and learning from each other, both in terms of the action research project and teachers' prior experiences. This is also true of the perceptions detailed about leadership. However, when discussing leaders, the focus was more on the value of support, or lack of it, and the commitment of leaders to support teachers' professional learning and promote a positive learning culture.

Nine of the twelve interviewees across both schools discussed the importance of leaders, when sharing their negative experiences of teacher learning. In many cases, teachers reported the extent to which leaders influenced the quality of professional learning opportunities available to teachers, as well as the extent to which *'team work was not encouraged'* (IA2), and *'leadership make decisions, make difference to how much teachers learn'* (IB6). In terms of impact of leaders upon teachers' ability to learn, one teacher (IA6) discussed the extent to which she felt that, *'If I asked for help, it may be perceived that I*

can't do anything. There were hardly any professional development sessions in my first school.

Conversely, when discussing the advantage of action research as a model for teacher learning, two of the twelve teachers discussed the importance of leaders in promoting the model. One teacher discussed the extent to which leaders were *'important in supporting the environment'* (IB6), whilst another discussed the influence of leaders in enabling her to *'feel you can try something new, if you make a mistake it's alright. Because it's encouraged by SLT. Can try things out that haven't been dictated'*. IA2 acknowledged the social processes involved in her learning and her responses reflected the significance of the learning environment and how her experiences were very different in the different schools in which she had worked, citing the considerable influence of the head teacher in promoting the expansiveness of the learning environment. For example, she discussed the *'ethos of the school'* and the extent to which her current school promoted learning because she was able to experiment. She discussed her experiences in a different school where she felt that her creativity had been stifled, and that the head teacher was responsible for this. *'Other schools have a different school culture, it's so much down to the Head. I've worked for a Head who was very set in their ways. Teacher learning in that school was very dogmatic, this is what we do'*.

Collaborative learning was also very significant to this teacher, and this again suggests a symbiotic relationship between individual dispositions, in terms of her positive attitude to professional learning, and communities of collaborative learners. Her most positive experience of teacher learning was *'team teaching'* and the importance of *'team work'*. However, her colleague (IA5) expressed views that indicated that she had fewer professional learning needs and preferred learning by herself. IA5 discussed the extent to which she viewed herself as an *'instinctive'* learner who didn't *'like to have to follow procedure'*. She felt that engagement in action research didn't have *'a huge impact on my teaching'* and that her learning experiences in the early part of her career had been more useful *'because it feels like I've heard a lot of the things before or discovered it myself through practice in the classroom'*. IA5 felt that she learnt

by *'doing'* or through practical activities. This demonstrates that there is a difference in dispositions to learning between these two teachers. IA2 prefers to learn collaboratively, whilst IA5 prefers learning by herself. These differences in attitudes are likely to affect the extent of their relative engagement in collaborative professional learning activities.

5.5 Time available for learning

Time emerged as an important factor for nine of the twenty-four respondents across both schools, when teachers were asked to discuss their perceptions of the disadvantages of action research. Responses discussed the need for more time to engage in the action research model. The responses appear to indicate a positive attitude to the action research model, but also hint at the frustration with not having enough time to conduct that research as well as they would like. Examples included: *'not enough time to discuss ideas fully'* (QB2); *'time constraints when attempting to carry out research initiatives'* (QA12); *'in such a demanding job, there is often not the time to spend observing and reading as much as you would like'* (QA15); *'staff need time to research strategies'* (QA1); *'would have benefitted from some release time to be able to observe my class using resources, or observe children in other classes, time to do reading in school time'* (QA15). These responses could also be linked to the previous section, in terms of the need for time to collaborate, as well as the value of leadership in enabling teachers to receive that time. However, the opposite view was expressed by two respondents, who discussed the impact of the time spent in the action research projects in a negative way. They discussed the impact in terms of the perception that it took time unnecessarily away from other professional learning activities. Responses discussed the perception that time was consequently taken away from subject leaders or that the research (based on data from retrospective issues) took time away from working on more immediate issues in the classroom.

There was evidence from the interview data across both schools of both teachers' appreciation of time to support their professional learning, as well as their frustration with a perceived *'lack of time'* in inhibiting their professional

learning in schools. Time was cited as an important factor in influencing all aspects of teacher learning. One teacher discussed the *'difficulty with all the strategies is the time . . . have had too much to fit in'* (IA2). In discussing their own professional learning, teachers discussed a lack of *'time to use strategies'* (IA3) and an awareness of *'things you know you had to do, but didn't always get the time to do so'* (IB5). This aspect of having too much to do and not having the time to focus on professional learning was a key concern, with one teacher complaining that *'training courses don't have value because of lack of time. No time to embed ideas. If you spent longer on things, learning would be deeper'* (IB2). Another (IA3) talked about the perception that she had *'too much to do, don't need this. Just feels like something additional to do'*.

However, evidence from the interview data across both schools also appears to suggest that the model of action research was valued in terms of the perception that it afforded greater time for teachers to spend on their professional learning. Six of the twelve teachers interviewed specifically referred to the value of time and opportunities to focus in detail, when asked to discuss their perceived advantages of action research as a model for teacher professional learning. Examples of responses included, *'you need time to develop ideas in practice'* (IA3), *'time to share in our meetings'* (IB2), and gives you *'time to reflect'* (IB5). This aspect of time provided through action research was valued highly by the interviewees. However, time emerged as an even more influential trend when teachers were asked to discuss the disadvantages of action research, with ten of the twelve teachers specifically detailing a *'lack of time'* as inhibiting their engagement in action research. The impressions of the teachers interviewed in this sample were that the learning remained something *'additional to do'*, and that it was *'the big disadvantage . . . have to continue job as teacher and carry out research at the same time'* (IB6). It was felt that responsibilities as a class teacher impinged upon the time necessary to complete the research. As two teachers commented, *'I would have liked to do research and see impact upon teaching, but didn't have the time'* (IA1), and *'the fact that it is something additional to do . . . lack of time'* (IA4). These views were also linked, for a number of teachers, to feeling *'overworked'*. As one teacher stated, she felt

'overworked sometimes. Too much, in addition to everything else that we have to do' (IA5).

Three of the twelve teachers discussed time when asked if they would like to share anything else about action research or teacher learning in schools. Their comments were all linked by the wish to have more time in schools allocated to research. One teacher (IA2) discussed how *'valuable'* the experience was and the *'need to do it more regularly, free up a bit more time to do it . . . would be great'*. Another (IA6) discussed her *'surprise'* at her enjoyment of action research and that it would be *'good if I had additional time to do it'*.

There was also evidence from responses from both schools, and school B in particular, of the influence of government policy, and Ofsted in particular, in impacting upon the time made available for teachers' professional learning. When asked to share their positive and negative experiences of teacher learning throughout their career, five of the twelve teachers interviewed provided responses that appear to indicate the influence of government policy or Ofsted, and its mediation into schools. Four of these five respondents were from school B, and it appears that an upcoming Ofsted inspection was impacting upon teachers' perceptions of the expansiveness of their own learning, and this relates closely to findings from the questionnaire data. Two teachers talked specifically about *'external pressures'* influencing *'management'* at the school. One teacher (B1) discussed the negative experience of *'recent lesson obs in prep for Ofsted, given impression by leadership that not doing well'*, whilst another (B2) shared the perception that *'external pressures become school priorities, impede upon professional learning'*. For this teacher, the perception was that such pressures impacted upon the time given to teachers to develop learning and that *'if you spent longer on things, learning would be deeper'*. Perceptions from school B are interesting because only two of the respondents provided additional information, yet they both discussed the pressures of government policy. One respondent argued that there were *'too many things on the curriculum (government initiatives) that teachers have no enthusiasm for: APP, SATs, Phonics'*. Whilst another discussed the perception that *'roles and responsibilities of those involved in education need to be clarified*

. . . teachers should not be dictated to . . . teachers should have choices as to take up particular approaches published as 'good practice'.

Responses of teachers in this study have demonstrated that they valued the activities they participated in; collaborative professional dialogue and peer learning in particular. However, they were left frustrated by a perceived lack of time afforded to such activities. The findings in this study appear to reflect that teachers did benefit from the learning experiences and that collaborative learning did promote reflection upon practice. However, teachers also felt that their learning would have been deeper if they had had the opportunity to engage in the activities more often and in greater depth. Their frustrations were not necessarily specific to the action research model, but indicate that they wished to engage more often in particular learning activities that they had attached particular value to.

5.6. The perceived impact on teachers' professional knowledge

The key aspects of teacher learning and development that emerged as most influential from the data in this study, and they have been placed under the overarching theme of 'professional knowledge' were: the development of skills of reflection and self-analysis; the opportunities to keep up to date with current practice; the development of knowledge and understanding about strategies to support teaching and learning; and I have also included responses that indicated a 'personal development' in either thinking, mindset or motivation. An example of a definition of 'professional knowledge' is also provided in a recent BERA-RSA report (2014) that examined the literature on the role of research on teachers' professional learning and development. In it, writers argue that research can make a positive contribution to each aspect of teachers' professional knowledge, which they define to include practical wisdom, technical knowledge and critical reflection (p30).

All four of the aspects of professional knowledge, as defined above, emerged as important when respondents were asked to discuss the impact of being involved in the action research projects. Seven of the twenty-four respondents were particularly positive about the opportunities made available through action

research to try out new ideas. This indicates that these approaches would not have been available to teachers if they had not engaged in action research. An even greater proportion of respondents (33%) discussed their professional learning in specific reference to the opportunity to reflect on their practice and develop the skills of reflection. There were also specific references made to the development of knowledge and understanding. Personal impact has been coded where responses indicate a change in attitude towards teacher learning, and reveal a number of key factors and considerations that emerge as important to teachers when discussing the value of action research, and factors that they perceive to be significant in supporting their professional learning.

These four aspects of: trialling ideas; reflection; subject knowledge; and personal development, also emerged strongly in responses across several questions. The opportunity to trial change was viewed as a particular benefit, and views appear to indicate that opportunities to trial ideas and changes were seen as a specific benefit of this model of professional learning. Examples included: *'trial changes'* (QB5); *'made me try new things in the classroom when I wouldn't otherwise have done'* (QB7); *'resulting in new ideas that I wouldn't have thought of myself'* (QA9); *'using evidence and data to identify new approaches'* (QA3). The value of reflection and reflective practice emerged as the most significant theme in teachers' responses when discussing the impact on their professional learning. When detailing changes made to practice, nine of the twenty-four respondents described these changes in terms of the impact upon thinking and ability to reflect. In terms of the advantages of action research as a model of teacher learning, respondents made specific references to the value of reflection. Responses appear to indicate the value of action research as a model for professional learning that enables teachers to have the opportunity to reflect and consider their own practice.

In the interviews, teachers discussed the value of action research in terms of the development of skills and knowledge about strategies to improve teaching and learning. When asked to discuss the advantages of action research as a model for teacher professional learning, ten of the twelve teachers interviewed across both schools discussed the value of learning new strategies from

research, and the opportunity to trial those strategies in the classroom. This relationship between discussing new strategies and ideas and putting them into practice appears very important to the teachers in this survey. Examples of responses included, *'introduce new strategies and ideas in class'* (IA1), *'discuss an idea and put it into practice'* (IA3), *'impacted upon some areas of teaching'* (A6), and *'implement something new'* (IB6). Also important to teachers, in addition to this aspect of *'trialling strategies'*, was the perception that they felt it was safe to do so. This was reflected in teachers' comments that action research allowed *'people to take risks and try things they wouldn't normally do for fear of mucking up'* (IA4) and *'try things without pressure'* (IA5).

When responding to a question asking teachers to consider the advantages of research based collaborative learning, six teachers (25%) discussed the greatest advantage in terms of a personal impact and motivation. These comments were usually made in relation to teachers' perceptions of the specific value of action research in relation to their previous experiences of teacher learning. Examples included: *more personal, motivates you to get involved* (IB1); and, *changes to own attitude as teacher has raised awareness of constant learning* (IA12). The personal impact was individual to teachers and included a range of different reflections and experiences. However, they do appear to indicate the particular value to teachers of engagement in this learning model in impacting upon teachers at a personal and motivational level. Examples discussed an impact on motivation, confidence, freedom to take risks, and intellectually challenging.

In discussing factors that had inhibited their professional learning in their careers, responses included the importance to teachers of *'feeling valued or appreciated'* and *'you lose motivation to improve'*. Individual dispositions were also considered in two of the earlier themes that emerged from the data: the importance of personal relevance; and, the value of collaboration and collaborative learning. It is worth noting the interrelatedness of the themes discussed in this chapter as there is a link between teachers' perceptions of added motivation at a personal level and how this directly related to the action

research model potentially providing a more relevant and personalised learning experience.

Four of the twelve teachers interviewed across both schools made specific reference to an increased awareness and reflection upon practice as a result of engaging in action research. One teacher claimed that it had '*opened educational argument for me, before I had a narrow confined view*' (IB1), whilst another discussed how the concept of the '*reflective teacher . . . appeals to the professionalism of people*' (IB2). A further teacher (IB5) explained how the reflection upon practice '*wouldn't have happened without action research . . . enabled me to examine practice, see big picture, analyse it, and change practice to support children*'.

5.7 Conclusion

The conceptual framework used to guide the empirical work for this study was designed in order to gain new understandings of the factors that teachers perceive to affect their professional learning in primary schools. What has emerged in this study is that most teachers value the opportunity to engage in action research. In the majority of cases, teachers valued action research as a model for teacher learning, and opportunities for collaborative learning and professional dialogue were particularly highly valued. However, the perceived impact of their engagement in action research is seen to be dependent on a number of key factors. The findings in this chapter have demonstrated that these key factors will need to be taken into consideration when planning for both teacher engagement in action research and wider professional learning opportunities.

What emerged as particularly important was the extent to which these factors are influenced by: pressures of instruments of government policy, such as Ofsted; the differing institutional learning environments in which teachers had worked in and experienced, particularly influenced by school leaders; and their own individual dispositions to learning and those of their colleagues. The tensions between these levels of influence were evident, for example through the allocation of time for professional learning activities. The factors included:

learning activities that are relevant to teachers' individual learning needs; opportunities for collaborative learning activities with colleagues; school leaders that promote activities at school that facilitate a positive formal and informal learning environment; and additional time is made available for teacher learning. These factors are considered to be of value to teachers' perceptions of their engagement in action research, and an important task for the teachers in this study was therefore to ensure that their professional learning activities took these factors into consideration.

