Towards understanding the influence of subject knowledge in the practice of 'expert' geography teachers

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Abstract

Teachers' subject knowledge is a significant aspect of teachers' practice and worthy of further research. This research focuses on how 'expert' geography teachers use their subject knowledge and its relationship to their practice. The research consists of three over-arching themes: geography teachers' subject knowledge; other influences on teachers' practice and teacher 'expertise'.

The research is based upon data collected on six examples of 'expert' geography teachers. Data were collected in two cohorts and focused on illuminating teachers' practice, personal motivations and relationships with academic and school geography. These data were coded, described and analysed using a framework, described as the 'cultures of influence' map.

The research highlights new understandings about how these teachers used their subject knowledge. The six teachers were encouraged, at interview, to articulate individual philosophies and theories about geography and teaching geography. The research shows that the case teachers ascribed qualities to geography that they valued and wanted to emphasise in their teaching. It also shows that whilst a central influence on their practice, the case teachers' subject knowledge was not always the most significant influence. In examining their practice, analysis revealed three strategies used by these teachers to help students bridge the lesson content with their prior knowledge. The term 'synoptic capacity' is used to describe how teachers can link their lesson content with the subject as a whole.

The research calls for policy to refocus on the subject and on teachers' professional practice, to enable teachers to develop and use their synoptic capacity. It also calls for a reemphasis on geography as a resource for teaching in ITE and CPD and for further research into how the subject can affect geography teachers' expertise.
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I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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# Abbreviations

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<tr>
<td>A' level</td>
<td>Advanced Level public examination</td>
</tr>
<tr>
<td>A2</td>
<td>Second Part of A’ level qualification</td>
</tr>
<tr>
<td>AS</td>
<td>Advanced level qualification (first part)</td>
</tr>
<tr>
<td>AST</td>
<td>Advanced Skills Teacher</td>
</tr>
<tr>
<td>BT</td>
<td>Beginning Teacher (a term used for pre-service teachers)</td>
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<tr>
<td>DME</td>
<td>Decision-making exercise</td>
</tr>
<tr>
<td>EFL</td>
<td>English as a Foreign Language</td>
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<tr>
<td>ER</td>
<td>External Researcher</td>
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<tr>
<td>GA</td>
<td>Geographical Association</td>
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<tr>
<td>GCSE</td>
<td>General Certificate Secondary of Education</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GNP</td>
<td>Gross National Product</td>
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<tr>
<td>HE</td>
<td>Higher Education</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>ITE</td>
<td>Initial Teacher Education</td>
</tr>
<tr>
<td>KS3</td>
<td>Key Stage 3</td>
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<tr>
<td>KS4</td>
<td>Key Stage 4</td>
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<tr>
<td>LDDC</td>
<td>London Docklands Development Corporation</td>
</tr>
<tr>
<td>LEA</td>
<td>Local Education Authority</td>
</tr>
<tr>
<td>LEDCs</td>
<td>Less Economically Developed Countries</td>
</tr>
<tr>
<td>MA</td>
<td>Master of Arts</td>
</tr>
<tr>
<td>MFL</td>
<td>Modern Foreign Language</td>
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<tr>
<td>O' level</td>
<td>Ordinary level public examination</td>
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<tr>
<td>PCK</td>
<td>Pedagogical Content Knowledge</td>
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<tr>
<td>PGCE</td>
<td>Post-graduate Certificate of Education</td>
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<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
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<tr>
<td>QCA</td>
<td>Qualifications and Curriculum Agency</td>
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<tr>
<td>S' level</td>
<td>Special level public examination</td>
</tr>
<tr>
<td>SLE</td>
<td>Significant Life Experience</td>
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<td>SLN</td>
<td>Staffordshire Learning Network</td>
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Chapter One

Teacher subject knowledge is a significant aspect of teachers' practice and worthy of further research. This research looks specifically at the influence of subject knowledge on 'expert' geography teachers, and seeks to understand how their subject knowledge influences their practice. This chapter outlines the research themes.

1.1 Research focus and themes

This research aims to understand how 'expert' geography teachers use their subject knowledge, and how it influences their practice, along with other influences they may experience. It addresses three overarching themes: geography teachers' subject knowledge, other influences on their practice, and teacher 'expertise'. This section introduces these themes, highlighting how they are relevant to the research.

1.1.1 Geography teachers' subject knowledge

The first research theme, geography teachers' subject knowledge, can be divided into two parts. The first part focuses on geography as an academic subject and as a resource for teaching. The second part examines how teachers use their subject knowledge. This section shows how both parts are brought together in this research.

The examination of geography as a school subject is timely in relation to the ongoing debates concerning 'quality' in geography education. In December 2004, an Ofsted press release announced that geography was the "worst taught subject in primary
Weeden (2007) also reports on the decline of numbers studying GCSE Geography and explores to what extent this is affected by students' interest in the subject. The debate in the geography education community about this 'crisis' (Lambert, 2004a) suggests a possible link between the decline in geography's popularity and in its quality (see section 2.1.2). Marsden (1997) traces how influences from outside school geography have affected its development, often negatively. These influences, which can stem from pressures from social education for example, have taken the emphasis away from the content of geography lessons. For instance, Marsden critiques the geographical content of the GYSL\(^1\) project as taking 'place' out of geography and replacing it with 'issues'. He also argues that when the 1991 Geography National Curriculum defined the content of school geography, teachers focused on how to teach that content rather than what they were teaching. Marsden (ibid) does not call for an emphasis on geographical content over and above concerns for social educational or educational goals, but suggests that due consideration needs to be directed to the content of geography education.

Marsden's analysis emphasises a relationship between the content of school geography and its quality. The 2004 Ofsted report emphasised that one of the weaknesses in primary geography was teachers' subject knowledge which it described as "fragile" (Ofsted, 2004). The latest report from the Chief Inspector for Schools asserts that:

> achievement in history and geography was often constrained because they were taught using disjointed activities which failed to provide pupils with opportunities to build up their subject knowledge, skills and understanding progressively.

(Ofsted, 2006, p 56)

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\(^1\) GYSL: Geography for the Young School Leaver
The 2006 QCA monitoring report highlights similar concerns with non-specialists teaching geography and the lack of curriculum development at KS3 (QCA, 2006). Even though in a primary context, the Ofsted findings above indicate that poor subject knowledge amongst teachers can have a negative effect on children's geographical learning. It is important therefore to research geography teachers' subject knowledge focusing on how teachers use their subject knowledge in their planning and teaching.

In relation to teacher knowledge, Shulman's concept of pedagogical content knowledge (PCK) has been influential and controversial (see section 2.2.3). In his Address to the Carnegie Foundation in 1985, Shulman called subject knowledge the missing component in research into teachers' knowledge (Shulman, 1986). Nelson argues that this prompted a "cottage industry" of researchers examining this field of subject-specific pedagogy (Nelson, 1992). Subsequent research into teachers' knowledge has conceptualised what teachers know and how they use their knowledge. A range of terminology has been introduced and used to categorise both teachers' knowledge and their classroom practice (Fenstermacher, 1994). Whilst enabling a further understanding of teachers' knowledge, the research in this field has yet to fully explain teachers' relationship with their subject knowledge and how they use it, particularly in geography (see section 2.2.3).

The research on how teachers use their subject knowledge has been focussed on a narrow range of subjects such as Science, Mathematics and English (Leinhardt, 1986; Gudmundsdottir, 1991; Gess-Newsome, 1999; Hillocks, 1999). I was concerned about the transferability of their observations for geography. Martin (2006) and Cheng (2003) have examined the development of PCK and subject knowledge in teachers in the first two years of their teaching career². Walford (1996) and Barrett-Hacking (1996) have examined 'novice' teachers' conceptions of geography. However, the research in this

² Martin's (2006) work focused on primary teachers of geography.
field has not examined the use of subject knowledge in more experienced or 'expert' geography teachers. My research aims to broaden understanding of the role of subject knowledge by looking specifically at 'expert' geography teachers. The research critically examines Shulman's concept of pedagogical content knowledge (in section 2.2.3), and its applicability to how these 'expert' practitioners use their geographical knowledge.

1.1.2 Other influences on teachers’ practice

The second theme in this research recognises that subject knowledge is not the only influence on teachers' practice but that a range of other factors, contexts and experiences can affect their work. It would be incorrect to assume that the first research theme, geography teachers' subject knowledge, is invariably the strongest influence on their practice. Understanding other influences on teachers' practice can help to gauge to what extent their subject knowledge has affected their teaching.

Influences on teaching practice are found in a wide range of research fields and are debated in section 2.3. Goodson's (2000; 2003) and Hargreaves' (1994; 2001) work focuses on teachers themselves, their life histories and emotions, and how this affects their teaching (discussed in section 2.3.3). Stoll (1998) and Hargreaves (1995; 1999) have researched the different ways that schools can respond to change and affect teachers' work (section 2.3.2). Chitty (2004) and Scott (2000) have also examined education policy that can affect teachers' work and expectations of them (section 2.3.1). Martin (2006) has shown how other experiences outside of formal education can contribute to geography teachers' understanding of the subject. In this research, influences on teachers are categorised into five 'cultures of influence' (see section 2.3.4) and the scale and significance of each are explored.
Teaching practice can be understood by listening to teachers' stories about their work and their decision-making (see section 2.2.2). Elbaz (1991) and Jalongo, Isenberg and Gloria (1995) argue that much research into teachers' knowledge and actions have categorised teachers' knowledge into either formal or practical knowledge which doesn't reflect how teachers understand their practice. Teachers' stories are a powerful methodological tool to elicit data about how they make sense of their practice (Elbaz, 1991) and so have been included in this research to find out how the 'cultures of influence' can affect teachers' practice. A unique tool, the 'cultures of influence' map (see section 3.5.3) has been developed to represent the scale and significance of each of the 'cultures of influence' and used as a heuristic device to support teachers' discussion. This research seeks to understand 'expert' geography teachers' subject knowledge taking into account the significance of other influences on their practice.

1.1.3 Teacher 'expertise' in geography education

The third research theme, teacher 'expertise' in geography education, initially stemmed from my own desire to become a better geography teacher and to support the development of my colleagues. During the process of the research, although my understanding of 'expertise' changed, it remained an important theme. This section introduces why 'expertise' is of particular interest in geography education.

The Labour Government introduced Advanced Skills Teacher status to recognise the practice of highly skilled teachers (Labour Party, 1996). The Advanced Skills Teacher criteria demonstrate 'expertise' as defined by the government, and are expressed as a list of competency statements (see section 2.4.1). Through analysis of these criteria, and influenced by the work of Elbaz (1990) who argued that studying 'expertise' to replicate it is circular logic (see section 2.4), I began to view 'expertise' as a social construction. The analysis of 'expertise' reflects the dominant values of those that define
it. Analysis of ‘expert’ practice can illuminate what it is about that practice that makes others label it as ‘expert’.

It is surprising that, although a large volume of research has been undertaken into expert teaching in Maths, English, EFL (English as a Foreign Language) and social studies, less has been focused on geography. ‘Expertise’ is of particular interest in geography education as geography is an eclectic subject with a range of different methodologies and different sub-disciplines from both the physical and human sciences. The academic geography community has debated which concepts unify the discipline (Harrison et al., 2004; Matthews & Herbert, 2004). Similarly, a debate about the future of school geography (Brown, 2002; Huckle, 2002; Stannard, 2002) (see section 2.1.2) has shown that there are contrasting viewpoints about the subject and its contribution (see section 2.1.2). The eclectic nature of the subject prompts the following questions:

- Can a human geographer (with limited experience in some aspects of physical geography) lay claim to being an ‘expert’ geographer?
- Can a teacher be an ‘expert’ in all aspects of geography?

These questions highlight the importance of examining ‘expertise’ in geography education. My aim became to discover how the subject knowledge of ‘expert’ geography teachers affects how they teach geography. The aim was not to discover a right way or wrong way to teach geography, but to unravel the nature of the relationship between subject knowledge and geography teaching, and to understand how ‘expertise’ is conceptualised in that relationship.

The research themes outlined above have been brought together in this research to focus on how ‘expert’ geography teachers are influenced by their subject knowledge. The research has adopted a case study approach, and uses a mixed range of data collection strategies to understand both the context and the phenomena in each case.
A new tool, the ‘cultures of influence’ map, has been devised and used to represent this context and phenomena relationship (see section 3.5.3).

1.2 Significance

The research aims to examine the relationship between the subject knowledge of ‘expert’ geography teachers and how they teach geography. The term ‘relationship’ is used because it is assumed that as they have chosen to become geography teachers, they have a relationship with their subject (along with other relationships that they develop, such as with their students (Hargreaves, 2001)). Previous work has looked at the relationship between teachers' knowledge and practice, with recent research looking specifically at the school subject of geography (Cheng Nga Yee & Stimpson, 2004; Martin, 2004; Morgan & Lambert, 2005). However, this research focuses specifically on ‘expert’ geography teachers and how they use their understanding of geography, whilst also acknowledging the other influences in their practice. This research is significant because it contributes to the growing understanding of teachers' knowledge, particularly in the field of geography. This research also contributes to the understanding of the practice of ‘expert’ teachers (Jasman, 2003; Moore, 2004). It seeks to increase understanding of geography teachers' work, with the motive of celebrating and understanding their practice and the importance of geography in the education of young people.

1.2.1 Thesis outline

This research considers the importance of how subject knowledge affects ‘expert’ geography teachers. Chapter Two reviews what is already understood about the nature of teacher ‘expertise’, and of geographical knowledge. It reviews what is known about how teachers use their subject knowledge and the other influences on teachers’
practice. Chapter Three outlines a methodological discussion on the design of the research including its empirical component and the data collection methods used. A case study approach was chosen for the empirical investigation, and the selection and sampling of cases is discussed. Chapter Four describes the first cohort of cases. Chapter Five describes the second cohort of cases. Chapter Six offers a synthesis of the research themes and the relationships between subject knowledge and how the case teachers have used it. Chapter Seven returns to the research themes to discuss the significance and importance of the research findings, and the contribution that the research has made. Recommendations for further research and the limitations of this research are also discussed in this chapter.
Chapter Two

This chapter reviews previous research in the three research themes: geography teachers' subject knowledge, other influences on teachers' practice, and teacher 'expertise'. Relevant research is reviewed critically, and its significance to this research outlined. The chapter concludes by outlining the research questions, showing how they are original, reflecting gaps in the literature.

2.1 Geography teacher's subject knowledge

The first research theme, geography teachers' subject knowledge, is divided into two parts: geography as a subject, and how teachers use their subject knowledge. This section examines what is meant by 'geography' at academic level, and how that may differ from the school subject. It reviews research on how conceptions of academic and school geography can affect teachers' understanding of the subject, and their practice. The second part of this section reviews research on how teachers use their subject knowledge.

2.1.1 Geographical knowledge

Academic geography, as a discipline, is a human creation, defined and maintained by people (ie, geographers) (Johnston, 1985; 1991). Goodson notes that this social construction is a dynamic process:

Subjects are not monolithic entities but shifting amalgamations of subgroups and traditions that through contestation and compromise influence the direction of change. (Goodson, 1997: p 64)
Johnston (1991) argues that such rivalry of ideas and influences can come from both inside and outside the discipline. Therefore, how 'geography' has been understood changes over time.

Reviews of the development of academic geography have charted these changes in the content and process of geographical study (Johnston, 1991; Unwin, 1992; Livingstone, 1993). Livingstone, Unwin and Johnston have recorded how geography’s development has adapted to changes in society reflecting what society considers valuable knowledge. Unwin (ibid) categorises distinctive phases in geography’s history which he labels: Regional, The Quantitative Revolution, Humanistic, Behavioural, Radical and Post-modern approaches. Although these terms are not agreed on by all scholars, they broadly represent the phases or ‘paradigms’ of the development of geography and therefore will be used in this research. These changes have affected how geography was studied and what content was considered valuable. This reflects different epistemologies as well as different methodologies.

Unwin (ibid) notes that the changes in the study of geography have not involved all areas of academic geography. Matthews and Herbert (2004) argue that the epistemological and ontological changes have caused divisions between physical and human geography, causing their development to diverge. Maude (2005) suggests that these divisions also occur within human geography. These sub-divisions prompted Jackson to describe the discipline as fragmented (1993).

The shifting trends and emphasis have affected the work of academic geographers, particularly within the broader academy. Castree & Sparke, (2000), Loftus, (2006) and Unwin, (1992) note that the work of academic geographers is regulated by broad structural forces such as the Research Assessment Exercise (in England and Wales), and institutional pressure to attract both funding and large numbers of undergraduates.
(For a case study of a department and how these changes have affected it see Jenkins and Ward, 2001.) These institutional pressures have caused some university departments to shift emphasis towards, for instance, environment topics or GIS to attract students (Thift and Walling, 2000). Therefore how geography is positioned can also be viewed as a dynamic political construction (Johnston, 2006).