These research findings and their implications for the leadership of teacher learning in schools and the value of action research will be discussed and critically analysed in chapter 6. This analysis will consider the learning from this study in relation to the key factors that impact upon teacher engagement in action research and implications for the leadership of teacher professional learning in primary schools.

Chapter 6: Discussion

6.1 Introduction

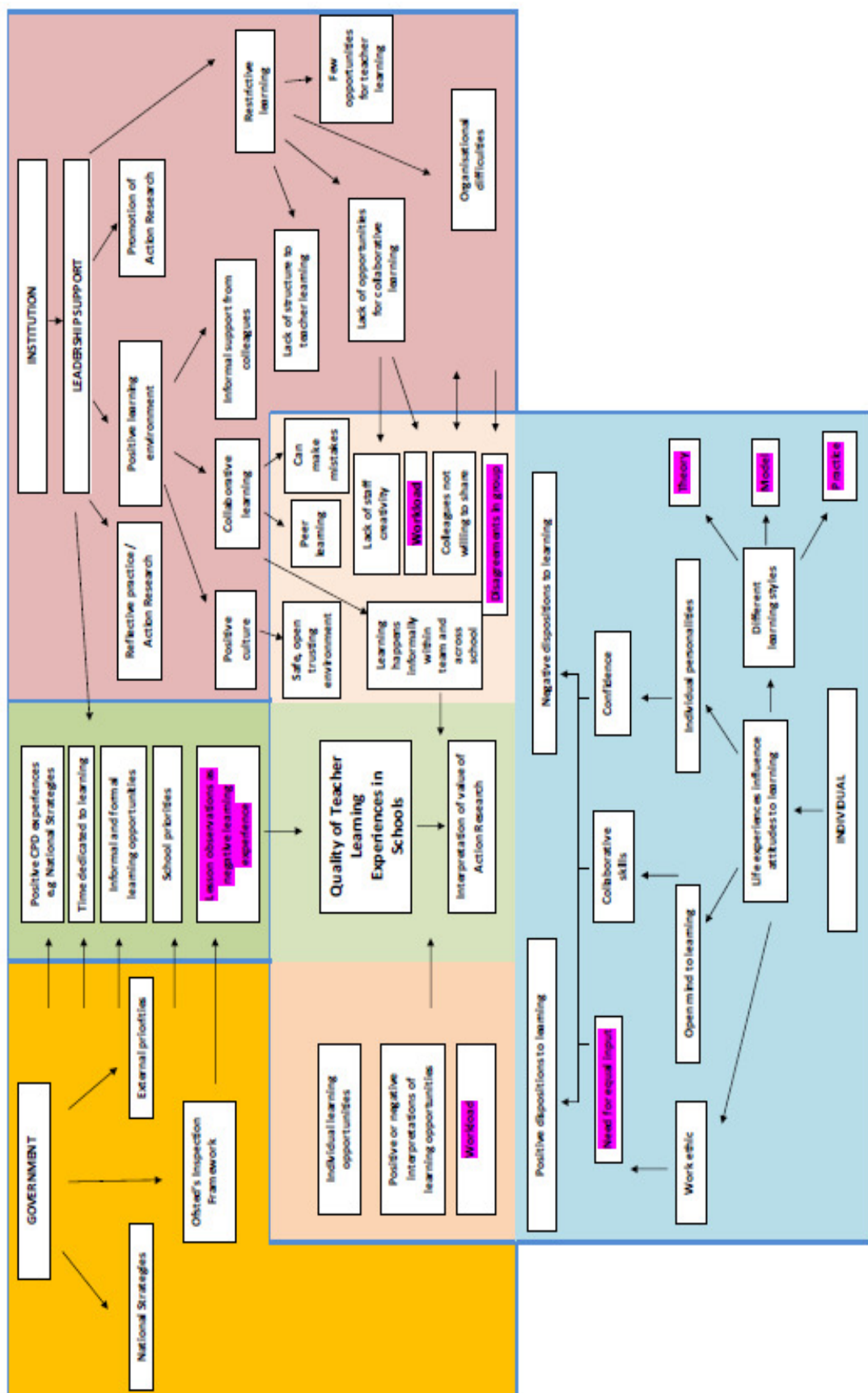
This thesis has explored primary teachers' perspectives on the value of engagement in action research and the factors that influence their engagement in professional learning activities in primary schools. Within this chapter, I will discuss the main findings of this study and consider how they relate to theoretical literature and previous studies of action research and teacher learning in schools. Furthermore, the findings will facilitate a discussion of the factors that teachers perceive affect their professional learning, and the implications of this for schools. The research findings will be discussed in terms of how engagement in action research can impact upon individual teachers within primary schools. The issues discussed in this chapter are based upon my exploration of the teacher responses, in relation to both teacher research and wider opportunities for professional learning. The findings from the collation and interpretation of data in chapter 5 are presented in a revised conceptual framework in figure 6.1. This revised conceptual framework represents my contribution to the field of research on teacher professional learning in primary schools. These findings will be further interpreted to provide a model for teacher professional learning in chapter 7.

This chapter begins with an evaluation of the extent to which the findings relate to the conceptual framework presented in chapter 3.

6.2 Revisiting the conceptual framework

The initial conceptual framework for this research implied that the learning opportunities made available in schools were dependent upon influences at three levels: government policy, the institutional learning environment, and individual dispositions. The findings from the collation and interpretation of data in chapter 5, in terms of teacher professional learning, are represented in a revised conceptual framework in figure 6.1 below.

Fig 6.1



The changes made to the framework are important because they represent the resulting conceptualisation of the interrelated influences that are considered to impact upon teacher professional learning experiences in the schools in this study. Specific elements that emerged from the data and that were different from the original conceptual framework are highlighted in red. The interrelationship of influences was presented in the conceptual framework for this study as complex and messy, and that there were inherent tensions at play between the three levels of influence. For example, in the same manner in which leaders in schools are in a position to make decisions about the implementation of national policy and strategies, individual practitioners are equally in a position to make decisions about the extent to which they genuinely accept and promote school policy. Evans and Kersh's (2004) study on the impact of workplace environments on learning demonstrated how individuals are in a position to influence the expansiveness of their learning environment through their collaboration in and contribution to workplace learning activities. This study, as well as the research of others (see, for example, Hardy, 2011; Darleen and Pedder, 2011; Hodkinson and Hodkinson, 2004) demonstrated the reciprocity between the contexts of government policy and school learning environments, school learning environments and individual dispositions, and even government policy and individual dispositions.

Analysis of the data presented in this study has demonstrated that the teachers did mediate the range of influences and learning opportunities that they engaged in. The evidence indicated that teachers were influenced by the culture of performativity in schools, particularly in terms of the expectations on their performance, as determined by the national standards for all teachers. In addition, they were influenced by associated instruments of government policy. The primary instrument presented in this study is the influence of Ofsted, as a mediator and regulator of national policy. However, teacher responses in this study have indicated that they have individual agency in the extent to which they interpret the learning activities that they participate in.

The original conceptual framework reflected that there are considerable limitations upon school autonomy in relation to teacher learning. Schools have

been under considerable pressure from School Improvement Partners (now known as Associate Advisors) appointed by the Local Authority, as well as expectations for Ofsted inspections. School leaders are expected to demonstrate effective practice to these advisors, and this practice is defined through national expectations that influence the learning activities that teachers engage in. The original conceptual framework conceptualised the extent to which national policies are mediated by school leaders, and the conception therefore is that their implementation can differ from school to school, depending upon school leaders and the community of learners. As detailed in chapter 3, government policy in this study is defined primarily through centrally produced national strategies for teacher learning and the influence of Ofsted as an instrument of government policy to regulate expectations and standards in schools.

One of the differences in the revised conceptual framework for this study is the perceived importance to teachers of lesson observations as negative learning experiences for teachers. Teachers in this study felt that pressures from Ofsted influenced the narrow promotion of lesson observations as a performativity mechanism rather than a learning tool. This was seen to be important to teachers in this study because it was implied that preparation for and outcomes of these judgemental lesson observations impacted upon teacher engagement in professional learning. These judgements then impacted upon the range of professional learning opportunities that these teachers were then allowed to participate in. This implies an influence at a national and institutional level. Preparations for Ofsted are perceived to be so influential to school leaders that they mediate the expectations of the Ofsted framework when determining the professional learning activities for their staff. Reflections from teachers in this study indicated that this led to a narrowing of the learning opportunities made available to them.

The review of literature indicated that the extent to which national policies and expectations for Ofsted are mediated and interpreted by school leaders differs from school to school. The interpretation and enactment of these national expectations is conceptualised in the framework as a dynamic and complex

process. Evidence from research (Hodkinson and Hodkinson, 2005; Hardy, 2008; Eraut, 2004; Kemmis, 2010; Darleen and Pedder, 2011; Howes et al, 2005) has demonstrated that schools did take opportunities to make decisions for themselves in terms of their responses to Ofsted or the demands of national policy. Teachers in this study made links to the national expectations through Ofsted and discussed the associated workload pressures. Workload pressures were seen to be important for teachers in this study both in terms of their engagement in action research and wider learning opportunities. The interpretation of their workload pressures was individual to each teacher and this may reflect their individual dispositions to learning.

Although the evidence of workload pressures appears important to teachers in this study, the impact upon their engagement in learning was individual to each teacher. It is prominent in the revised framework because the evidence indicates that teacher concerns regarding workload need to be taken into consideration when planning for teacher learning, particularly in terms of allocating time dedicated to professional learning activities. The fact that its influence is different for each teacher implies that schools can make decisions in mediating pressures from Ofsted when designing opportunities for learning. In addition, considerations regarding the designing of the learning environment can serve to promote teacher learning opportunities and minimise workload pressures. An example would be to allocate time during the school day for teachers to engage in collaborative learning activities. Examples from the data in this study have indicated that schools also have agency in their decision-making in relation to the performativity agenda. One example would be the use of lesson observations and performance management as learning tools rather than performance measures. It is also worth considering that school leaders also have individual dispositions to learning and this will potentially impact upon their interpretation and mediation of policy instruments, and the designing of the institutional learning environment.

In chapter 2, I discussed the value to schools of considering the extent to which the learning environment provides opportunities for informal learning. Lave and Wenger's (1991) theory of communities of practice was critiqued and evidence

was presented to demonstrate that teachers could simultaneously be operating within communities of practice and communities of learners. Analysis of the data has demonstrated that there were examples of teachers working within communities of practice, for example in year group teams. However, the data can also be interpreted to build upon the work of Lave and Wenger to demonstrate that the expansiveness of the learning environment within a school influences the extent to which teachers are additionally operating within informal communities of learners. An example of the value to teachers of communities of learners was evident in the way in which so many teachers valued opportunities to learn through collaboration. Collaborative learning was viewed by teachers in this study to be the most important learning activity that they experienced in school, and was particularly valued as a specific aspect of the model of action research. Evidence from this study has demonstrated that for collaborative learning to be successful, teachers need equal input into the learning activities that they participate in.

Research (see, for example Hodkinson and Hodkinson, 2004; Fuller et al, 2005; Evans et al, 2006) was presented in the literature review to demonstrate the impact of individual dispositions on teachers' perceptions of and engagement in professional learning activities. It was demonstrated that an individual teacher's dispositions to learning will influence their interpretation of the teacher learning activities on offer, and that this interpretation works in a dynamic process. The institutional learning environment can have a positive or negative influence on dispositions to learning and vice versa. For example, Ball et al (2011) have argued that centrally designed policies are only ever part of what teachers do and that they have individual agency in making decisions in their classrooms.

The data in this study has demonstrated that even with such a highly valued model of learning such as collaboration, teachers have agency in the extent to which they elect to engage in the learning activities. The data in this study indicates that for collaborative activities to be successful in engaging all participants, the learning has to be both relevant to the individual teacher's needs and that all participants need to have equal input and voice in planning and designing the learning. Responses in this study also indicate the significant

importance to teachers of having learning opportunities that sufficiently reflect their preferred learning styles, and that are personalised to their individual learning needs. These preferred learning styles may reflect their individual dispositions to learning, which have been shaped by their prior workplace learning experiences. This again could represent a dynamic relationship between the expansiveness of the learning environment in shaping individual dispositions to learning.

The evidence from this study may indicate that individual teachers' dispositions to learning could potentially be more important in shaping their interaction with professional learning opportunities than institutional learning environments. In terms of school leadership (Marsick, 2009) therefore, consideration needs to be given both to teachers' individual dispositions to learning when structuring and designing learning activities, and also the promotion of learning activities that develop these dispositions (Senge, 2005). Evidence from the data in this study indicates that the learning environment potentially impacts upon teachers' dispositions to learning, and that these dispositions to learning also impact upon the expansiveness of the learning environment, and this relationship was reflected in the research literature (Darleen and Pedder, 2011). Both the conceptual framework and the revised framework reflect the individuality of school learning environments and the importance of informal learning opportunities. Teacher responses in this study indicated a positive impact of engagement in action research on informal opportunities for learning (Lyle, 2003). Responses indicated that schools differ in the extent to which they provide a learning environment that supports formal and informal learning opportunities (Fuller and Unwin, 2004, 2006).

The findings from this study have confirmed that teacher learning experiences in schools are influenced by instruments of government policy, institutional structures, and individual dispositions to learning.

6.3 Three levels of influence on teacher learning

6.3.1 Government policy

As highlighted earlier, for the purpose of the discussion in this chapter, I have used the term government policy to focus primarily on Ofsted as a mediator and regulator of wider national strategies and policies. Research literature presented in chapters 2 and 3 (Hardy, 2008; Eraut, 2004; Kemmis, 2010; Darleen and Pedder, 2011; and Howes et al, 2005) implied that although schools were influenced by government policies and strategies for teacher professional learning, they also had relative autonomy in mediating and interpreting these policies in relation to the activities that took place in schools. Figure 6.1 reflects the findings from this study and develops the initial framework in demonstrating that the teachers did not connect the promotion of action research with government policy. They felt that it was the school and the leadership team that were influential in promoting action research, and that school leaders were responsible for making decisions regarding teacher learning. In terms of the influence of government policy in this study, of primary concern was the influence of Ofsted as an instrument of government policy and the inspection process. This was considered to be a specific tool of government policy, and influential in potentially limiting learning opportunities. Although responses from teachers reflected that schools were able to mediate government policies such as the national strategies and make decisions accordingly, the requirements of Ofsted were influential in both informing and directing the learning opportunities in schools, as well as limiting the formal and informal opportunities made available for learning. This relationship is reflected in the revised framework in figure 6.1 as the perceived direct influence on teachers of Ofsted promoting lesson observations that were conducted in a judgemental way and provided a limited and negative learning experience for teachers. As we saw in chapter 5, teachers discussed the influence of Ofsted in impacting upon the learning opportunities made available to teachers. The original conceptual framework presented the influence of government policy in the relatively narrow promotion of teacher learning activities. Responses in this study have demonstrated that preparation for an Ofsted inspection impacted not only upon the learning

activities teachers participated in, but also the perceived negative impact upon teachers of judgemental lesson observations for teachers.