Castree (2003) describes physical and human geographers as speaking different languages, and Thift (2002) emphasises that physical and human geographers prefer different methodologies. Disciplines are defined by how they construct knowledge (Becher & Trowler, 2001) (see also Holloway, Rice, & Valentine, 2003). This is relevant to geography as its subject matter lies across traditional science/art boundaries (Marsden, 1997). Academic disciplines that lie within these boundaries work with a set of codes, rules and recognised methodological practices. Geography, a discipline that ‘borrows’ from both the social sciences and the physical sciences, then claims to construct knowledge using the methodological practices of both. For instance, the Quantitative Revolution was influenced by positivism and adopted systematic and quantitative research methods, some of which are still practised in areas such as geomorphology. However, humanistic geography and radical geography preferred more qualitative and interpretative approaches to research. The philosophical and methodological residuals from these varied ‘geographies’ can still be seen in the subject today.

Slater summarised these changes in her analysis of values within geography (see Figure 2.1). Although her summary was intended for a geography education audience (and therefore does not use exactly the same terminology as Unwin’s account), its relevance here is to emphasise how geography can be viewed through the lenses of these different viewpoints.
Figure 2.1 Means and ends in geography (after Slater, 1996, p 209)

<table>
<thead>
<tr>
<th>Viewpoint - the presupposed values</th>
<th>Ends - the overriding aim or focus</th>
<th>Means - ways to explanation and understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific (called Quantitative Revolution by Unwin)</td>
<td>Space, spatial patterns, spatial relationships, spatial processes</td>
<td>Analysis, prediction/modelling, generalising/seeking laws, mathematical deduction, hypothesis testing, problem-solving</td>
</tr>
<tr>
<td>Behavioural</td>
<td>Patterns, relationships, people/environment interactions</td>
<td>Analysing perceptions and decision-taking, generalising people environmental behaviour, developing models, hypothesis testing</td>
</tr>
<tr>
<td>Humanistic</td>
<td>Place, people and places, sense of place, spirit of place, authenticity</td>
<td>Personal understanding, individual meaning, interpretation, making meaning, reflecting, empathetic stances, being presuppositionless, insider/outside positioning, analysis of personal reactions</td>
</tr>
<tr>
<td>Social welfare, liberal, radical and social historical</td>
<td>Society, organisation, structures, pressure groups, place and society, power, vested interests in time and place</td>
<td>Critical analysis, critical theory, social theories and analysis, social and political analysis, interpretation, critical reflection</td>
</tr>
<tr>
<td>Postmodern</td>
<td>Understanding the multiple realities of places, spatial practices, landscape as text, places in transition, celebrating difference, places and developing identities</td>
<td>Critical analysis, interpretation, reflection, un-patternning and re-patternning, reassembling, deconstructing, recognising many realities and representations of space</td>
</tr>
</tbody>
</table>

One question this discussion raises is the extent to which geography can be recognised as a single discipline. Stoddart (1987) argues that the common purpose of geography is to answer the big questions in society, through using location, position, distance and area, as the ‘building blocks’ of the discipline. Matthews and Herbert (2004) have emphasised how shared concepts and methodologies can unify different positions within physical and human geography. They conclude that the core concepts of geography are space, place, environment and maps, and that these concepts (and in the case of maps, methodologies) can be used to link the subdivisions within geography.

Matthews and Herbert (ibid) debate how the discipline can unify rather than if or why it should (Maude, 2006). Their position has been criticised by Johnston (2006) as he
reasons that creating and sustaining an academic subject is a political process and the politics of silence can omit important areas. He explores how the geographical concept of spatial science is neglected in many undergraduate textbooks and in Matthews and Herbert's summary of the discipline. The omission of particular concepts can have a further divisive effect within the discipline (Johnston, 2006).

Acknowledging Johnston's important criticism, the literature suggests that there are areas of geography which bring the physical and human aspects of the discipline together, as well as a gathering consensus on the defining concepts of geography. Burgeoning areas of geography such as moral geographies (Smith, 2000) and hybrid geographies (Whatmore, 2002) bridge the physical and human divide. Analysis of first-year undergraduate human geography textbooks (Cloke et al., 1999; Holloway et al., 2001; Hubbard et al., 2002; Doring, 2005; Daniels et al., 2005) shows agreement on the key geographical concepts. Thift and Walling's (2000) work on physical geography notes that the underlying concepts of place, scale and landscape are also prevalent in research. There is some consensus therefore of the underlying concepts of the study of geography today, and an air of optimism about the future of geography as an academic discipline and as an important influence on policy and society (see Thift, 2002, and responses from Clark, 2002; Johnston, 2002 and Turner, 2002). Jackson (2006) has suggested that these concepts emphasise relational thinking, a distinctive geographical contribution to knowledge.

The debate and degree of consensus on a unified geography has taken place relatively recently. Geography teachers, as undergraduates, may have experienced a more disparate and divided academic discipline. Depending on where and when they studied geography, teachers may have been influenced by different content matter and ways of conducting research, and through time their understanding of geography may also have developed and changed. In addition, teachers may not be familiar with the changing
philosophical traditions within geography and may not have the meta-theoretical vocabulary to describe them and their effects (Kent, 2006).

The debate in academic geography is helpful in illuminating different ways that geography can be understood. However, the question remains as to the extent this shifting discussion affects geography teachers. Drake and Dart (1997) state that there is little formal support for the development of teachers' subject knowledge post-qualification (although they do not acknowledge the support offered by subject associations). Without such support, it may be that teachers are not enabled to make sense of this shifting landscape of ideas. However, a focus on the unifying concepts would be useful for teachers as this would not only enable them to gain a full understanding of the subject, but could also act as a way of guiding them through the shifts and changes that occur in academic geography.

2.1.2 School geography

Understanding academic geography as dynamic could affect how the school subject is interpreted or understood. This section reviews the influences on school geography and the ideological traditions that underpin those influences.

Walford (2001), Rawling (2001), and Graves (2001) have traced the development of school geography. Walford (2001), analysing school geography from 1850-2000, observes that it has been influenced by broader changes and developments in pedagogy such as progressive notions of teaching and learning. Graves (2001), whose work focuses on school geography textbooks from the same period, makes similar observations stating: "[Geography school] textbooks tend to follow society, rather than lead it" (Graves, 2001, p 157). A question that could follow this observation is the
extent to which changes in the academic subject discipline have affected school geography.

In the UK there has been a strong tradition of links between geography at academic and school level (Goodson, 1987; Marsden 1997; Kent, 2000) with academic geographers participating in the Geographical Association (the subject association) and writing school geography textbooks (Graves, 2001). Chalmers, Keown and Kent (2002) argue this link started to deteriorate in the 1970s due to changes in the focus of work in higher education (HE). In 1993, the divide between academic and school geography had widened to the point that Goudie described it as a “chasm”, a view that was supported by Brown and Smith (2000). Morgan and Lambert (2005) argue that today the divide is wider than ever.

Is the divide from academic geography detrimental to the school subject? Bonnett (2003a, 2003b) and Stannard (2003) emphasise that academic and school geography rely on each other for their mutual survival (although they do disagree on how they can relate to each other). In the January 2002 edition of Geography, Brown, Huckle, and Stannard, offered their perspectives on the future of geography education, placing emphasis on how and what should be taught to secure its future. Noticeably each author takes a different perspective on school geography, its importance and the relevance of academic geography, each focusing on its popularity, contribution to citizenship, and sustainable development. Kent (2000) argues that the apparent lack of coherence within the subject, poor communication between the sectors and its diminishing visibility are all indications of the school subject’s perceived weakness. Marsden (1997) notes how changes in the school subject can impact on the content of school geography (for example, Marsden suggests that the GYSL project reduced the emphasis on ‘place’ in school geography and replaced it with an emphasis on geographical issues). His analysis shows that the educational or social motives behind changes in the curriculum have affected the content of school geography. Marsden
advocates a refocus on the content of school geography, for there are dangers he argues, to a school subject when its independent means to select content are relinquished (Marsden, 1997).

One question that arises is how is the content of school geography selected? The Geography National Curriculum and government guidance on its implementation (such as the QCA schemes of work, 1998) define the statutory content of school geography. These perspectives on school geography have power and authority as they originate from government agencies and are supported by a legislative framework. However, as Rawling (2001) notes, their construction are not value-free but are ideologically driven. Rawling’s (ibid) analysis of school geography highlights how the Geography National Curriculum has been influenced by ideological traditions in geography education (see Figure 2.2).