The responses of participants in this study demonstrated that they viewed the influence of Ofsted to be important in impacting upon school priorities and the direction of teacher learning. Teachers' responses, particularly when asked to consider all their prior experiences of working in schools, did indicate that learning environments in schools could range from 'restrictive' to teacher learning to 'expansive' learning environments that are more positive in promoting teacher learning, and this relates strongly to research literature (Hodkinson and Hodkinson, 2005; Fuller and Unwin, 2004). This appears to support the conception of the initial framework that school leaders held influence over the mediation of policies and their subsequent introduction into schools (Ball et al, 2011). It was evident in the last chapter that specific references were made by teachers to different types of leaders and their different approaches to the promotion of teacher learning strategies in schools. This indicates that school leaders can make decisions in mediating both the performativity agenda and expectations for Ofsted in designing the learning environment to be more or less expansive. Teachers' experiences of a range of institutional learning environments indicate the influence of schools in interpreting and mediating the expectations placed upon them.

The revised conceptual framework demonstrates that teachers interpreted expectations for quality teaching to reflect the design of the Ofsted Framework and that the combination of Ofsted as an instrument of government policy and centrally designed strategies influenced the quality and quantity of collaborative learning experiences in schools. The data in this study reflects that individual teachers still had agency in mediating government policy and interpreting the value of teacher learning strategies (Ball et al, 2011). The reflection from the data that teachers viewed the school as responsible for teacher learning activities in schools rather than government policy indicates that for many teachers, the influence of government policy was almost de-emphasised and taken for granted. For example, although teachers discussed national strategies, they were unaware of the ideologies about teaching and learning

that informed these strategies. They discussed 'external priorities' in influencing the learning opportunities made available but there is very little reflection upon the extent to which these external priorities were directly linked to central ideologies or policies. This indicates a level of compliance in that the influence of government policy, through policies such as national strategies, national standards for teachers and performance management, is so great that its place in influencing teachers' learning is accepted without question.

Teachers take for granted how government policy through strategies for CPL influences teacher learning in schools, and that they are absorbed into this compliance because of the way in which national policies have been mediated into schools. School leaders are undoubtedly influenced by government policy and all schools have to ensure that guidance from Ofsted is followed. However, it needs to be acknowledged that teacher professional learning occupies one of the spaces that are devolved to schools to make their own decisions on. Teacher learning remains the responsibility of the school and although Ofsted are judging the quality of pupil achievement and teaching, they are not required to make any judgement as to the means by which this pupil progress is achieved or the quality of teacher learning.

The negative experiences of lesson observations presented in this study indicated that teachers viewed them to be as a direct consequence of preparations for Ofsted inspections, and teachers discussed how collective preparation for such inspections would override any emphases on collaborative learning experiences. Teachers viewed Ofsted as the most influential and central component of government policy, and reflections indicated that they perceived Ofsted influenced teacher learning. It was felt that the inspection regime did not value learning over time and was only interested in outcomes. Responses also indicated that external priorities and policies had a direct influence on teacher workload (this is highlighted in figure 6.1) and that this influence was perceived to be negative. It was suggested in chapter 3 that government policies were potentially mediated at both an institutional and individual level (Ball et al; Hodkinson and Hodkinson, 2005; Darleen and Pedder, 2011). Evidence in this study indicates that teachers do make individual

interpretations of their engagement with centrally designed CPL strategies. This is represented in figure 6.1 by the fact that teachers also discussed their positive experiences of engagement in national strategies. This demonstrates that centrally designed strategies were viewed by many teachers as providing a positive learning experience for teachers. There is evidence to indicate a level of compliance in that there is an expectation among teachers that it is the responsibility of government to inform what and how teachers should teach in schools. However, the school is viewed as responsible for teacher learning. Evidence from data in this study illustrates that perceptions of the potential influence of government policy go beyond centrally designed strategies and that external priorities directly and indirectly influence: formal learning opportunities; informal learning opportunities; school priorities; teacher learning opportunities in schools, such as lesson observations; workload; and individual learning opportunities.

6.3.2 Institutional learning environments

The initial conceptual framework implied that school leaders were able to make individual decisions on both the formal opportunities made available to teachers as well as the environment in place to support informal learning (Fuller et al, 2005; Hodkinson and Hodkinson, 2004, 2005). Institutional learning activities, as depicted in figure 6.1, include: structured teacher learning opportunities, such as action research; peer learning; collaborative learning activities, for example shared collaborative planning in teams; teacher learning related to pupil needs and day-to-day practice; opportunities to model and see teachers model practice; and non-judgemental lesson observations. Institutional decision making was seen to influence the expansiveness of the learning environment (Evans et al, 2006; Burns and Haydn, 2002) and this is also reflected in the revised framework.

The revised conceptual framework for this study reflects that this relationship between engagement in learning activities and the expansiveness of the learning environment is a dynamic process. Evidence from this study suggests that engagement in activities such as peer learning both support the

development of a community of learners and also potentially impact on individual dispositions to learning. The findings from this study reflect the influence of the institution in determining the expansiveness of the learning environment (Li, 2008; BERA-RSA, 2014) and the learning opportunities made available to teachers. Activities, such as opportunities for collaborative planning, are valued highly and also perceived to be influential in promoting a positive culture for learning within schools, and this relates closely to research literature (Darleen and Pedder, 2011; and Jurasaitė-Harbison, 2009).

Responses also demonstrate that although it was seen by teachers in this study to be a more collaborative model for teacher learning, a school would not need to deploy action research necessarily in order to develop a collaborative learning environment. The fact that collaborative learning emerged as such an influential positive factor for teachers in this study suggests that schools may need to evaluate the expansiveness of their learning environment and the extent to which they are developing a community of learners in their schools. This may be of greater importance than implementing action research, particularly when considering the value to teachers of engagement in informal learning opportunities. School leaders are therefore in a position to mediate the expectations placed upon them to design professional learning opportunities that enable teachers to engage in professional dialogue and learn collaboratively with and from each other.

One aspect of action research, in that there is an explicit focus on a particular topic of learning sustained over time, appeared to be highly valued in the data collected for this study. Teachers' perceptions clearly indicated the need for more time to effectively undertake research. The evidence discussed indicates that time is an important factor in facilitating the effective motivation of all teachers within a school. Many of the comments of teachers in this study reflected a tension between valuing the positive aspects of engagement in action research and experiencing a frustration with managing the day-to-day tasks of the job. Responses demonstrated that in this study, action research was perceived to be positive in motivating teachers to engage in learning activities. However, the perception amongst teachers was that they would have

valued more time to enable them to undertake that research as effectively as possible. In terms of the conceptual framework, teachers' perceptions indicate that they feel it is the responsibility of the school to provide time for teachers to engage in professional learning activities, and that time is important in teachers' perceptions of the effectiveness of their learning in schools.

It is also worth noting the influence of leadership in developing and promoting this positive learning environment. The influence of school leaders concurs closely with evidence presented in the literature review that detailed the importance of leadership in modelling and promoting a collaborative learning culture (Eraut, 2004; Macgilchrist et al, 2004). Key factors that were identified in the research literature as important in influencing the expansiveness of the learning environment in schools were reflected in the evidence produced in this study. These factors included; the quality of working relationships (Elliot, 2007); formal and informal activities in place to support learning (Fuller et al, 2005; Fuller and Unwin, 2004, 2005; Pedder et al, 2005); and the quality of leadership (Marsick, 2009). The evidence was in teachers' responses that discussed the learning environment in their current schools in comparison to their previous experiences. This concurs with evidence presented in the literature review that indicates that some schools are more supportive of teacher learning than others (Hodkinson and Hodkinson, 2004). School leaders make decisions when designing professional learning opportunities that determine the expansiveness of the learning environment.

The evidence from the data in this study indicates that teachers perceive the institution to have a strong influence upon the learning opportunities made available to them in schools. As represented in figure 6.1, teachers' responses acknowledged the value of informal support from colleagues and collaborative learning experiences that resulted from positive and expansive learning environments in schools. This was acknowledged not only in terms of the formal teacher learning opportunities made available, but particularly in enabling informal learning opportunities within a safe and trusting environment. This demonstrates the influence of the workplace learning environment in supporting the development of a community of learners. In this aspect, evidence indicates

that teachers could potentially be working simultaneously within communities of practice and communities of learners as part of a wider expansive school learning environment. Teachers' responses reflected the importance of learning that happened informally within year group teams and across the school. Responses also indicated teachers' experiences of more restrictive learning environments, where teacher learning was restricted by organisational difficulties or lack of opportunities, and these negative perceptions were seen to be as a direct result of decision making within the institution, particularly by school leaders. The learning environment is influential in determining the formal and informal learning opportunities made available to teachers in schools.

6.3.3 Influences of individual dispositions on teacher professional learning opportunities

Evidence from the data in this study builds on the findings from Hodkinson and Hodkinson's (2004) study and indicates that individual dispositions are a potentially more important factor than instruments of government policy and institutional learning environments in influencing teachers' perceptions of their engagement in teacher learning. In relation to this study, the evidence appears to suggest that individual dispositions are also important in influencing teachers' positive or negative perceptions of the value of action research. Hodkinson and Hodkinson (2004) have shown that individual dispositions are partly constructed through individuals' experiences in the workplace, as well as their own life experiences. Examples from responses in this study indicated that the teachers who did not appear to value action research did so because of the comparisons they made to their prior workplace experiences of learning.

The influence of individual dispositions was reflected both in comments teachers made about their own learning experiences as well as comments about the dispositions to learning of their colleagues. Examples included colleagues that teachers were not prepared to approach because they were not open and collaborative in their planning and learning. This included peers as well as leaders. This is represented in figure 6.1 as the potential to limit the perceived positive impact of collaborative learning experiences as a result of

disagreements within a team of teachers, or colleagues who demonstrated a lack of creativity or were not willing to share (Sneider and Lemma, 2004). The evidence from this study indicates that individual dispositions are potentially influential to teachers' engagement in the learning opportunities on offer in schools. Examples of these dispositions emerged in the themes presented in chapter 5 and included: a preference for particular learning styles, for example some teachers in the study preferred practical examples; work ethic, with some teachers claiming to work harder than colleagues in terms of their professional learning; the extent to which teachers were willing to collaborate; and self-motivation as learners.

Teachers therefore have individual agency in the extent to which they elect to engage in the learning opportunities on offer, and their engagement is dependent upon the extent to which the design of the activities reflect their preferred learning styles. Analysis of the data suggests that these preferences are partly influenced by their prior workplace learning experiences. Additionally, there is evidence to indicate action research could be used by schools to develop a more expansive learning environment in promoting formal and informal learning, and impact positively on individual dispositions, which concurs with research (Altrichter et al, 2008; Marsick, 2009). However, it remains questionable as to the extent to which this would have an equal positive impact on all teachers.

There was evidence in this study of the ways in which individual dispositions influenced teacher learning experiences, and these are presented in the revised framework: lack of staff creativity; colleagues not willing to share; and disagreements in group. An important factor to teachers was the need for their learning opportunities to be personalised and relevant to their own and their children's learning needs. This was linked to teacher motivation and an addition in the revised framework is the perceived need for teachers to have professional learning opportunities that reflect their preferred learning styles. Examples highlighted are the opportunities made available for teachers to learn from theory, from modelling, and through experimentation with practice. It is worth noting the interrelatedness of the themes discussed in the previous

chapter as there is a link between teachers' perceptions of added motivation at a personal level and how this directly related to the action research model providing a more relevant and meaningful experience. In addition, the personal impact is also related to the value of collaboration and collaborative learning to teachers and their motivations. Personalisation and relevance appear to be important factors in engaging all teachers. Figure 6.1 demonstrates that for teachers in this study, reflections were made about colleagues learning in different ways and preferred learning styles. This was also interpreted in terms of the extent to which some colleagues were viewed as having negative attitudes to learning or not having an open mind to new learning experiences.

Evidence presented in this small-scale study is not conclusive enough to suggest that individual dispositions, in terms of their prior life and work experiences and attitudes to learning, will fundamentally impact upon all teachers' engagement in professional learning. However, there was enough evidence in teachers' responses in these two schools to indicate that attitudes to learning and individual personalities are perceived to be important in influencing teachers' engagement in learning (Marsick, 2009). In the literature review, evidence was presented to demonstrate that these individual dispositions were not fixed and attitudes to learning could shift and develop as part of their work and life experiences (Billett, 2001). In addition, research literature (Gewirtz et al, 2009) suggested that engagement in action research enabled the development of individual dispositions as teachers gained confidence and became more positive about their learning. The evidence available from teacher responses in this study appears to suggest that this was also the case for a number of teachers in these two schools. Examples included a teacher who had '*gained more confidence from various experiences*' (B3) and another who had '*to learn to become more collaborative*' (B4).

Some teacher responses indicated that attitudes to learning could be inconsistent. However, the evidence presented in this study indicates that dispositions to learning are individual. Therefore, to enable professional learning to be as effective as possible, collaborative action research undertaken in schools might benefit from considering strategies to engage and value these

individual learning styles (Evans et al, 2006). Some evidence has been presented both in the literature and in this study to indicate that engagement in action research can have an impact in motivating practitioners and developing positive dispositions to learning. However, it also indicates that some teachers may always prefer other models of professional learning. For example, it could be argued that the teacher (A5) in this study who prefers one-off sessions of professional learning may continue to prefer that model throughout his or her career.

6.4 The value of action research in relation to the conceptual framework

When discussing the findings, it is important to define to what extent action research has impacted upon teacher learning in these two primary schools, and to what extent it is the wider activities involved in undertaking action research that are perceived to be influential. In this section, I will specifically discuss the perceived value of action research, as reflected in the findings, in relation to the influences on teacher learning of: government policy; institutional learning environments; and individual dispositions to learning.