**Figure 2.2 Ideological traditions and geography: a simplified analysis (2001)**
(Rawling, 2001, p 32)

<table>
<thead>
<tr>
<th>Ideological tradition</th>
<th>Characteristics</th>
<th>Impact on school geography in England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilitarian/informational</td>
<td>□ Education primarily aimed at 'getting a job' and 'earning a living'</td>
<td>□ Nineteenth century emphasis on locational knowledge ('capes and bays') and on useful knowledge about the countries of the world</td>
</tr>
<tr>
<td></td>
<td>□ A focus on useful information and basic skills</td>
<td>□ The 1991 GNC reinstated an emphasis on maps, locational knowledge about the world geography</td>
</tr>
<tr>
<td>Cultural restorationism</td>
<td>□ Restoring traditional areas of knowledge and skills (cultural heritage)</td>
<td>□ Economic and regional geography related to Britain's early twentieth century empire and trading links</td>
</tr>
<tr>
<td>(as promoted by the New Right in English policy making in the 1980s and 1990s)</td>
<td>□ Providing pupils with a set package of knowledge and skills which will enable them to fit well-defined places in society and the workplace</td>
<td>□ The 1991 GNC seemed to stress factual information and to focus on the geography of Britain in a relatively unchanging world</td>
</tr>
<tr>
<td>Liberal humanist</td>
<td>Worthwhile knowledge as a preparation for life: the passing on of a cultures heritage from one generation to the next</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emphasis on rigour, big ideas and theories, and intellectual challenge</td>
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</tr>
<tr>
<td>Progressive educational</td>
<td>Focusing on self development or bringing to maturity the individual child/pupil</td>
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</tr>
<tr>
<td>(also called classical humanist)</td>
<td>Using academic subjects as the medium for developing skills, attitudes, values and learning styles which will help them become autonomous individuals</td>
<td></td>
</tr>
<tr>
<td>Reconstructionist</td>
<td>Education as an agent for changing society; so an emphasis on encouraging pupils to challenge existing knowledge and approaches</td>
<td></td>
</tr>
<tr>
<td>(also called radical)</td>
<td>Less interest in academic disciplines, more focus on issues and socially critical pedagogy</td>
<td></td>
</tr>
<tr>
<td>Vocationalalist or industrial trainer</td>
<td>Provide pupils with knowledge and skills required for work</td>
<td></td>
</tr>
<tr>
<td>(note: in some ways this cuts across all the other traditions)</td>
<td>Or use workplace and work-related issues as a stimulus for learning skills/abilities</td>
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</tr>
<tr>
<td></td>
<td>Or use work-related issues for questioning status quo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The development of geography as an academic discipline in the 1950s and 1960s and the resulting higher status accorded to the subject in schools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress on scientific methods, theories and quantitative techniques in the 'new geography' of the 1960s and 1970s</td>
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<tr>
<td></td>
<td>The geography curriculum development projects of the 1970s and 1980s (Geography for Young School Leaver, Bristol Project, Geography16-19)</td>
<td></td>
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<tr>
<td></td>
<td>Emphasis on enquiry, active learning and development of skills, attitudes and values through geography</td>
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</tr>
<tr>
<td></td>
<td>Child-centred primary education 1960s-1970s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'thinking skills' (late 1990s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geography's involvement with e.g. environmental education, peace education, global education, in the 1970s-1980s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The current interest by the New Labour government in sustainable development education and citizenship seems to offer opportunities for reconstructionism, but may only be a relatively utilitarian reaction to changing societal concerns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Geography, Schools, Industry project (GA sponsored 1983-91) used work-related contexts in a progressive way for curriculum change and active learning. More recently, government-promoted careers education, work-related initiatives and key skills have been more utilitarian in character (skills for work).</td>
<td></td>
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</table>

In her account, Rawling (2001) suggests that members of the Geography National Curriculum Working Group had contrasting ideological viewpoints on geography education that influenced the construction of the programme of study. Centrally generated education policies are translated, interpreted and implemented at a school,
classroom and individual level (ibid). However, empirical research into how geography departments responded to the 1991 National Curriculum Order suggests that the dominant influence was the department's preferred pedagogical approaches and their habitual practices (Roberts, 1996a).

The Geography National Curriculum also had an impact on how geography teachers viewed their subject content. The content of the original Geography National Curriculum orders emphasised a particular definition of geographical knowledge (Morgan & Lambert, 2005) with an emphasis on a more traditional view of such knowledge. The amount of content was seen as an attempt to overturn the progressive development in geography education in the 1980s. The result of which, as described by Rawling (2001) and Roberts (1996b), was that local curriculum development initiatives lost their momentum. Morgan and Lambert describe this in strong terms: “It was as if teachers no longer believed in the capacity to decide the what and the how of teaching geography” (Morgan & Lambert, 2005, p 38, emphasis in original).

This apparent 'deskilling' of teachers has been exacerbated by the geography textbook market. Ofsted recognised many teachers responded to the first Geography National Curriculum by an over-reliance on one textbook series (Ofsted 1999, and see also Lambert, 2004). A more recent trend in publishing is to align post-14 textbooks with particular examination specifications. As Chris Kington (2004) noted in his presidential address at the GA Conference in 2003, the link between examination specification and textbook authorship (often GCSE and AS/A2 textbooks are authored by Chief Examiners) means that the examination specifications dominate the content of those textbooks. As examination specifications do not change often, this narrows the scope of school geography (Lambert & Roberts, 2004).

However, since the introduction of the first Geography National Curriculum, the landscape of school geography has changed significantly. The revised National
Curriculum contains sufficient scope for individual or departmental curriculum development (Rawling, 2001). However, evidence from Ofsted (2005) would suggest that teachers have not responded creatively to this change, echoing Morgan and Lambert’s observation that teachers do not appear to engage in curriculum development. This is despite recent government legislation which has focused on pedagogy and curriculum development. The Key Stage 3 Strategies (DfES, 2005) have focused on generic pedagogical initiatives such as assessment for learning, thinking skills and setting objectives. However, they have little accompanying subject specific guidance, and the guidance is presented in generic ways with little applicability to individual subjects (Stobart & Stoll, 2005). Leach, Williams and Andrews (2002) note that subject knowledge is becoming more influential in government legislation, and the Action Plan for Geography has enabled the subject association (the Geographical Association, with the Royal Geographical Society, with the Institute of British Geographers) to offer subject specific support for teachers.

School geography has therefore experienced reduced involvement with the academic community and greater prescription of subject content, which this section has argued has reduced teacher autonomy. In the science community it is acknowledged that school science is a different (but related) subject from its academic counterpart (Kind & Taber, 2005). This section has shown that school geography has different influences compared to the academic subject, and so may also be epistemologically different from its academic cousin (see Lambert, 2001; 2002). The challenge therefore is for teachers who have experienced academic geography to teach the epistemologically different school geography. The following section reviews what we already know about how geography teachers do this.
2.1.3 Teachers’ understanding of geography

Teachers’ experience of academic geography depends on where and when they studied it (see section 2.1.1). Section 2.1.2 noted how the school subject is also dynamic. It is not surprising therefore that geography graduates consider the discipline at school level to be concerned with different knowledges from their undergraduate studies (Lambert, 2001; 2002). This section reviews research into how teachers have negotiated these differences between the academic and school subject.

Undergraduate geography courses rarely cover all areas of geographical content covered in the school curriculum, so geography teachers do not necessarily have a detailed knowledge of all the topics required to teach geography at A’ level (Bale & McPartland, 1986). However, Rynne and Lambert (1997) argue that geography graduates have the intellectual capacity to develop new understandings through their ability to think geographically. Since that research, there has been the introduction of subject knowledge Standards for QTS (2002) and some standardisation of undergraduate courses (QAA, 2000). But opportunities to reflect on subject knowledge development post qualification are limited (Prentice, 1997).

Calderhead and Robson (1991) suggest that the biggest influence on teachers is their experience at school, and Chan’s (2004) research shows that teachers have different conceptions of teaching and learning as well as geography. These conceptions of learning are similar to those held by undergraduate geographers (Bradbeer, Healey & Kneale, 2004). Therefore, teachers’ understanding of schooling is relevant to understanding their practice.

Martin’s (2006) work demonstrates the complexity of defining teachers’ understandings of geography. Her concept of ethnogeographies emphasises teachers’ broader engagement with geographical phenomena beyond formal education is an important
component of their geographical understanding and pedagogical toolkit. Parker (2001) recognised that formal education leaves “residuals” that affect teachers, but Martin argues that everyday experiences contribute to geographical knowledge:

Ethnogeography reflects the view that all learners are geographers because they all live in the world. They all negotiate and interact with a variety of landscapes (human and natural) on a daily basis. What they don’t perhaps recognise is that this knowledge is useful geographical knowledge and a point from which deeper conceptual understanding is developed. (Martin, 2007 p 183)

This concept has its roots in the concept of geographical imaginations (Gregory, 1994). Allen and Massey (1995) describe a person’s geographical imagination as including their formal education as well as notions of nature, distance, movement, sustainability, the identity of place and local cultures. Martin’s work suggests that these everyday geographical experiences can add to teachers' knowledge base (2006).

Teachers with a range of experience may have highly developed geographical imaginations, which influence their teaching. Unfortunately, research in this area is inconclusive. Walford’s (1996) research on PGCE students suggests geography teachers have a clear idea of what they perceive geography to be, albeit with little agreement between them. Barratt-Hacking’s (1996) research looked at 16 teachers in their PGCE year and concludes that geography teachers’ geographical “persuasions” are often suspended when they teach geography. Jewitt’s (1998) work contradicts these findings. Her work on one geography department suggests that the individual’s practice is underpinned by values, mainly developed through their HE geography experience, which affects how they perceive school and academic geography.

Therefore, it is unclear what the impact of geography teachers’ understanding is on their practice. Research in this area has focused on ‘novice’ teachers rather than geography
teachers with more experience or 'expertise'. Geography at academic level has changed, and more experienced teachers will have experienced these new developments in academic or school geography whilst 'in' practice. They may also have been affected by other experiences such as post-academic studies that have changed their geographical imaginations. Accordingly research is needed to examine how 'expert' teachers' practice can be affected by their subject knowledge.

2.2 The use of subject knowledge and teachers' actions

The second part of this research theme reviews research on teachers' subject knowledge. Reviews of research in this field (Calderhead, 1996; Cochran-Smith & Lytle, 1999; Fenstermacher, 1994) have used conceptual or chronological categorisations. This review has adopted Munby, Russell and Martin's (2001) categorisation as it enables a summary of the research that is broadly chronological but also reflects these different conceptual and methodological approaches. The classification divides research in this field into three categories: the cognitive psychology approach, the teacher-centred approach focusing on personal practical knowledge, and the knowledge base for teaching approach. It is acknowledged that there is cross-over between these approaches. For instance, Cochran-Smith and Lytle (1999) see their work on teachers as researchers through teacher narrative (a characteristic of the personal practical knowledge approach) as contributing to the research on knowledge bases for teaching. Influenced by Calderhead's (1993) description of Zeichner's (1983) classifications of research into teacher education as representing different epistemologies of practice, this section reflects how different approaches to examining teacher knowledge also represent different ways of thinking about 'expert' teacher knowledge. This section concludes with a critique of pedagogical content knowledge.
2.2.1 The cognitive psychology approach – describing expert practice

Research into teachers' knowledge sought to describe 'expert' teaching in order to distinguish the work of expert practitioners from novices (see section 2.4.2). Much of the work in this field was influenced by Berliner and his team at the University of Pittsburg. Grounded in the tradition of cognitive psychology, research in this field mostly used an experiment methodology or simulated classroom events and observed how teachers responded (examples are detailed in Figure 2.3).

Figure 2.3 Research into the practice of experts – summary of findings

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Research</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis &amp; Raymond, 1995</td>
<td>Student teachers reflect on discipline and class management</td>
<td>Class management relies on Planning Organisation Staffing Leading Controlling</td>
</tr>
<tr>
<td>Skamp, 1995</td>
<td>Survey of perceptions of student teachers and their development through training.</td>
<td>Conceptions identified</td>
</tr>
<tr>
<td>Leinhardt, 1986</td>
<td>Compared the practice of 'expert' and novice maths teachers through videoed lessons, with commentary and extensive interviews</td>
<td>Experts and novices differed through:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• time and content of lessons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• use of routines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• content specific focus to lessons.</td>
</tr>
<tr>
<td>Leinhardt, 1987</td>
<td>Looks at an 8 day unit on subtraction taught by an 'expert' teacher.</td>
<td>Teacher uses range of strategies to cater for and provide for all abilities.</td>
</tr>
<tr>
<td>Leinhardt, Weidman &amp; Hammond, 1987</td>
<td>Observed experts in their first few lesson with new classes.</td>
<td>Routines were established quickly and maintained.</td>
</tr>
<tr>
<td>Peterson &amp; Comeaux, 1987</td>
<td>Compared 10 experts and 10 novices, via intelligence tests, videoed lessons, structured interviews, and then coded responses.</td>
<td>Experts have more developed knowledge structures, and rely heavily on procedural knowledge.</td>
</tr>
<tr>
<td>Carter et al. 1988</td>
<td>Compared responses of experts and novices to slides of classroom situations.</td>
<td>Experts more able to understand and explain phenomena rather than merely descriptive.</td>
</tr>
</tbody>
</table>
Swanson et al., 1990 | Coded responses of 48 experts and novices to 6 problems. | Experts identified the causes of the problems rather than dealing superficially with the situation.

Sabers, Cushing & Berliner, 1991 | Compared the responses of 7 experts, 4 advanced and 5 novices to 3 video screens simultaneously showing classroom situations. | Experts were more able to understand and explain phenomena rather than merely descriptive.

Oppewal, 1993 | Showed pre-service teachers video clips of classroom events and discussed what they saw. | The more experienced the student, the more detail they saw.

Tochon & Munby, 1993 | Compared how experts and novices perceived time. | Experts are more at ease and more flexible, and often improvise.

Research using an experiment methodology examined isolated aspects of teachers' practice in order to understand what they knew (described as process-product by Jasman, 2003). However, this approach does not establish how these isolated actions link with the other dimensions of teachers' work such as the academic rigour, the pedagogic practice, their understanding of students, or what happens outside the classroom (Warham, 1993). Eraut (1995) criticises analyses of 'expertise', which like Berliner's work, are based on the Dreyfus and Dreyfus model (1986), as they focus on the decision making dimension of 'expertise' and so reflect an intuitive rather than analytical understanding of phenomena.

Sternberg & Horvarth (1995) address these issues through their prototype model of expert teachers' knowledge which seeks to describe an 'expert' teacher holistically. However, this model has been criticised for being incomplete (Cowley, 1996) which demonstrates the difficulty of describing teachers' knowledge and 'expertise' in this way.

In 2001, Berliner returned to this area of research and acknowledged that his research into teacher 'expertise' did not take into account teachers' talent, their practice or context and how these factors can affect 'expert teachers'. This body of work on 'expertise' fails to differentiate between good and successful teaching: ie, whether the
teaching hits various standards or whether it achieves its own objectives (Fenstermacher & Richardson, 2000). The outcomes focus on describing what teachers do, through identifying patterns and generating rule-like suppositions, but the research does not focus on illuminating the phenomena of ‘expertise’ by offering different interpretations and observations. It does not examine why their practice occurs in this way (Eraut, 1995). However, the results have been influential and useful for describing elements of teaching (see section 2.4).

2.2.2 Personal practical knowledge – listening to experience

Whilst the research in the cognitive psychology approach described what teachers did, other scholars sought to describe knowledge of classrooms and to categorise teachers’ knowledge (Calderhead, 1996; Fenstermacher, 1994). For instance, Leinhardt and Greeno (1986) offer a categorisation of teachers’ knowledge into two systems: that of lesson structure and subject matter. Clark and Peterson (1986) suggested that a teacher also has theories and beliefs, which can also influence their practice.

The body of work that acknowledges teachers’ knowledge borne from classroom experience uses the term personal practical knowledge (Connelly & Dienes, 1982; Clandinin, 1985; Connelly & Clandinin, 1988; Elbaz, 1990). The term enables a distinction between teachers’ theoretical or formal knowledge which stems from research, and practical knowledge which teachers gain from classroom experience (Fenstermacher, 1994). Elbaz (1991), Cochran-Smith and Lytle (1993) and Connelly and Clandinin (1988) argue that this demarcation is not how teachers themselves perceive, or use their knowledge.