The literature review in chapter 2 detailed consensus on the potential value of action research in: its accessibility for teachers; improving practice; related impact on pupils, parents and colleagues; ability to stimulate and sustain teacher reflection on learning; developing teacher autonomy and professionalism; supporting individual, institutional and cultural change; supporting teachers' wellbeing and personal development. All of these factors can be related to the conceptual framework, and specific findings related to engagement in action research will be highlighted here. In terms of government policy, the biggest perceived impediment to teachers of successful engagement in action research was a 'lack of time' allocated in schools. This was also related to the perceived lack of value afforded to action research in traditional models of teacher learning in schools, and that this was directly attributed to governmental influences on CPL strategies in schools. It was felt that 'external pressures' influenced the extent to which schools felt they had agency and could promote action research as a model of 'learning over time', and that

action research would struggle to have ultimate priority for schools who were more concerned about preparation for Ofsted.

This reflects the priority for schools to prepare for Ofsted inspections and that this implicitly directs schools to divert resources away from deeper professional learning opportunities such as action research, in favour of short-term measures such as external one-off courses. There would have to be a greater recognition at a national policy level, including the framework for inspections, if the impact of engagement of practitioners in action research is not to continue to be stifled. However, there is also evidence to suggest that action research can empower teachers in developing their professional knowledge and expertise and dispositions to learning, as well as an associated development in confidence. It could be argued that this would consequently empower and enable individuals and groups of teachers to more effectively mediate government policy and centralised strategies and inform practice within their institutions.

There is plenty of evidence from the findings to suggest that engagement in action research can have an associated impact on both the expansiveness of the institutional learning environment, and individual dispositions to learning. The evidence clearly indicates that engagement in action research enables greater opportunities for collaborative learning, and that collaborative learning has the potential to positively impact upon the expansiveness of the learning environment and individual dispositions to learning. It is worth noting that teachers valued all opportunities to participate in collaborative learning activities, regardless of whether or not these activities were part of an action research project. Teachers valued the opportunities made available to learn from each other in teams and also in collaboration with leaders. Evidence suggests that the encouragement of such practices served to promote and establish a more positive learning environment.

Central to teachers' perceptions of collaborative learning was the opportunity to engage in professional dialogue, both formally and informally. Evidence in this study indicates that engagement in collaborative learning enables the development of positive individual dispositions to learning, as well as the

development of an expansive learning environment. This is a dynamic process and specific collaborative activities such as peer learning, coaching, collaborative planning and modelling practice, enable the development of individual dispositions and informal learning within the institution. Action research, with its further emphasis on collaborative learning, therefore has the potential to complement and develop existing activities in place that constitute the expansive learning environment. This 'expansive environment' within these two primary schools also included the specific value to participants of engagement in action research that was directly relevant to the context within which they were working, as well as the value in taking risks and being creative with practice.

The specific elements of action research, as experienced by teachers in this study, have the potential to provide a more relevant and meaningful learning experience for individual teachers. There is also a link between engagement in action research and teachers' perceptions of added motivation. Other significant motivating factors included the value of learning over time and greater relevance. Opportunities to take risks and to reflect and consider own practice was also considered to have an associated impact on motivation, confidence and the value of intellectual challenge. This dynamic process is therefore represented by the development of motivation and confidence, through engagement in action research. It would appear that this development has the potential to impact positively on individual dispositions and that this has a dynamic effect on institutional cultures of collaboration and the expansiveness of the learning environment.

Engagement in action research can have a positive effect on teacher learning, in relation to the interrelationship of influences of government policy, institutional learning environments, and individual dispositions to learning. Through engagement in the activities associated with action research, I would argue that individuals and groups of teachers are empowered to mediate the demands of government policy to meet the specific learning needs of both staff and children within the institution. In addition, engagement in these activities can also impact positively on teachers' individual dispositions, as well as formal and informal

activities, to enable the development of a more expansive learning environment. However, I would also suggest that a school will not need to necessarily engage in action research to benefit from the range of activities detailed in this section.

6.5 Conclusion

Within this chapter, I have discussed the main findings of this study and considered them in relation to the literature review and conceptual framework presented in chapters 2 and 3. Teachers in this study perceived that the opportunities made available for collaborative learning was a significant positive aspect of engagement in action research. However, the perceived value of engagement in action research was dependent on the time available to conduct and engage in research effectively and the extent to which the study was relevant and contextualised to teachers' own learning needs as well as their pupils' learning needs.

The interrelationship of instruments of government policy, institutional learning environments and individual dispositions in influencing teacher learning was represented in figure 6.1. The data discussed in this chapter appears to indicate that for these two schools, individual dispositions were more significant in influencing teacher perceptions of their learning than government policy and institutional learning environments. However, there was evidence to indicate that government policy and institutional learning environments do influence teacher perceptions about their professional learning experiences and engagement in action research. The findings suggest that individual teachers are influenced by government policy, institutional learning environments, and individual dispositions, in very different ways. The interrelationship of influences is presented as messy and complex. However, I would argue that schools are in a position to mediate the influence of instruments of government policy, determine the expansiveness of the institutional learning environment, and design learning opportunities that take into account individual dispositions to learning.

In terms of the revised framework in figure 6.1, an analysis of all the teacher responses in this study is reflected to detail the relative influences upon teacher

learning in schools. The framework suggests action research can potentially be utilised in schools to provide a relevant and meaningful learning experience for teachers. There is also evidence to suggest that action research can be influential in mediating government policy and supporting the promotion of an expansive learning environment, as well as the development of positive dispositions to learning. However, it is worth questioning to what extent action research enables this positive difference and whether or not any type of research based learning may be equally effective.

The next chapter examines the conclusions that can be drawn from the research, and outlines the recommendations that can be made for national policy for teacher learning in schools and the factors that can inform school leaders in maximising teacher learning opportunities in schools. I will also discuss my own learning as a researcher and school leader with specific responsibility for teacher learning.

Chapter 7: Conclusions and Recommendations

7.1 Introduction

Findings from this thesis illustrate the complexity of factors that influence teacher learning experiences in primary schools. In particular the research evaluated new understandings of teachers' perceptions of all the factors that influence their learning experiences in schools. I have conceptualised these factors to present a model for the provision of teacher learning in primary schools to promote positive formal and informal learning activities. Within this chapter, I will address the findings of the study in relation to the research questions and will discuss what can be learnt about promoting teacher learning in primary schools. The concept of a 'dynamic learning community' is presented as a model for schools to consider when designing a whole-school programme for teacher professional learning that promotes both formal and informal learning for teachers.

Subsequent sections identify and discuss the limitations of the empirical work undertaken during the course of this study, and the contribution made by this thesis. I will also present my recommendations for future research and discuss my personal reflections of my own learning during the undertaking of this study.

7.2 The research questions revisited

This research developed during my professional life as a school leader responsible for teacher learning. I wanted to know how I could create an environment in primary schools which would maximise teacher professional learning experiences. The main focus of this research then has been an investigation of the value to teachers of engagement in action research as a model for teacher learning. Through this journey, I discovered the Importance of situated learning and the extent to which the learning environment in schools impacts upon teacher engagement in both formal and informal learning activities. I commenced this research at a time when interest in teacher engagement in research was being promoted at a national level. In the time

since, despite great educational change, there has been no identifiable increase in teacher engagement in action research in primary schools in England. A summary of the key findings in relation to the three research questions is provided below.

1. What do teachers consider to be the advantages and disadvantages of action research?

Evidence in this study indicates that for the overwhelming majority of teachers, their response to the model of action research was positive. The key advantages identified included: opportunities to learn and trial new strategies in their classrooms that they would not otherwise have had the opportunity to do; the value of learning that was personally relevant for each teacher and that was directly linked to their own class; the value of collaborative learning activities specific to action research, for example reading together; more time allocated for deeper learning with an explicit focus through action research on a particular topic of learning sustained over time; the development of skills of reflection and self-analysis, and opportunities to keep up with current practice and knowledge about teaching and learning; and personal development in mindset or motivation.

The perceived disadvantages were closely related to the associated advantages. Examples included time and relevance. Whereas time was widely viewed as an advantage of engagement in action research in that it involved learning over time, a perceived disadvantage was that there was still insufficient time allocated to research and that it remained something additional to the role of the teacher. Also, as detailed earlier, there were examples of teachers who preferred a different model of teacher learning. They felt that engagement in action research took time away from focusing on other aspects of professional learning. In addition, in terms of personal relevance, teachers did not value their engagement in action research as much if the topic of study was not seen to be relevant to their current learning needs. This was an issue when working within a team on a shared topic, and the need for teachers to have an equal input.

Responses demonstrated that for the majority of teachers in this study, engagement in action research led to changes to and perceived improvements in practice. It was strongly felt that participating in action research enabled teachers to have the opportunity to experiment with their practice and make informed changes. Most teachers in this study made specific reference to changes in practice and responses reflected that these changes were perceived to be improvements. Key to this improvement was the opportunity to experiment in their classrooms and learn about strategies to support teaching and learning. In addition, teachers also discussed an associated impact upon their thinking and ability to reflect. However, it is also worth noting that there were teachers in the study who did not discuss an impact upon or perceived improvement to practice.

2. What are the factors which teachers perceive affect their professional learning in schools, with particular reference to action research?

The findings from this study suggest that there are key factors that teachers perceive to affect their professional learning in schools. Of clear importance to teachers in this study was the need for learning to be relevant and contextualised effectively for them, both in terms of their own individual learning needs and the needs of the children that they were teaching. This contextualisation was also related to the perceived value of being able to select their own focus for the learning, and that this promoted their own engagement and motivation in their professional learning. Collaboration was perceived to be of importance, particularly within the wider positive learning activities within the school, and how these influence the expansiveness of the learning environment. Collaboration was seen to be important within the context of a supportive learning environment, and the value of collaboration was perceived to be dependent on the individual teachers involved and how individually supportive they were. Leadership was viewed by teachers to be influential in schools in determining learning activities, and in: supporting teachers' professional learning; promoting a positive learning culture; and allocating time

for teacher learning. Findings from the data reflected how the school learning environment was influential in determining the quality of professional learning, including action research, and that the environment could be positive or negative in terms of promoting or inhibiting formal and informal learning opportunities. Additional responses also discussed the influence of government policy on teacher learning, particularly in terms of the perceived negative influence of Ofsted in limiting expansive learning opportunities, including action research.

3. What can be learnt about the provision of teacher learning in primary schools from these findings?

I can acknowledge that the complex and messy interrelationship between government policy, institutional learning environments, and individual dispositions, provides a dynamic process by which to conceptualise the teacher professional learning opportunities made available to teachers in schools in England. Although the primary aim of this study is to evaluate the effect upon teachers of engagement in action research in particular, the data analysis has provided evidence to indicate key possible factors that may potentially impact upon the provision and implementation of teacher learning activities in schools. I have detailed these key factors within an overarching definition of a 'dynamic learning community'. A model for the development of this dynamic learning community is presented in figure 7.1.

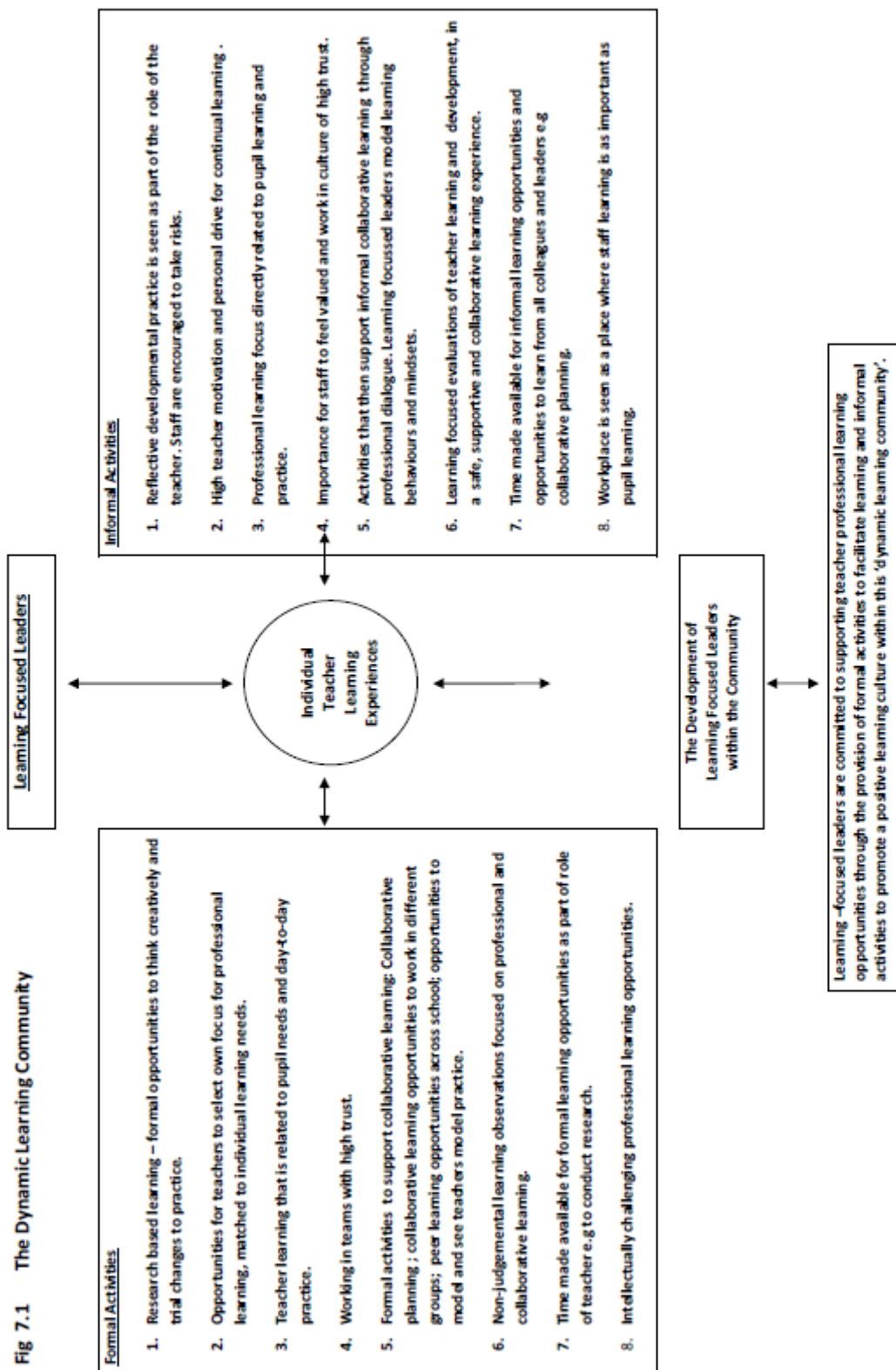
Key features of this model include specific teacher learning activities that can be implemented in schools to support both formal learning opportunities and encourage informal learning activities within the promotion of a positive and expansive learning environment. It is the premise of this study that by implementing such activities, both formal and informal learning activities can be implemented and encouraged in schools. Examples of activities include: opportunities and time made available for teachers to undertake research; teachers to select own focus for professional learning that is related to pupil needs and own practice; collaborative working in pairs and teams; and non-judgemental lesson observations. To enable this model to work successfully, it

is imperative that teacher learning is led by learning-focused leaders who are able to work in partnership with teachers and contribute to learning activities. The argument presented in this model is that through teacher engagement in this dynamic community of learners, they will potentially develop the skills of learning-focused leaders. I have designed the model to inform the future implementation of teacher learning activities in primary schools, and to support the development of activities in schools that promote expansive, personalised formal and informal learning opportunities. I have designed it to support school leaders in deciding upon the organisation and implementation of teacher learning in schools. The findings from this study have indicated that school leaders are particularly influential in determining the extent of formal and informal learning opportunities made available in the workplace (Burns and Haydn, 2002; BERA-RSA, 2014).

School leaders within this dynamic learning community are described as 'learning-focused leaders'. This title is designed to define the significance for school leaders to take responsibility for the learning of all staff within the workplace (Macgilchrist, et al, 2004). It is also argued that learning-focused leadership is essential in supporting and maximising opportunities for informal learning (Eraut, 2004). I have chosen to describe the learning community in the model as 'dynamic' because the findings have indicated that the development of these key factors has a dynamic effect on teacher learning in schools. This dynamic effect is represented through the argument that teachers' engagement in such activities has a reciprocal effect on the development of positive attitudes to learning and a positive learning environment within the institution. The reciprocity is reflected in the assertion that this positive culture within the learning community is capable of driving and reproducing the promotion of these activities and developing more learning-focused leaders within the institution (Pedder et al, 2005). This is represented through a constant cycle of activities that influence the expansiveness of the learning environment within this dynamic learning community. The word 'dynamic' has been used to define both the system within the learning community 'characterised by constant

change and progress' and the learning-focused leaders who are 'positive in attitude and full of energy and new ideas'.

Fig 7.1 The Dynamic Learning Community



The diagram represents the key factors that the findings suggest will support teacher professional learning in primary schools. There are two boxes in the diagram, entitled as formal and informal activities. The implementation of the eight formal activities in box 1 will have a dynamic effect in supporting the associated development of informal activities in box 2, and they are numbered accordingly. These informal activities will impact upon teachers' attitudes to learning within the institution (Darleen and Pedder, 2011). I argue that a consistent implementation of these activities will ensure that the learning environment supports the development of teacher learning through formal and informal workplace learning activities. I would also argue that these activities will have a positive impact on individual dispositions to learning and support the development of learning-focused leaders. As the learning environment becomes more expansive, and all teachers develop positive dispositions to learning, all teachers are capable of becoming learning-focused leaders within the institution.

The diagram reflects that in terms of the perceptions of teachers in this study, positive learning experiences would involve activities that are effectively contextualised and relevant to their learning needs, aligned with the opportunity to select the focus of their learning. Essentially, this relates to the extent to which teacher learning was linked to their classroom practice, and this included the perceived value afforded to opportunities to experiment in their classroom and reflect upon their practice. Effective teacher learning is linked to effective leadership. It is important that teacher learning activities are not seen as something additional to do. It is also important to teachers that time is allocated to specific activities that they value, including collaborative professional dialogue and peer learning (Hodkinson and Hodkinson, 2004; Darleen and Pedder, 2011).

Action research has the potential to provide more time for teacher learning and a potentially more personally relevant and meaningful learning experience (Coghlan and Brannick, 2005). As a model for schools, this study has acknowledged the potential benefits to teacher learning but also acknowledged that these benefits may not be equal for all teachers. If a school is to

successfully engage all staff in action research, these factors need to be taken into consideration.

7.3 Achievements of this thesis and contribution to the field of teacher learning

Although teacher learning is seen as a key priority in impacting upon standards of teaching and pupil achievement, research has demonstrated that there remains a lack of access for teachers in UK schools to high quality learning activities that impact positively on their practice and pupil learning outcomes (Cordingley et al, 2015). The major achievements of this thesis include a presentation of the factors that need to be taken into consideration when planning for the effective implementation of teacher engagement in action research. In addition, this thesis represents one of the few studies that have drawn upon theories from workplace learning literature to investigate how to develop formal and informal opportunities for teacher learning in schools. A significant achievement of this thesis and its most prominent contribution to the field of teacher learning is the presentation of a model for schools to adopt in order to develop a dynamic, expansive learning community within primary schools. It is the central argument of this thesis that this model has the potential to promote opportunities for teacher learning through formal activities and develop a learning environment that will additionally promote informal teacher learning.

One of the primary aims of this thesis was to evaluate the factors that teachers perceive affect their professional learning in schools, with particular reference to action research. The findings of this study reflect that action research as a model for teacher professional learning appears to be highly valued by practitioners. I have made clear distinctions as to the factors that promote and develop teacher learning in primary schools, regardless of teachers' engagement in a specific model of research based learning, such as action research. My contribution therefore to the existing knowledge base on action research and teacher professional learning has been to provide both a summary of the perceived value to teachers of engagement in action research,

and a wider conceptual framework for the effective engagement and development of a dynamic learning community for teachers in primary schools.

This study was needed because the recent context of government policy and teacher professional learning has seen an increased emphasis on the promotion of teacher research in schools as a legitimate form of teacher learning. It was intended that this study would be of value and interest to school leaders and individual teachers as well as the wider education community to inform the future delivery and development of action research and all forms of teacher learning in schools. It addresses gaps in the existing literature by providing the perceptions of a range of teachers within a school on their engagement in action research. This aspect of whole-school engagement in action research has not been effectively researched in previous empirical research studies and the findings from this study will therefore be of value in improving future practice in schools. This study provides a perspective that will enable school leaders to consider the benefits and challenges of supporting all teachers within their school to engage effectively in action research. The findings of this study in terms of what can be learnt about the provision of teacher learning, has highlighted key activities within schools that have the potential to promote both formal professional learning opportunities and activities to promote informal workplace learning.

An initial review of the literature in chapter 2 highlighted both the potential value to teachers of engagement in action research and the associated challenges involved. Although action research was presented as an appropriate model for teacher learning, the promotion of teacher engagement in research at a national level had resulted in very little impact on teachers in schools. This research has addressed further gaps in the literature by paying analytic attention to the involvement of teachers who would not choose to volunteer or may be reluctant to engage in research processes. Findings from this study will therefore be relevant in investigating the impact of engagement in action research for all teachers within a school. A discussion of situated learning and communities of practice indicated the potential for teachers to also learn informally in ways that are unplanned and unintentional. These studies offered limited theorising about

the transferral of workplace learning theories to teacher learning in primary schools. A range of literature was presented in chapter 3 to highlight three levels of influence upon teacher learning in schools: government policy; institutional learning environments; and individual dispositions. Examples were highlighted to demonstrate the importance of all three levels of influence in providing positive impetus for the formal and informal learning opportunities available for teachers in schools.

Within the existing research on teacher learning in schools, I found limited starting points for my own research. Three key studies were presented as particularly important in providing an overview of theories of workplace learning in relation to teacher professional learning. Evidence from Lave and Wenger's (1991) work highlighted the value of communities of practice in supporting the informal situated learning of workers in the workplace. This was supported further by Fuller and Unwin's (2004) concept of the expansive learning environment. Key factors related to institutional learning environments have been detailed as being particularly important in influencing the expansiveness of the workplace learning environment and the quality of teacher learning that takes place, including: the quality of working relationships; formal and informal activities and opportunities in place to support teacher learning; and the quality of leadership. This evidence demonstrated that some schools were more supportive of teacher learning than others. In addition, Hodkinson and Hodkinson's (2004) study of teacher learning in schools demonstrated that intrinsic motivation and positive attitudes to learning cannot be taken for granted, and that teachers come to schools already possessing beliefs, understandings, skills and attitudes to life and learning. The research evidence presented also indicated that these attitudes and dispositions to learning are not fixed.

The original conceptual framework presented in chapter 3 argued that the possibilities for learning at work are dependent upon the interrelationship between individual worker dispositions, the affordance of the workplace to provide a restrictive or expansive learning environment, and the influence and direction of instruments of government policy, rather than upon any of these

factors taken in isolation. The conceptual framework reflected the findings from the review of literature and represented what I believed were the main influencing factors that impact upon teacher learning in schools. The framework represented a dynamic process in which factors influenced by government policy, institutional learning environments and individual dispositions impact both upon the learning opportunities made available to teachers in schools and their interpretation of the value of those activities. It was acknowledged that for effective professional learning, a teacher could learn through both formal learning activities and social participation in situated learning.

I detailed the features of the research design in chapter 4. I chose to use small-scale evaluative case study as a methodology to answer the research questions because this study represents an empirical enquiry of teacher learning within two schools, and the primary purpose of this study is to provide new knowledge to inform my own future practice. I have acknowledged my role as insider researcher and the challenges involved with researcher positionality. I also provided an informed justification of the use of questionnaires and semi-structured interviews as data collection tools to provide authentic and valid data for analysis. Analysis of this data in chapter 5 identified five key themes across the range of questionnaires and interviews that could be important when planning for the design and implementation of action research, as well as wider teacher learning opportunities in schools. These five key themes were: changes to practice; the significance of learning that was personally relevant; the value of collaboration and collaborative learning; time made available for own learning; and the impact upon teachers' professional knowledge. A comparison across the two schools demonstrated teacher perceptions were consistent across both institutions.

Responses from the teachers involved highlighted the advantages and disadvantages of engagement in action research, and responses demonstrated that for the majority of teachers in this study, engagement in action research led to changes and perceived improvements in practice. Factors which teachers perceive to affect their professional learning were identified, and the most influential factors were: the need for learning to be personally relevant and

effectively contextualised; opportunities to select their own focus for their learning; collaboration within the context of a supportive learning environment; the significance of school leaders in determining teacher learning activities, and supporting teachers professional learning; the promotion of a positive learning culture and allocating time for teacher professional learning; the expansiveness of the learning environment; and the influence of government policy, particularly through Ofsted.

Chapter 6 presented the revised conceptual framework, in response to the findings from the empirical work. The framework acknowledges the significance of school leaders in mediating government policy and promoting a collaborative learning culture and directly influencing the expansiveness of the institutional learning environment. The revised conceptual framework highlighted key activities, such as peer learning, collaborative year group planning, professional dialogue and opportunities to work in different groups, which potentially positively influence both the expansiveness of the learning environment and individual dispositions to learning. Although it was agreed that teachers held individual agency in terms of the extent to which they engaged in the professional learning opportunities on offer, I also argued that these individual dispositions to learning were not fixed. The achievements of this thesis have been to combine the original conceptual understanding with the results from the qualitative data to provide a wider understanding of the perceptions of teachers within two schools of the perceived advantages and disadvantages of engagement in action research. In addition, data has been used to theorise wider influences upon teacher learning in our schools today. These findings will be of relevance to school leaders in developing teacher professional learning activities in our schools.

From the findings of this study, a model for a dynamic learning community has been presented to detail key factors that may need to be taken into consideration when planning for teacher professional learning activities in primary schools. These findings indicate therefore that the following factors will need to be taken into consideration when planning for teacher learning, in order to motivate and engage all teachers:

1. Opportunities for teachers to engage in research based reflective learning.
2. Opportunities for teachers to select own focus for professional learning.
3. Teacher learning that is related to pupil needs and day-to-day practice.
4. Opportunities for collaborative working in teams.
5. Formal activities that support collaborative learning.
6. Non-judgemental learning-focused lesson observations.
7. Time made available for formal learning opportunities.
8. Intellectually challenging professional learning opportunities.

If other studies were to replicate these findings, there may be cause to alter the perceptions of what effective models for teacher learning are. If national policy is to facilitate greater opportunities for teacher engagement in action research and professional learning, then consideration may need to be given to developing leaders who are able to provide expansive learning opportunities and promote activities in schools to facilitate both formal and informal learning. This would involve the movement away from a model of teacher learning that is dominated by teachers going off-site for external training courses. It would involve a movement towards a model of whole-school teacher learning that enables teachers to participate in collaborative, contextualised learning activities. The findings from this study indicate that this will also lead to a more motivating professional learning experience and enhanced confidence and self-efficacy amongst teachers. In addition, the findings highlight the need for a greater awareness of the significance of developing learning environments in schools that incorporate institutional activities that are designed to facilitate greater opportunities for informal learning.

I have argued in this study that teachers' engagement in professional learning is dependent upon the interrelationship between government policy, institutional learning environments, and individual dispositions to learning. The significance of this study's contribution to the existing literature base and its particular interest to policy makers is the assertion that the continued provision of centrally designed CPL strategies will not necessarily ensure teacher engagement in

professional learning activities. Consideration will also need to be given to the design of teacher learning activities to equally ensure that they provide a personally relevant and meaningful learning experience for teachers, within a wider expansive school learning environment that promotes formal and informal learning activities. Of particular significance is the extent to which these activities are collaborative, and co-ordinated by learning-focused leaders who promote a learning culture of high-trust. If the current reality of teacher professional learning characterised by external courses, continues to exist, then teacher learning opportunities will be neither sufficiently valued nor maximised.

Evidence from this study suggests that the concept of a professional learning community within and between schools would benefit from being promoted at a national level, and valued through the inspection framework. Essentially, schools should be held accountable not only for the learning outcomes of pupils, but of staff too. In order to develop and encourage teacher engagement in professional learning activities, the types of collaborative and contextual learning activities presented within the model of the 'dynamic learning community' need to be promoted. School leaders need to be supported to encourage the development of skills of learning-focused leadership, and crucially, time needs to be made available within the school day. In addition, professional learning needs to be established and valued as central to the role of the teacher.