Advocates of personal practical knowledge claim the term gives credibility to teachers’ experience as part of their knowledge about teaching. This approach has been adopted
by empirical research conducted into teachers’ knowledge (Dadds, 1993; Shank, 2006). Goodson (1999) argues that teachers’ experiences of teaching, as expressed through their narratives and stories can help describe their understanding of practice and its social context. Goodson (2003) also argues that this type of knowledge is important as it defines who the teachers are.

Teachers construct their knowledge of classrooms through stories and images (Elbaz, 1983b; Jalongo, Isenberg & Gloria, 1995). These ‘images’ help teachers make sense of classroom phenomena (Clandinin, 1985). In order to understand teachers’ actions, it is important to listen to them discussing their reasoning which may help illuminate their beliefs and knowledge. However, Hillocks (1999) notes that other influences such as curriculum, or different perceptions of the subject, will also affect their actions and may not be expressed as beliefs or knowledge. Clark (1986) expresses concern that this introspection does not address other pressing issues in education (such as its quality).

Cochran-Smith and Lytle (1993) argue that teachers’ knowledge is often constructed for them by outsiders (such as academic researchers). They suggest that enabling teachers to reflect on their own experiences and their practice empowers them and therefore is more likely to have an impact on their practice. These perspectives on teachers’ knowledge have resonance with the reflective practitioner model of teacher development which has influenced ITE (Moore, 2004). Schön’s (1987) description of a reflective practitioner shows that professionals’ reflections on their practical experience enables them to understand their actions and the effects arising from them. Eraut (1994) and Zeichner (1995) state that this reflection needs to be purposeful and informed by a general theory of practice.

The body of work into personal practical knowledge has been challenged as to whether it is an authentic knowledge construct. Fenstermacher (1994) questions whether practical knowledge can be viewed as a type of knowledge at all. Using a modified
definition of knowledge from the philosophical study of epistemology (ie, that of knowledge as justified true belief (Moser, Mulder & Trout, 1998)). Fenstermacher (ibid) is sceptical of whether this knowledge that stems from practice has epistemic validity and questions whether personal practical knowledge is a form of knowledge or a belief.

Fenstermacher's criticisms highlight the grey area between knowledge and beliefs and the difficulty of defining the boundary between them. Parajes (1992) considers what teachers have beliefs about. He warns against assuming beliefs exist or that they influence practice or that researchers can know what they are. Korthagen (2004) argues that teachers have layers of beliefs. He suggests that teacher's actions are underpinned by competencies, which are influenced by their beliefs, which stem from a teacher's identity and their mission for teaching. Korthagen and Parajes' work suggests that whether beliefs can be understood as knowledge does not negate their importance in understanding teachers' practice. Korthagen (2004) acknowledges that beliefs and identity are influenced by significant others and life events. This emphasises the importance of acknowledging teachers' individual contexts and experiences (see section 2.3.3). Campbell, Kyriakides, Muijis and Robinson (2004) argue that this values dimension is so important that it should always be a feature of research into school or teacher effectiveness.

Personal practical knowledge has therefore been valuable in refocusing work on teachers' knowledge on the teachers themselves and the sense they make of their practice. It has highlighted the importance of viewing teachers' knowledge and beliefs holistically, and the importance of researchers listening to teachers' stories, and taking their beliefs into account. However, it does also highlight the grey area that exists in our understanding of the differences between teachers' knowledge and beliefs.
2.2.3 Knowledge base for teaching – pedagogical content knowledge

One of the most influential ideas in the study of teachers' knowledge has been Pedagogical Content Knowledge (PCK) a term used first by Shulman in 1985, in his address to the Carnegie Foundation (Shulman, 1986). His aim was to draw attention to what he called "the missing paradigm" in the study of teachers' knowledge: that of understanding teachers' subject knowledge. Part of a research movement led by Shulman to identify the "knowledge base for teaching", Shulman argued that much research neglected what he considered to be some of the most essential questions, ie, how do teachers decide what to teach? How do they prepare to teach something never previously encountered? How does learning for teaching occur?

In his initial address, Shulman identified three categories of content knowledge:

- subject matter content knowledge (ie, the subject itself)
- pedagogical content knowledge (subject matter for teaching)
- curricular knowledge (programs for teaching, the curricular alternatives for instruction).

Subject matter content is what teachers know about their subject as developed through their formal education. Curricular knowledge includes teachers' knowledge of the relevant programs of study and curricular alternatives for instruction. Pedagogical content knowledge is defined as: "subject matter for teaching" (1986, p 9, emphasis in original). The term is used to introduce "the most useful forms of [content] representation ..., the most powerful analogies, illustrations, examples, explanations, and demonstrations - in a word, the ways of representing and formulating the subject that makes it comprehensible for others" (Shulman, 1986, p 9). PCK therefore, is the knowledge that Shulman identifies as describing how teachers use their subject knowledge, and hence is of significance to this research.

In his further development of the concept, PCK is listed as one of the seven knowledge bases for teaching, the others being: content knowledge, general pedagogical
knowledge, curricular knowledge, knowledge of learners, knowledge of educational contexts, and knowledge of the philosophical and historical aims of education (Shulman, 1987). This development is significant as it not only represents a refinement of the concept of PCK, but also places it as a knowledge base of equal status with the others (Gess-Newsome, 1999).

In his initial address, the content dimension of PCK was described as teachers' knowledge of the school subject (i.e., the curriculum, textbooks). In this fuller elaboration, Shulman defines PCK as:

that special amalgam of content and pedagogy that is uniquely the providence of teachers, their own special form of professional understanding ... Pedagogical content knowledge ... identifies the distinctive bodies of knowledge for teaching. It represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to diverse interests and abilities of learners, and presented for instruction. Pedagogical content knowledge is the category most likely to distinguish the understanding of the content specialist from that of the pedagogues. (Shulman, 1987, p 8)

This further explanation of the term is significant as it sets PCK apart from what teachers already knew about their subject or the content of the curriculum, but focuses on the interface between content and pedagogy. Shulman also has elevated its status to one of 'knowledge'. Turner-Bisset (2001) goes further to suggest that PCK is the most important knowledge area as it encompasses all the other areas of 'expert' teachers' knowledge, and is therefore important in the development of 'expert' teaching.

PCK is an influential concept (Gess-Newsome, 1999), promoting much subject specific research (Wilson & Wineburg, 1988; McDiarmid et al., 1989; Grossman et al., 1989;
Ormrod & Cole, 1996; Banks, Leach & Moon, 1999), and has been developed to also understand how teachers have incorporated new technologies into their practice (Neiss, 2005). It has been adopted largely uncritically by many teacher education programmes (McEwan & Bull, 1991) but has been criticised by scholars (Bullough, 2001) for a lack of agreement on how it is developed, and for an unconvincing theoretical basis. The next section explores these criticisms.

The idea that teachers understand their subject area differently to others is not new. Bullough (2001) traces the concept of PCK back to 1888 when Parr argued that there was a “special knowledge” for the teaching of each subject. Bullough links early movements in education in the USA, which sought to professionalise teaching, with the assertion that teaching a subject required a different type of knowledge of that subject area. Along with Carlsen (1999), Bullough acknowledges the significance of the education debate at the time. The call for Education Reform in the USA, had prompted teacher educators to defend their position, and to respond to the criticisms from the Nation at Risk report (1986). Carlsen (1999) highlights how Shulman’s response (that teachers had a discrete separate knowledge to other subject specialists) was a classic call to professionalise teachers’ knowledge and to legitimise the work of teacher educators. Knowledge as a construct is embodied with power and authority and therefore the identification of a separate knowledge specific to teachers had the potential of professionalising their work, and reinforcing the need for education at a higher level to teach subject specific pedagogical content knowledge (Carlsen, 1999). In fact, Carlsen calls the identification of PCK a “strategically bold move” (Carlsen, 1999, p 135).

Part of Shulman’s motivation in making claims like this was political; by defining content knowledge in disciplinary terms, teachers shown to possess it might strengthen their claim to the rights, privileges, and responsibilities enjoyed by other disciplinary specialists ... The status of teaching clearly needed to be
enhanced if the movement to professionalise teaching were to succeed.

(Carlsen, 1999, p 134/5)

So, if PCK fulfilled a political need at the time, is it then merely a political construct? The answer lies in further research on the deconstruction of PCK and analysis of how teachers develop or learn this knowledge. Shulman (1987) described PCK as a transformation of subject knowledge; and in a later publication described it as a 'translation' and offered a conceptual framework that defined four categories of knowledge: subject matter, substantial, syntactic and beliefs about the subject (Grossman, Wilson & Shulman, 1989). In her overview of research on PCK, Gess-Newsome (1999) divides research into its development into two approaches which she describes as representing two extremes on a continuum. The first sees PCK as Integrative: where PCK is an integration of subject matter, pedagogy and context. The second model is where knowledge of these three areas is transformed into a new knowledge form: PCK. Gess-Newsome calls this the Transformative model and it echoes how Shulman himself described the development of PCK. Gess-Newsome emphasises that both models are extreme positions and that most educationists understand PCK as situated in-between the two. She acknowledges that the distinctions between them are subtle, but that the findings of research into the development of PCK which favours one or other of the models is largely due to the interpretation of the researcher rather than evidence.

The disagreement over how PCK is developed makes the concept difficult to understand (Sockett, 1987; Meredith, 1996; Segall, 2004). A good example of this is Grossman's work on the development of PCK in English teachers which focuses on how the subject specific coursework of the teacher development programme affects the development of PCK. Grossman's work does not distinguish PCK from other areas of pedagogical or content knowledge or how they affect teacher development. She acknowledges other influences external to teacher education programmes, but it is not clear to what extent
these influence the development of 'PCK'. Grossman's work is typical as it highlights the difficulty of defining the boundaries of PCK and how it is different from other types of knowledge. The lack of reference to different conceptions of learning, (Geddis, 1993) or of context (Carlsen, 1991), implies that PCK is arbitrarily defined by the researcher.

The lack of clarity in defining PCK is a weakness in the empirical research in this field. When examining a teacher’s practice, categorising his or her action as due to ‘subject knowledge’, ‘curriculum knowledge’ or ‘PCK’ is at the jurisdiction of the researcher. It is difficult to determine where the ‘knowledge’ that affects his or her actions comes from. Researchers and participants cannot assume that they have a shared understanding of what is meant by teachers' subject knowledge which raises questions of how adequate the word 'knowledge' is to reflect all the dimensions of what teachers draw on to teach. Fenstermacher (1994) describes “knowledge” as a word that gives power and authority (or a “purr” word). Fenstermacher appropriately summarises this debate by questioning whether this type of “knowledge” to which PCK refers is clearly defined as a form of knowledge (Fenstermacher, 1994). Carlsen (1999) argues that we need a general term that reflects the dynamic nature of subject knowledge, teachers' personal relationship with it and with pedagogy.

A further criticism of PCK is the implicit assumption that content is static (Banks, Leach & Moon, 1999). Carlsen (1999) suggests this is due to the conceptual assumptions of PCK. Carlsen’s structuralist and post-structuralist analysis of PCK (as summarised in Figure 2.4) argues that PCK is grounded within a structuralist view of knowledge, supporting Meredith’s (1995) observation that it does not enable a constructivist conception of learning.
Figure 2.4 Conceptual assumptions of PCK from structuralist and post-structuralist perspectives (after Carlson, 1999)

<table>
<thead>
<tr>
<th>Structuralist perspective on PCK</th>
<th>Post-structuralist perspective on PCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumptions include:</td>
<td></td>
</tr>
<tr>
<td>□ a correspondence between word labels, concepts, and real world referents or signs.</td>
<td>□ Rejects a view of knowledge as fixed and systematic.</td>
</tr>
<tr>
<td>□ These signs do not exist outside a system</td>
<td>□ Highlights the interdependency of knowledge and power (which is not evident in PCK).</td>
</tr>
<tr>
<td>□ That PCK is established through a relationship to and from other signs.</td>
<td>□ Displaces the individual from the centre of meaning.</td>
</tr>
<tr>
<td>□ That the knowledge and relationship are static.</td>
<td>□ Does not consider historical and cultural dimensions of knowledge.</td>
</tr>
<tr>
<td>□ The structure of teacher knowledge is described in binary oppositions</td>
<td></td>
</tr>
<tr>
<td>□ Ideological neutrality.</td>
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</tr>
</tbody>
</table>

Section 2.1 argues that school and academic subjects develop and change and this challenges teachers. It is important therefore to understand the nuances of what subject knowledge means within studies of PCK.

Firstly, PCK assumes that knowledge can be separate from pedagogy. McEwan and Bull (1991) argue that all knowledge has a pedagogical dimension; that scholars do not just create knowledge but have to present it in a form that makes it accessible to others (see Wertsch, 1991; Gee, 1996). Whilst this argument has validity, scholars can presume that following certain conventions (such as what is needed to pass a peer review), their work can be accepted and valued as knowledge. Teachers have a different relationship with knowledge as they have a wider and more diverse audience emphasising a greater pedagogical burden. Segall (2004) further argues that text is also
a form of representation and so subject content is already a selectively constructed social reality. Therefore, defining the boundary between content and pedagogy is problematic.

Secondly, PCK assumes that teachers pass on knowledge that has been created by others. McEwan and Bull (1991) also highlight how PCK as conceptualised by Shulman reflects a double hermeneutic. They argue that Shulman's argument is that scholars create knowledge which is objectively 'true'. This knowledge is then 'transformed' by teachers through PCK (McEwan & Bull, 1991), therefore teachers make representations of other representations of 'truth'. However, research into teachers' subject knowledge demonstrates that teachers change their understanding of knowledge through teaching it. Grossman's (1990, 1991) and Hillock's (1999) work shows how English teachers' values about the subject affect what they perceive as English 'content' or knowledge. Their definition of 'English' affects how they construct sequences of lessons and individual lessons. Turvey (2005) also shows how the act of teaching can change teachers' subject knowledge as they encounter different perspectives on text through working on it with children. Carlsen's (1991) work on science teachers shows that their perception of the subject also varies depending on context and the people involved. Therefore teachers actively construct and develop their subject knowledge through the process of teaching, suggesting that their subject knowledge is dynamic and under constant review.

Other scholars have researched teachers' practice and their conceptions of a subject, and have focussed on the importance of values in this process (Grossman, 1990; Gudmundsdottir, 1990; Carlsen, 1999). Teachers' values affect their perception of the subject and how it is taught (Hashweh, 1987; Ball, 1991; Brickhouse, 1991; Wineburg & Wilson, 1991; Daly, 2004). Gudmundsdottir (1990), in her analysis of the PCK of four teachers concludes that teachers' core values affect their subject knowledge understanding and how they teach. Their values influence not only their approach to
teaching, but also the selection and choices that they make when planning and preparing classroom experiences. Despite being an advocate of PCK, Gudmundsdottir leads us beyond a constricted view of this phenomenon as a 'knowledge' per se, and enables us to understand the phenomenon of how teachers use their subject knowledge as driven by their values (Gudmundsdottir, 1991). Similarly, Carlsen (1999) argues that we need a more general term to describe 'PCK'.

Review
This section has examined literature relevant to the research theme of geography teachers' subject knowledge. It has outlined the changes in geography and school geography and explained how both 'subjects' are dynamic and subject to change from outside influences. Understanding them as dynamic entities highlights the importance of clarifying what teachers' conceptions/understanding of the subject is, and how it should be taught – as these cannot be assumed.

The work on personal practical knowledge places emphasis on the individual way that teachers talk about and reflect on their practice. The notion of teachers' knowledge is problematic and raises methodological issues of how such knowledge, particularly that of their subject, can be understood.

Pedagogical content knowledge has been a popular way of understanding teachers' use of subject knowledge. This review has argued that it is not clear where the boundaries of PCK begin and end. PCK can be elusive to define and differentiate from content knowledge or pedagogical knowledge, making it challenging to pinpoint how it is developed in teachers. The review suggests there may be a better way of describing how geography teachers use their subject knowledge.
2.3 Other influences on teachers' practice

Although the subject, and how it is understood, is important, this research acknowledges that it is not the only influence on teachers' practice. The following sections examine other influences that can affect teaching. The research is divided into three broad categories of educational influences, school influences and personal influences. It is acknowledged that there are some overlaps between these categories and also with the influences of geography and school geography already discussed, but they are used here as a way of categorising and presenting influences on teachers' practice, highlighting their sources.

2.3.1 Educational influences

This section argues that teachers are influenced by the dominant ideas about education in society. It explores how the government, as the legislating body, describes education and how these ideas can affect teachers.

Studies of the history of education have shown how education has been influenced by a series of education policies and ‘paradigm’ shifts (Goodson, 1987; Lawton, 1989; Gordon, Aldrich & Dean, 1991; Chitty, 2004). These shifts have themselves been influenced by broader changes in society (Goodson, 1987; Lawton, 1989; Edwards & Kelly, 1998) and in the economy (Crang, 1998). Some have argued that these changes are underpinned by political motives (Chitty, 1989; Simon & Chitty, 1993). Others have suggested that they are due to misunderstandings about education (Barber, 1995; Ball, 1999), or educational theory (Goodson, 1997; Turner-Bisset, 1999).