The findings in this study have highlighted the particular value of collaboration and of school leadership in influencing the expansiveness of the learning environment and quality of professional learning opportunities made available to teachers. These findings have been replicated in two recent wide-scale studies of the teaching profession. Coe et al's (2014) study on what makes great teaching highlighted the significance of sustained professional learning opportunities over time, the value of supportive professional learning environments, and the extent to which these learning opportunities are influenced by school leaders.

‘Teachers working in schools with more supportive professional learning environments continued to improve significantly after 3 years . . . Sustained professional learning is more likely to result when an environment of professional learning and support is promoted by the school’s leadership’. (Coe et al, 2014, p5)

A more recent international study on the teaching profession (Schleicher, 2015) has discussed how teacher learning approaches have remained the same despite constant changes to conceptions of pupil learning and the skills required for students to contribute effectively to society. Schleicher (2015, p9) argues that three key ingredients are required to create a responsive 21st century school:

1. Teachers confident in their ability to teach.
2. A willingness to innovate.
3. Strong school leaders who establish the conditions in their school that enables the former two ingredients to flourish.

In Schleicher’s (2015) work, the importance of leadership and collaborative learning is clear. In both studies (Coe et al, 2014; Schleicher, 2015), the value of collaborative learning activities such as peer learning and team teaching are highlighted. It is worthwhile to note once again that these activities are not reflective of the professional learning opportunities that most teachers in primary schools in England have experienced in recent educational history. The findings of this study complement these major research studies on education and reflect both the importance of school leaders in directly influencing the quality of opportunities made available for teacher learning, as well as the value of collaborative learning opportunities in developing individual dispositions to learning and the wider culture of the school learning environment. In this study, I have defined these leaders as learning-focused.

The context of primary education has altered greatly since I began this thesis. The proliferation of free schools and academies has resulted in a wider range of institutions and it appears that greater autonomy has been devolved to schools.

It can be argued that schools have greater autonomy in decision-making on teacher learning and there are certainly fewer centrally produced and promoted strategies for teacher professional learning. However, it can equally be argued that this has strengthened the performativity culture in schools which this study has argued has the potential to limit teacher learning experiences and engagement in action research. As Ball (2013) has argued, pedagogy and classroom teaching is informed less by reflective practice and more by an overt emphasis on performance. He (Ball, 2013) has argued that education in the UK requires a new kind of informed teacher who is committed to collaborative learning. I would argue that the model developed from the findings of this study can promote collaborative learning and this concept of informed professionalism.

What this study has contributed to the existing literature on teacher learning is a framework for individual schools, through specific formal and informal learning activities, to implement to promote teacher professional learning. This study has presented the perceptions of teachers on their engagement in action research and teacher learning within two schools. The findings of this study argue for the important influence of school leaders in enabling an expansive and positive learning environment and providing opportunities for collaborative learning through activities such as peer learning and teacher modelling. This study therefore adds to the existing field of teacher professional learning by defining activities and conditions that can support the development of a collaborative learning community, and the factors that need to be taken into consideration.

7.4 Limitations of this study

The limitations of this study are that it is a small scale study and the conclusions in this study are drawn from research findings of teacher responses in only two primary schools. This limits any claims to generalisation that I can make. Selection of the institutions was influenced by my participation on an Educational Doctorate programme and my position as a senior leader in school A. It was clearly not possible for me to select a sufficient range of institutions for the study to represent the wider population of primary schools. I therefore used

purposive sampling to select two primary schools participating in the same action research programme in partnership with the University of East London. The teachers in this study therefore did not represent the entire population of primary school teachers, and the two schools do not represent the diversity of professional learning programmes in primary schools. It is important to acknowledge that my work on this thesis was as part of a professional doctorate, and my primary aim was to develop my own practice. I therefore needed to investigate teacher learning within my own school. As Frame and Davis (2015) have recognised, the professional doctorate is valued and recognised for enabling professionals like myself to use the resultant learning to inform our practice.

Teacher responses were taken from questionnaires and semi-structured interviews and I have acknowledged my own positionality as an insider researcher and senior leader in school A and how this will have influenced the responses. Given these limitations, I would claim that there was a strong and appropriate research design for this study in answering the research questions. I have demonstrated that my sampling techniques were rigorous and appropriate, allowing me to explore the research questions in sufficient detail in this small-scale study. The literature review was extensive and the conceptual framework was drawn from previous studies of teacher engagement in action research and theories from workplace learning literature. I believe that this combination of literature on teacher learning and workplace learning represents a strength of this study and justifies the assertion that the revised conceptual framework and the model of a dynamic learning community makes an original contribution to the field of teacher learning. Its status as a small scale qualitative study in two schools will be of interest to school leaders in planning for teacher learning within primary schools. A larger scale study would clearly be required, if the findings of this study were to be considered generalisable to the wider population of teachers.

This study focused on the perceptions of teachers in two large primary schools on their whole-school engagement in action research. The findings reflect these perceptions and I am not claiming that these findings can then be generalised

and reflected in all primary schools. It is accepted that these findings could be a useful tool and reference point to support those responsible in making decisions on national policy for teacher learning. More importantly, the findings will provide a starting point for school leaders in designing the implementation and promotion of teacher learning activities within primary schools. The findings from this study reflect the potential strengths and areas for consideration when implementing action research with all teachers in a primary school.

In terms of my own role as a school leader, the primary aim of this study was to enable me to understand what constitutes effective provision for teacher learning, and the value of engagement in action research in particular. For that reason, I chose a research design that would enable me, as a school leader, to use the research tools that would be most readily available to all school leaders when choosing to evaluate teacher perspectives on teacher learning within their schools. I wanted to investigate the validity of those specific tools; questionnaires and interviews, which I would have the opportunity to employ again in the future. Working and researching across two schools, and employing the research design that I have, has enabled me to understand and inform my future practice as a school leader for teacher learning. I have acknowledged the fact that the interviews were not audio-taped. I justified the use of note-taking to provide data summaries of teacher responses, and these were then presented to participants to verify. I discussed the limitations of questionnaires and interviews as data collection techniques. I also acknowledged that as a school leader, I was interviewing participants from the same field, and that participants were therefore bounded by the common professional background which we shared. Teacher responses in the questionnaires and interviews were reflective of their responses in those particular contexts and not therefore representative of all that teachers would choose to present about their professional learning experiences. The use of questionnaires and interviews as research tools was clearly valid given the focus of the research questions, but it might be argued that the findings of this thesis would have been stronger if supported by a wider variety of data gathering tools, for example lesson observations or learning journals.

As a professional undertaking an Educational Doctorate, I acknowledge the fact that my research had to take place within my own Institution. One of the primary outcomes of this research was to impact upon the development of my own knowledge and understanding about factors that impact upon teacher learning. However, as a potential limitation in impacting upon my own findings, I have acknowledged this. This is also why I chose to evaluate practice within a second school. In addition, this potential limitation does enable this study and its findings to be of relevance to both practitioners who may undertake research within their own institution, and school leaders who may be in a similar position to myself and interested in investigating factors that impact upon the provision of teacher learning within their schools.

This study is designed to be a starting point for school leaders to reflect upon the implementation of teacher learning, and action research, in primary schools. I believe that its strength lies in the interpretation of the perceptions and responses of practitioners. Essentially, this study details factors that teachers believe impact upon their engagement in teacher learning. Although it focused on two schools over a relatively short period of time, the questions presented to participants were designed to enable teachers to share their perceptions of teacher learning over the course of their careers. I am confident that the findings reflect that, and this study was not designed to focus on pupil outcomes. The length of this study did not provide sufficient evidence to measure either the success of or the sustainability of changes teachers made to their practice.

The potential limitations detailed in this section could be overcome in future research through a wider large-scale study of both whole-school engagement in action research and an investigation of factors that constitute the effective provision of teacher learning. An independent study evaluating the perspectives of school leaders and their leadership of teacher learning within primary schools, would also add to the findings from this study.

7.5 Directions for future research

Although research-based practice has been promoted by government agencies at a national level (DfE, 2010), there is insufficient evidence to indicate that this has had a significant impact upon teacher professional learning in primary schools in England. Indeed, my considerations for the directions of future research are based on the premise that the culture for performativity (Ball, 2003, 2012) and markets and competition (Hodkinson and Hodkinson (2005) will continue to influence teacher learning in the immediate future. I would like to continue to examine factors that impact upon teacher learning in schools, beyond action research. I would certainly argue that there needs to be a greater emphasis on the activities and environment in place to support teacher learning in schools. In fact, I believe that this will require fundamental change. It remains an irony that in the very workplace where the business of learning (children's) is central, the quality of and expectations for workers' learning remains so poor. I would argue for research to evaluate models for teacher learning in primary schools that enable time during the school day for teachers to engage in research and reflective practice. I would also argue that further studies investigating workplace learning theories in schools would be of value. Certainly, studies on a larger scale than this one would be a positive direction for future research.

I would like to focus specifically on the development of leadership competencies that underpin the promotion of formal and informal learning activities in schools. This would also include an analysis of the related impact upon pupil learning outcomes. To what extent does the involvement of pupils in such a 'dynamic learning community' impact upon their attainment and progress in learning? It would also be worthwhile to explore in further detail the development of individual dispositions to learning over time, particularly in relation to engagement and learning within an expansive learning environment such as the dynamic learning community.

7.6 Personal Learning and Reflections

The journey of my developing understanding of factors that impact upon the learning of teachers over the course of this study has mirrored the journey of my own development as a learner. Undertaking this study has proved to be the most enriching and fulfilling professional learning experience of my career so far. My own engagement in reading and writing at a doctoral level has developed both my thinking and my practice. I feel confident in my ability to critically evaluate literature and effectively synthesise my findings and learning. As a result, I feel that I'm a research-informed practitioner and am confident in the beliefs and practices that I will promote as a leader in schools. I am also determined to develop teachers within the schools that I will work in the future to also be research-informed and confident practitioners.

I began this study by sharing my own personal experiences of engagement in teacher learning in primary schools. I explained that I had always held the belief that our most effective teachers are those teachers who engage in professional dialogue and reflection upon practice, both formally and informally. As a leader of teacher learning in schools, it was my intention through this study to investigate the impact upon teachers of engagement in action research and identify the factors that constitute effective learning for teachers in primary schools. I wanted to identify these factors because I wanted to create the best possible learning environment for teachers within the school that I was working in. Through the course of this study, I have identified factors that impact upon the effectiveness of teacher professional learning in schools. Factors that positively impact upon teacher learning such as collaborative learning activities, and factors that negatively impact such as lack of choice or relevance.

A significant learning point for me as a professional involved in the leadership of teacher learning in primary schools is the need to ensure that the provision of effective formal teacher learning activities is matched to the development of an institutional culture that values and promotes activities that support informal learning. These activities, as well as the workplace learning environment, have to be led and influenced by learning-focused leaders. Of the two schools

involved in this study, neither school is continuing to currently engage in enquiry based learning or action research. In school A, only two teachers went on to complete their Masters. In school B, a change of leadership has meant that enquiry based learning no longer remains a focus for teacher learning. These examples highlight the importance of leaders in directly influencing the teacher learning experiences made available to teachers. It appears that we are continuing to work within a system where too often, learning experiences for teachers are influenced by the demands of government policy, particularly through external pressures from the inspection regime. A school's priorities for teacher professional learning are often dominated by the need to prepare effectively for an external inspection.

As for my own personal practice, I have developed an understanding of the factors that I believe need to be taken into consideration for a school to ensure the best possible learning experiences for teachers. Teacher learning is particularly significant because I believe that we need innovative, reflective practitioners if we are to provide the best possible learning experiences for our pupils. Strong and confident leaders and teachers will be able to effectively: mediate the demands of government policy and Ofsted to meet the individual learning needs of staff and pupils; create and promote expansive institutional teacher learning activities and, consequently, cultures within an expansive learning environment for all; impact positively on the individual dispositions to learning of all staff. Through strong professional learning opportunities for staff, evidence in this study also indicates that this will support an enhanced confidence and motivation in the workplace.

For the past three years, I have been Head Teacher of a large primary school in the London Borough of Redbridge. I am certain that I will continue to promote, adapt and develop the model of the dynamic learning community presented in this study, including the focus within it on learning-focused leadership, in the future. The model is beginning to have a major influence on the learning of staff and children at the school. In 2011, the school was placed in the bottom 5% of schools nationally for pupil progress for 11 year olds. By 2014, it was placed in the top 1%. This was achieved with a majority of the same teachers remaining

at the school throughout this period and I believe this success was as a direct result of their engagement within some of the learning activities presented in the model of the dynamic, learning community. In March 2016, over 20 teachers at the school were in the process of completing their Masters in Education, which again I believe is a unique achievement.

When I began this study, I never believed that my work would receive national and international recognition. In November 2014, I was invited to present my work in Westminster to David Laws, the Minister of State for schools. In September 2015, I was invited to work in partnership with head teachers in Oslo to support the development of the model for the 'dynamic learning community' there. This partnership has been strengthened to the extent that I am leading the development of school improvement across a large number of schools in Oslo. In terms of my practice therefore, the story continues. I will continue to investigate the factors that impact upon teacher professional learning in schools.

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Appendix 1

Quantitative data from questionnaires

Question	School	-3	-2	-1	0	1	2	3
1. How do you think participating in the action research projects has impacted upon your own professional development?	A	1				6	8	1
	B				1	1	4	3
	Total	1			1	7	12	4
2. How do you think participating in the action research projects impacted upon your own professional practice/teaching?	A	1		1		6	7	1
	B				1	1	4	3
	Total	1		1	1	7	11	4
3. What do you think of the value of action research as a tool for teacher professional development?	A	1				2	12	1
	B				1	1	2	5
	Total	1			1	3	14	6

28 questionnaires were distributed in School A and 15 were returned, a response rate of 54%. In School B, 9 were received from 21 distributed, a response rate of 43%. Results from the questionnaires, in terms of the three questions that enabled quantitative data analysis, are presented above. As the sample size is relatively small and the quantitative data therefore slight, it can only provide very general perceptions. It is worth noting that there were only 9 respondents in school B, and many of them were very positive about the action research projects. The responses received from school A represented a wider cross-section of opinion. The data is useful in providing a comparison between the two schools.

Appendix 2

Qualitative data from questionnaires

Theme	No of teachers	Underlying factors	Examples of teachers' comments
1.Changes to practice	20 (83%)	<ol style="list-style-type: none"> 1. Opportunity to try out new ideas. 2. Improving teaching. 3. Changes to practice. 	<p>Learning specific skills to support groups of pupils (B3); changes to story time (B7); changing practice for teaching reading (B8); inclusion of success criteria (A1); more role-play (A2); changes to marking (A12); focus on pupil talk (A14); more child led (B2); more interactive learning with children (B2); support of children with SEN (B3); traffic light marking system and role-play (A11); marking and feedback (A12); introduction of talk wall (A14); giving children more time to think (A15); chance to try out new ideas (B1); trial changes (B5); make me try new things in the classroom when I wouldn't otherwise have done (B7); resulting in new ideas that I wouldn't have thought of myself (A9); more effective teaching when new initiatives are trialled and sometimes implemented permanently (A12); using evidence and data to identify new approaches (A3); enhanced children's learning and confidence through role-play and discussion (A1); helped children comprehend and talk better (B1); encouraged children to be more creative (A14).</p>
2. Relevance	14 (58%)	<ol style="list-style-type: none"> 1. Personal choice for research topic. 2. Relevancy to teachers' learning needs. 3. Active involvement for teachers. 	<p>Personal learning needs may not be government or school priority (B4); relevancy to teachers (A2); staff could not be trained on other things (A12); frustrating as would prefer to do other things (A7); depends on what it is. Action research should be continuous (B2); depends on topic (B7); depends on context (B8); help if related to own context, an intervention you need to do anyway (A9); more personal (B1); more involved (B2); made learning relevant to own area which school CPD is often not (B7); more sense of ownership (A1); other CPD based on providers' experiences (A3); people developed ideas that are pertinent to their own practice (A10).</p>
3.Collaborative learning	18 (75%)	<ol style="list-style-type: none"> 1. Learning with and from others. 2. Working in partnership to solve problems. 3. Institutional culture that supports collaboration. 4. Dispositions of colleagues and commitment to 	<p>Talk to other professionals about how ideas worked. Pick up good points from others (B1); helped to reflect on own practice. Discussed with other experienced teachers and made improvements to practice (B5); sharing good practice (A5) resulting in new ideas that I wouldn't have thought of myself (A9); collaborative aspect builds confidence, should be part of shared learning environment (B5); coaching, mentoring and peer observations; allowed us to compare specific aspects of curriculum and talk about</p>

		collaboration.	effectiveness of strategies (A1); learning from others (A2); sharing ideas and sharing problems (A4); new ideas are learnt through sharing (A5); working in a team to solve a problem (A8); collaboration aids remembering of ideas rather than listening to a speaker (A9).
4. Time	9 (38%)	<ol style="list-style-type: none"> 1. Need for more time to effectively undertake research. 2. Time for effective collaboration. 3. Release time for learning activities. 4. Less time for other types of learning. 5. Workload. 	Time to share ideas in school (B4); time out of class (A12); not enough time to discuss ideas fully (B2); time factor to work collaboratively with colleagues (B7); time constraints and workload (A11); time constraints when attempting to carry out research initiatives (A12); in such a demanding job, there is often not the time to spend observing and reading as much as you would like (A15); staff need time to research strategies (A1); research units could be a little shorter and more concise (A6); would have benefitted from some release time to be able to observe my class using resources, or observe children in other classes, time to do reading in school time (A15).
5 (a) Professional development	20 (83%)	<ol style="list-style-type: none"> 1. Opportunities for reflection. 2. Developing knowledge and understanding. 3. Self-analysis of practice. 4. Keep up to date. 	Trial changes (B5); made me try new things in the classroom when I wouldn't otherwise have done (B7); resulting in new ideas that I wouldn't have thought of myself (A9); using evidence and data to identify new approaches (A3); made me reflect more on my own practice (B2); made me more evaluative of own practice (B7); helping to think about different responses to a problem. Opportunities to reflect (A3); time to think what else I can do in the classroom (A4); encouraged me to reflect (A11); motivates teachers to challenge themselves (A12); don't normally read books related to my profession – found it stimulating to do this and reflect on practice (A15); developed subject knowledge (B8); enabled me to gain further knowledge and understanding to apply in the classroom (B9); better background knowledge (A10);
5 (b) Personal impact	17 (71%)	<ol style="list-style-type: none"> 1. Developed thinking. 2. Changed mindset. 3. Raised self-awareness 4. Increased motivation. 	Have had a big influence on the way I think (B3); more evaluative of my own practice and think creatively to get around problems (B7); thinking differently (A2); helping to think about different responses (A3); time to think what else I can do (A4); made me think about the importance of why we are doing certain things (A14); made me think outside the box of my everyday practice (A15); given us more confidence to deliver curriculum (A1); changes to own attitude as teacher has raised awareness of constant learning (A12); confidence to question results and the understanding in children's learning and why (A13); more personal, motivates you to get

			involved (B1); builds confidence (B5); freedom to try out ideas and take risks, valued as intellectuals (B6); challenging yourself (A12); makes it more personal, makes a bigger impact on me personally (A1); more impact on me than any other (A5).
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Appendix 3



Enquiry based learning – Action Research module

Dear all,

I am carrying out this survey to understand better the impact that being involved in the collaborative research projects has had on your professional development and learning. For the purpose of this research, I have used the term 'research projects' to describe the collaborative action research study you have participated in over the last two terms.

Your responses in this questionnaire will contribute to data analysis for a study on the impact of action research on teachers' professional development in primary schools. Your participation is voluntary and all responses will remain anonymous. Please be as honest and open as possible in your responses as this will support the effectiveness of the study. All data will be treated in a way that protects the confidentiality and anonymity of the teachers involved in the study

Please could you complete the questionnaire and return it to Caroline by the end of term (Friday 23rd July). There is an electronic version of the questionnaire on Shared Resources under. You can email your response to me at kulvarn.atwal@redbridge.gov.uk or provide a written response if you prefer.

Kulvarn

1. This first section is to gain an awareness of your teaching experience and your perceptions of teacher professional development.

- a) Age range currently taught: FS ☐ KS1 ☐ Y3/4 ☐ Y5/6 ☐
- b) Number of years of teaching experience: 0-4 ☐ 5-9 ☐ 10-14 ☐ 15+ ☐
- c) Please complete the following sentences in your own words:

Teacher professional development is . . .

Action research is . . .

2. This second section is to evaluate the extent to which you consider participating in the action research projects impacted upon your own professional development, your professional practice and your pupils' learning.

- a) How do you think participating in the action research projects impacted upon your own professional development?

Not at all -3 -2 -1 0 1 2 3 Very much

- b) How do you think participating in the action research projects impacted upon your professional practice/teaching?

Not at all -3 -2 -1 0 1 2 3 Very much

- c) What do you think of the value of action research as a tool for teacher professional development?

Not effective -3 -2 -1 0 1 2 3 Very effective

3. This final section is for you to provide more detailed responses and consider the ways in which participating in the action research projects may have impacted upon your professional development and your teaching practice.

a) How do you think being involved in the action research projects has impacted upon your professional development and learning as a teacher?

b) Have there been any changes to your teaching practice as a result of your involvement in the action research projects? If so, what have these changes been?

c) What do you think are the advantages and disadvantages of research based collaborative learning as CPD?

d) How do you think being involved in a further collaborative action research project would impact upon your professional development?

e) How would you compare this model of professional development to your previous experiences of school CPD?

Appendix 4

Interviews with teachers participating in action research

1. Biographical details

Name:

Age:

Gender:

Ethnic origin:

Years in teaching:

No. of schools:

Previous work experience:

Current role:

2. Could you share some of your more positive experiences of professional learning during your teaching career and why they were positive?

3. Could you share some of your more negative experiences of professional learning and why they were negative?

4. What do you think are the different ways in which teachers learn?

5. What do you consider to be the advantages of action research as a model for teacher professional learning?
6. What do you consider to be the disadvantages of action research as a model for teacher professional learning?
7. Would you be able to share some examples of how participating in action research at your school impacted upon your professional practice?
8. Did participating in the action research work at your school impact on you in any other way? Eg. in terms of your understanding of the role of the teacher?
9. Is there anything else that you would like to share about action research or teacher learning in schools?

Appendix 5

UNIVERSITY OF EAST LONDON

APPLICATION FOR THE APPROVAL OF A RESEARCH PROGRAMME INVOLVING HUMAN PARTICIPANTS

Please read the Notes for Guidance before completing this form. If necessary, please continue your answers on a separate sheet of paper: indicate clearly which question the continuation sheet relates to and ensure that it is securely fastened to the report form.

1.	Title of the programme: Doctor of Education Title of research project (if different from above): Research informed professional learning – an exploratory case study of the relationship between action research and teacher professional development in two UK primary schools.	
2.	Name of person responsible for the programme (Principal Investigator): Kulvarn Atwal Status: Student on Professional Doctorate programme Name of supervisor (if different from above) Professor Jean Murray Status: University tutor	
3.	School: Cass School of Education	Department/Unit:
4.	Level of the programme (delete as Appropriate): Postgraduate (research or Professional Doctorate)	
5.	Number of: (a) researchers (approximately): 1 (b) participants (approximately): 60	
6.	Name of researcher (s) (including title): Mr Kulvarn Atwal Nature of researcher (delete as appropriate): Student on Professional Doctorate programme	
7.	Nature of participants (general characteristics, e.g University students, primary school children, etc): Primary school teachers	
8.	Probable duration of the research: from (starting date): June 2010 to (finishing date): February 2011	

9. Aims of the research including any hypothesis to be tested:

The primary purpose of this research study is to undertake a critical analysis of the impact of action research on teachers' professional development. As plans are developed to ensure that all newly qualified teachers undertake research based practice during their first year of teaching, it is evident that the Teacher Training and Development Agency (TDA) are intent on promoting teaching as a research and evidence based profession. However, it is worth questioning the extent to which this policy promotion will impact directly on teacher professional learning and signify a move away from the traditional acquisition model of teacher learning, characterised by teachers going off site to attend training courses. Koshy (2005) has argued that these developments have raised the profile of action research as the preferred model or approach to educational research for those practitioners engaged in research in schools. According to McNiff et al (1996), action research involves a cycle of reflection and review that can result in a change in practice or professional learning, and this is a basic definition that I will be examining through the course of this study. The importance within action research of educational researchers researching with the aim of improving practice within the context of problems they have identified is clearly apparent. They undertake reflection around these problems and implement some form of action upon which they collect and analyse data in order to make changes to improve their own practice. The value of this model of research is therefore not primarily in the theories that are produced but, as Elliot (1991) has discussed, much more on the impact it has on researchers and their own practice. The key aspect here is the fact that the researcher is directly involved in the research setting. The researcher makes the decisions about the research, is directly involved and intends to implement change that will impact positively upon the researched (Coghlan and Brannick, 2005).

What I will attempt to do in this study is identify a working definition of action research and how this can be related to the context of teachers working in primary schools. I will investigate the effectiveness of action research as a model for teachers to engage in research and to support their professional development? If teachers are going to be asked to undertake research informed practice in their schools to support their professional learning, I want to investigate the most effective ways to manage this in order to maximise teachers' workplace learning experiences. The aim of this study is to investigate a deeper understanding of the relationship between research informed practice and teacher professional development. I will focus in particular on the perceptions and attitudes of teachers to this relationship. The study will comprise sixty teachers with a range of experiences and teaching backgrounds. I will investigate the following specific research questions in detail:

4. What do teachers consider to be the advantages and disadvantages of action research? Through their involvement in a whole school programme of professional development, what are teachers' perceptions and attitudes towards research informed practice in terms of the impact if any upon their own learning and the learning of their pupils. I will also investigate teachers' opinions on action research as a strategy to support teacher professional development in schools.
5. What impact if any do teachers consider action research to have upon their own professional practice? Does involvement in action research lead to changes in teachers' professional practice?
6. How, and in what forms, do teachers think that action research has impacted upon their pupils' learning? Through engagement in research and using the action research methodology, what is the impact if any on pupils' learning?

10. Description of the procedures to be used (give sufficient detail for the Committee to be clear about what is involved in the research). Please append to the application form copies of any instructional leaflets, letters, questionnaires, forms or other documents which will be issued to the participants:

In this study, data gathering methods will constitute semi-structured interviews and questionnaires. A questionnaire is considered to be a complex research tool that presents significant advantages and disadvantages, and these are primarily dependent on the purpose and context for which the questionnaire is designed and implemented (Peterson, 2000). As Cohen (2007) has noted, an important consideration will be to utilise the opportunities available at the design and pilot stage to minimise the disadvantages

and maximise the advantages, such as the quality of response, the value of anonymity, the continuity of experience, and the ease of analysis. Three significant aspects will be highlighted for individual consideration: question design; questionnaire design; and, the maximising of response rates.

Semi-structured interviews have been selected to complement and supplement the qualitative findings from the questionnaires. One advantage of interviews is the fact that they provide the flexibility of further clarification where appropriate, to interpret the meaning of questions, or to probe and explain answers (Munn and Drever, 1995). The questionnaires in this study will include both open and closed questions. The closed questions will enable me to draw general conclusions about the strength of feeling and confidence the participants feel about the research they are involved in. The open responses will require a greater length of time to analyse but will provide deeper evidence of context specific issues. The qualitative responses will be used to code key points made and illuminate further the strength of feeling illustrated in the closed responses.

Within the case study itself, there will be two samples. All sixty teachers will be invited to complete questionnaires at different points of the study in order to gain a wide overview of different perspectives of the processes that they have participated in. The use of questionnaires with this larger group will enable an efficient use of time as well as providing rich data about their experiences (an example of a questionnaire is provided as an appendix). Six teachers from each school will be selected to provide further rich data to enable me to gain an even deeper understanding of some of the themes that are expected to emerge from the questionnaires. They will participate in semi-structured interviews at different points of the study to provide further evidence towards the evaluation of the case study. Initially, arrangements will be made to interview the six teachers in each school on two occasions during the course of the study. The interviewees' responses will be recorded and copies will subsequently be provided for the participants to verify. The first round of interviews will be structured to gather data about the teachers' perspectives on research-based practice and their own professional development. The structure and content of subsequent interviews will be determined as the study progresses to reflect the data analysis produced from the questionnaires. In this respect, the value of the semi-structured interviews will be in enabling me to gain an even deeper understanding of the issues and themes that will emerge within the data analysis produced from the questionnaires.

All participants will be informed verbally and in writing about the study and participation will be on a voluntary basis. All teachers will be participating in the school professional development programme and it is my intention that they complete an anonymous questionnaire discussing their involvement within that programme. I will make clear to the participants that their responses will contribute to data analysis for this study and participation will therefore be on a voluntary basis. For those teachers who are selected to be interviewed, written consent to participate will be obtained and participants may withdraw from the study at any time. All data will be treated in a way that protects the confidentiality and anonymity of the teachers involved in the study. All questionnaires and interview notes will make no reference to the identity of the participant and will be stored securely for the duration of the project and destroyed upon completion.

Data will be collected from both the complete and smaller sample in a cyclical process as outlined below:

- Semi-structured interviews with 6 participants in school 1 (Jun 2010)
- Questionnaire for all participants at end of module in school 1 (July 2010)
- Semi-structured interviews with 6 participants in school 1 (Oct 2010)
- Questionnaires for all participants in school 1 (Oct 2010)
- Semi-structured interviews with 6 participants in school 2 (Nov 2010)
- Questionnaires for all participants in school 2 (Dec 2010)
- Semi-structured interviews with 6 participants (Feb 2011)
- Questionnaires for all participants in school 2 (Feb 2011)

11.	Are there potential hazards to the participant(s) in these procedures?	YES
<p data-bbox="384 293 975 331">If yes: (a) what is the nature of the hazard(s)?</p> <p data-bbox="288 353 1565 728">One area that I will need to consider carefully is the fact that I am a senior leader in one of the schools involved in this study. In addition to being an insider researcher, my position as Deputy Head Teacher with specific responsibility for teacher professional development requires me to consider how I manage the data collection in the school to ensure authenticity. Busher (2002) has discussed how the contexts in which educational research is undertaken has an impact on the way in which researchers and participants engage with each other. This implies that the researcher needs to consider the design of the questionnaire and interview schedule in great detail, in order to minimise the possible impact of respondents' perspectives on contextual relationships upon the transparency of their responses. I will need to consider the extent to which teachers genuinely feel that can volunteer to take part in the collection of data and don't feel compelled to do so because of my position within the school. There are therefore two factors to take into consideration, the need to ensure teachers are able to make informed choices about their involvement in the project as well as ensuring the authenticity of response.</p> <p data-bbox="480 750 927 788">(b) what precautions will be taken?</p> <p data-bbox="288 810 1565 1400">Munn and Drever (1995) have highlighted the potential difficulty of collecting information from people that I know and work with. Are questionnaires and interviews the most appropriate tools by which to gain the thoughts and ideas of teachers at my school? It may be that people are less likely to be frank if you are interviewing them in person, than if they are able to provide information anonymously (Munn and Drever, 1995, p3). If this is the case, then the anonymity offered by a questionnaire may facilitate more honest and open responses. My dilemma would be in ensuring to what extent my respondents actually truly accepted this offer of anonymity. Foucault (1990) has discussed how membership of institutions constrains the actions of individuals, distorting the views that they may feel that they are allowed to give. There could be the danger that despite my intentions to ensure anonymity, respondents may feel that they could still be identified through their responses and this could adversely affect the richness and honesty of the data. My intention is to take great care to communicate to all staff that their involvement in data collection is voluntary and will be anonymous. I will also clarify the fact that the data collection is part of an external research project that has no bearing on their individual positions within the school. I will make clear to the participants that their responses will contribute to data analysis for this study and participation will therefore be on a voluntary basis. For those teachers who are selected to be interviewed, written consent to participate will be obtained and participants may withdraw from the study at any time. I will also give participants the opportunity to be interviewed by someone other than myself if they so wish. All data will be treated in a way that protects the confidentiality and anonymity of the teachers involved in the study.</p>		
12.	Is medical care or after care necessary?	NO
<p data-bbox="384 1541 975 1579">If yes, what provision has been made for this?</p>		
13.	May these procedures cause discomfort or distress?	YES
<p data-bbox="384 1720 943 1758">If yes, give details including likely duration:</p> <p data-bbox="288 1780 1565 1937">I will ensure that at all points of the data collection, that individual participants have the opportunity to opt out if they choose to do so. This may be as a result of individual participants feeling under pressure during the data collection process or certain questions making them feel uncomfortable. This will be clarified at the beginning of each questionnaire and interview that participation is on a voluntary basis and that participants can choose to terminate the interview (or not return a questionnaire) if they so wish.</p>		

<p>14. (a) Will there be administration of drugs (including alcohol)?</p> <p style="text-align: center;">If yes, give details:</p> <p>(b) Where the procedures involve potential hazards and/or discomfort or distress, please state what previous experience you have had in conducting this type of research:</p>	<p>NO</p>
<p>15. (a) How will the participants' consent be obtained?</p> <p>All participants will be informed verbally and in writing about the study and participation will be on a voluntary basis. All teachers will be participating in the school professional development programme and it is my intention to invite them to complete an anonymous questionnaire discussing their involvement within that programme. I will make clear to the participants that their responses will contribute to data analysis for this study and participation will therefore be on a voluntary basis. For those teachers who are selected to be interviewed, written consent to participate will be obtained and participants may withdraw from the study at any time. All data will be treated in a way that protects the confidentiality and anonymity of the teachers involved in the study.</p> <p>(b) What will the participants be told as to the nature of the research?</p> <p>The participants will be informed that their contributions will inform an evaluation of the collaborative research informed professional development programme that they have participated in within their schools.</p>	

16.	(a) NO	Will the participants be paid?	
	(b)	If yes, please give the amount:	£
	(c)	If yes, please give full details of the reason for the payment and how the amount given in 16 (b) above has been calculated (i.e. what expenses and time lost is it intended to cover):	

17.	NO	Are the services of the University Health Service likely to be required during or after the research?	
		If yes, give details:	

18.	(a)	Where will the research take place?	
		Uphall Primary School, Uphall Road, Ilford, Essex. IG1 2JD. Newbury Park Primary School, Perrymans Farm Road, Barkingside, Ilford , Essex.	
	(b)	What equipment (if any) will be used?	
		Paper based questionnaires will be given to teachers to complete. Audio recording equipment will be used to record transcripts of interviews.	
	(c)	If equipment is being used is there any risk of accident or injury?	NO
		If yes, what precautions are being taken to ensure that should any untoward event happen adequate aid can be given:	

19.	<p>Are personal data to be obtained from any of the participants? YES/NO</p> <p>If yes, (a) give details:</p> <p>The only personal data to be obtained from the questionnaires and the interviews is the key stage (Foundation Stage is Reception and Nursery, Key Stage 1 is Years 1 and 2, and Key Stage 2 is Years 3-6.) within which the participant is currently working and the number of years that they have been teaching. This information will only be used to record the number of years each participant has been a qualified teacher, and not the number of years that they have been teaching in that particular school.</p> <p>(b) state what steps will be taken to protect the confidentiality of the data?</p> <p>All the data related to the study will be securely stored in a locked cupboard in my office and no other member of staff will have access to that information.</p> <p>(c) state what will happen to the data once the research has been completed and the results written-up. If the data is to be destroyed how will this be done? How will you ensure that the data will be disposed of in such a way that there is no risk of its confidentiality being compromised?</p> <p>All of the data related to the study will be shredded and disposed of by myself after five years to ensure that there is no risk of its confidentiality being compromised.</p>	
20.	<p>Will any part of the research take place in premises outside the University?</p> <p style="text-align: right;">YES</p> <p>Will any members of the research team be external to the University?</p> <p style="text-align: right;">NO</p> <p>If yes, to either of the questions above please give full details of the extent to which the participating institution will indemnify the researchers against the consequences of any untoward event:</p> <p>I will be the only member of the research team (although I am a student of the University, I am not a member of staff) and all my research will be undertaken in the two schools involved in the study.</p>	
21.	<p>Are there any other matters or details which you consider relevant to the consideration of this proposal? If so, please elaborate below:</p> 	
22.	<p>If your programme involves contact with children or vulnerable adults, either direct or indirect (including observational), please confirm that you have the relevant clearance from the Criminal Records Bureau prior to the commencement of the study.</p> <p>YES</p>	

23. DECLARATION

I undertake to abide by accepted ethical principles and appropriate code(s) of practice in carrying out this programme.

Personal data will be treated in the strictest confidence and not passed on to others without the written consent of the subject.

The nature of the investigation and any possible risks will be fully explained to intending participants, and they will be informed that:

(a) they are in no way obliged to volunteer if there is any personal reason (which they are under no obligation to divulge) why they should not participate in the programme; and

(b) they may withdraw from the programme at any time, without disadvantage to themselves and without being obliged to give any reason.

NAME OF APPLICANT:
(Person responsible)

Signed: _____

Date: _____

NAME OF DEAN OF SCHOOL:

Signed: _____

Date: _____

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[September 2008]

School A Action Research Questions

Name of credit group colleagues	Year group	Question / focus
K, S,	N	What kind of observation can best inform planning for independent learning?
S, J, R, A	R	How can role play develop independent writing
A, J, S, P	Y1	How can we improve children's questioning skills?
J, M, P, S	Y2	How to support children in sentence building?
A, J, D, L	Y3	How can we make our feedback more effective for children who are below the year's average in writing?
D, T, N, E	Y4	How can we use feedback to help improve sentence structure in writing
A, G, N, R	Y5	How can involving pupils in their own target setting improve their learning in Science (scientific enquiry skills)?
K, L, T,	Y6	How can peer assessment support writing

School B Action Research Questions

Names of teachers	Year group	Question / focus
T, S	N	How can we develop children's critical thinking skills and self-reflection.
L, R, M	R	How can we use questioning more effectively to improve children's language and communication skills?
L, V, M	Y1	Is our questioning effective for the progress for a range of pupils?
S, D, L, M	Y2	How can higher order thinking and deeper questioning extend higher attaining pupils to achieve their target, with a focus on teaching and learning?
J, A, S	Y3	How can we make our written feedback and response time more effective in Year 3?
Si, L, F	Y4	How do children become active learners?
S, J, B, L	Y5	How can we use questioning to develop comprehension through reciprocal reading.
J, S, L	Y6	How can peer assessment motivate and support progress for all pupils?

Interviews with teachers participating in action research

A1 Biographical details

Name: S. A. Age: 40+ Gender: Female

Ethnic origin: British Asian Years in teaching: 6 No. of schools: 1

Previous work experience: Receptionist in Estate Agents

Current role: Year 2 class teacher

A2. Biographical details

Name: A. W. Age: 40+ Gender: Female

Ethnic origin: White British Years in teaching: 23 No. of schools: 6

Previous work experience: A year working with the DHSS

Current role: YGL Reception

A3. Biographical details

Name: D. C. Age: 39 Gender: Female

Ethnic origin: White British Years in teaching: 10 No. of schools: 3

Previous work experience: Worked in a bank/Market Trader

Current role: Art subject leader / Year group leader 4

A4 Biographical details

Name: N. B. Age: 32 Gender: Female

Ethnic origin: Mixed Race

White /Black African Years in teaching: 3rd year No. of schools: 1

Previous work experience: Buildings Facilities Management, Customer Service Advisor (Virgin), BT Operator, Shop Assistant (Bookshop)

Current role: Year 5 Teacher/Geography Subject Leader

A5 Biographical details

Name: R. C. Age: 38 Gender: Female

Ethnic origin: White European Years in teaching: 10 No. of schools: 3

Previous work experience: Worked in a supermarket, restaurants, marketing, retail, night market

Current role: Year 5 Teacher

A6 Biographical details

Name: N. S. Age: 43 Gender: Female

Ethnic origin: Asian British Years in teaching: 3 years in permanent, 3 years in supply
No. of schools: 2 permanent, loads on supply

Previous work experience: Had own business for 2 years. Westminster Council/Doctor's Service.

Current role: Year 4 teacher. Charities Leader.

B1 Biographical details

Name: J. D. Age: 50+ Gender: Male

Ethnic origin: Years in teaching: 30 No. of schools: 7 (New Pk 10 years)

Previous work experience: United Nations (2 years) – Maritime Branch

Current role: EAL Co-ordinator

B2 Biographical details

Name: M. W. Age: 28 Gender: Female

Ethnic origin: White Years in teaching: 5 No. of schools: 1

Previous work experience: Straight to teaching

Current role: Year 1 Literacy Lead

B3 Biographical details

Name: M. Age: 40+ Gender: Female

Ethnic origin: Black African Years in teaching: 17 No. of schools: 4 (New Pk 4 years)

Previous work experience:

Current role: Key stage 1 Maths Co-ordinator, Yr 2 YGL

B4 Biographical details

Name: A. D. Age: 40+ Gender: Female

Ethnic origin: White/NZ Years in teaching: 11 No. of schools: Cover/ 1???

Previous work experience: Bus Driver

Current role: Year 3 (Doing MA)

B5 Biographical details

Name: L. H. Age: 25 Gender: Female

Ethnic origin: White British Years in teaching: 3 No. of schools: New Pk B.Ed

Previous work experience: B & Q, Charity Fundraiser

Current role: Class teacher Year 6

B6 Biographical details

Name: J. R. Age: 50+ Gender: Male

Ethnic origin: White British Years in teaching: 7 No. of schools: New Pk

Previous work experience: Local Authority Chief Officer

Current role: Class teacher Year 5

Appendix 8

Contextual details for the two schools

School A is much larger than the average primary school, with four classes in seven year groups from Reception to Year 6. The proportion of pupils supported by the pupil premium, which is additional government funding to support pupils who are known to be eligible for free school meals or looked after children, is above the national average. The proportions of pupils who are from minority ethnic groups or who speak English as an additional language are well above the national average. The proportion of disabled pupils and those with special educational needs supported through school action is below the national average. The proportion of students supported at school action plus or with a statement of special educational needs is also below the national average.

School B is also much larger than most primary schools with four classes in seven year groups from Reception to Year 6. The proportion of pupils supported by the pupil premium who are known to be eligible for free school meals is in line with the national average. A very large majority of the pupils on the school roll are from minority ethnic backgrounds. However, only a small minority of these pupils are at an early stage of learning English. The proportion of pupils with special educational needs and/or disabilities is broadly average. Most of these pupils have speech, language and communication difficulties.