Ideas about education are expressed in response to perceived problems or issues that are specific to time and space (Becher & Trowler, 2001). The way these 'problems' are
described and understood affects how those policies are expressed. But education policies do not reflect a homogenous view of education. Examination of them highlights contradictions and inconsistencies in their expression (Chitty, 2004). Not only is there contradiction between the rhetoric and the detail of policy, but also between different aspects of the same policy. For example, the broad aims of the National Curriculum are not always reflected in the individual subject programmes of study (White, 2004) (and this is certainly the case for geography, see Lambert, 2004). Allocations of funding can reveal more about government ideology than the policies themselves (Benn & Chitty, 1996), and individual policies do not always reflect the dominant government ideology on education (Taylor, Fitz & Goard, 2005).

Education policies can directly or indirectly impact on teachers' work. For example, Grace traces how changes in education have affected the expectations and practices of school leaders (specifically headteachers) (Grace, 1995). Not only have the roles and responsibilities of those leaders changed but also the expectations placed on them by the broader education and social community.

One of the most obvious ways that education policy can affect teachers is in the way that they control the curriculum. Young (1999) traces how changes in education affects what is perceived as 'useful knowledge' and subsequently how the curriculum is articulated and organised. These types of ideological shifts and changes in education are expressed primarily through policy documents (Scott, 2000). Scott analyses the way policy documents are expressed and how this can determine the extent to which they affect teachers' practice. He argues that this is a fragmented and multi-directed process, and that the connection between policy making and policy implementation is complex. He argues that there are three ways that policy can be 'received': through being adapted, accommodated or contained. This can affect how policy is expressed and how it can be supported by:

- The level of prescription in the text of the policy document
• The 'control' of the policy (ie, whether this is delegated locally or kept centrally)
• The establishment and use of regulatory bodies (such as Ofsted)
• The way that the policy initiatives are supported or sanctioned through funding.

The imposition of these mechanisms to regulate and control the level of policy implementation can be viewed through analyses of the implementation of several policy initiatives (Jones & Moore, 1993; Brighouse, 1995; Tomlinson, 1995; Graham, 1997b; Hodgson, Spours & Waring, 2005).

However the policy is expressed or supported, teachers will be differently affected due to the degree of flexibility in the implementation of that policy (Bowe, Ball with Gold, 1992; Hodgson, Spours & Waring, 2005). Rawling (2001) illustrates this in her account of the development and implementation of the Geography National Curriculum.

Research into the impact of education policy shows that the effect can be context or person dependent and can vary in its extent (see Hodgson, Spours & Waring, 2005; and Westcott, 2005).

What does emerge, however, is that some education policies affect teachers greatly but not necessarily in predictable ways. For example, Helsby (2000) notes that government policies such as the National Curriculum have had a huge impact on teachers' professional cultures. Further research by Helsby and McCulloch (1997) suggests teachers' perceptions of these policies reflect their allegiance with other 'cultures' such as the subject communities. These groups also affect teachers' values about education (Halse, Kennedy & Cogan, 2004). Moore, Edwards, Halpin and George (2002) suggest that teachers 'reposition' themselves with these interest groups in the light of these policies. This finding is interesting for this research, as it highlights how dominant ideas or policies in education cause teachers to reflect on their subject allegiance or practice.
What then is the current educational climate and culture? Chitty's detailed analysis of policy expression and ideology argues that the education programme is "multidimensional, difficult to pin down and essentially incoherent" (Chitty, 2002, p 148). His analysis shows that there is little ideological difference between the policies of the Thatcherite and New Labour governments. The result of this has been a lack of coherence between the aims of policy and the detail as seen with the Education Reform Act 1988 (Edwards & Kelly, 1998), and the National Curriculum (White, 2004). Watkins (2005) notes that recent educational policies have been designed to put pressure on teachers and as such have been couched in military language (of "strategies", "targets" and "task forces"). However, the rhetoric from the current Labour government is that education policy supports teachers, illustrating the complexity of interpreting the impact of changing education policies nuances (Chitty, 2004; Pring, 2005).

However, it is also important to acknowledge that government policy is not the only place where the education climate or culture is expressed. Moore (2004) has identified three dominant discourses in education that have driven definitions of what makes a good teacher. Moore argues that these dominant discourses do not just emerge from government policy but also from higher education. It has been argued that educational research has had little influence on teachers' practice (HMI, 1998), but more recent research (Everton, Galton & Pell, 2000) has refuted this claim and shown that teachers do take into account educational research and do claim that it has changed their practice. However, Becher and Trowler (2001) argue that changes in funding have affected the work that higher education institutions do and consequently the extent of their influence on teachers. Goodson (1987) argues that subject associations can also influence teachers, but notes even within these 'communities' of pressure groups, there may not be a shared vision. Therefore, there are a variety of groups which influence the dominant views of education which within themselves are contested. (Section 2.1 has explored how geography and school geography have been contested.)
This section has reviewed relevant literature on how general patterns and trends in education have affected teachers' practice. Analyses of policy documents show that the link between education policy and its expression is not always clear, and can appear confused. The dominant education culture is also affected by other influential groups such as HE institutions, and subject associations. There is also little consensus on how this affects teachers although there is some agreement that it does.

2.3.2 School influences

This section reviews how schools influence teachers. The influences from the broad educational culture have to be adapted and understood at a school level. Schools themselves are usually disconnected from the formation of policy (Lawton, 1984; Ball, 1999), but are the focus of much of its content (Bowe; Ball with Gold, 1992), and therefore how they respond to that policy influences teachers' work.

Although responding to the same broad education policy, cultures and framework, individual schools do not respond in the same way. Schools have distinctive “cultures” (Hargreaves, 1994). Prosser (1999) argues that regarding this phenomenon as a culture is less limiting than referring to a schools' ideology or ethos, as it also takes into account the actions as well as beliefs.

Stoll (1998) notes that school cultures are unique, as a result of their situation, community and set of actors. This culture is often expressed through the school’s aims, vision, and policies, and by the school community of teachers, students, parents and managers. Stoll (ibid) emphasises that this is a dynamic culture that is subject to development as the school moves through phases of change generated both internally and externally. Schools have therefore complex and multidimensional cultures which can make them difficult to understand.
Influences on school culture can, for instance, come from the pupils’ culture (Reynolds & Skilbeck, 1976) and the dynamics of the community (Thomas, 2000). Acker’s (1999) work tracks how gender can influence these dynamics. Within a school, there can also be a number of sub-cultures such as a departmental group (Sarason, 1982). The combination of these and how they interact together can make up the unique culture of each particular school which are time and context specific (Stoll, 1999; Doecke & Gill, 2001), and can be viewed as the ‘way we do things around here’, thus emphasising that each school is situationally unique (Deal & Kennedy, 1983).

When teachers join a school they ‘learn’ the culture of that school (Prosser & Warburton, 1999) and may experience it in different ways (Ledoux, 2005). It affects their work by affecting how teachers interact with each other (A. Hargreaves, 1991, 1994; Stoll & Fink, 1995; D. Hargreaves, 1999). But the relationship is also a symbiotic one as teachers can also act as catalysts to exact school change (Wu, 2004; Berger, Boles & Troen, 2005).

One way of illuminating school culture is to observe how schools respond to change. Much research into how schools respond to policy change has focused on the Education Reform Act and the introduction of the National Curriculum (Lawton, 1989; Bowe, Ball with Gold, 1992; Bathmaker & Avis, 2005). Roberts (1996b) found that the department cultures of schools are remarkably resilient and despite educational pressures, teachers in departments continue their work driven by similar values. Researchers have tried to identify which types of school cultures can lead to greater effectiveness (Handy & Aitken, 1986; A. Hargreaves, 1991, 1994; D. Hargreaves, 1999; Prosser, 1999). What emerges from this research is that not only do schools affect what teachers do but also how they view national policies (Yinger & Hendricks-Lee, 1993; Goodson & Sikes, 2001). Whilst it is acknowledged that school culture can affect teachers’ work and even their beliefs (Hamilton, 1993), most recent research has
suggested that schools can be seen as having a range of "intelligences" (MacGilchrist, Myers & Reed, 2004). The development and use of these intelligences can give schools the capacity to change and to work effectively with its own range of subcultures. These intelligences combine vision and action, and enable leaders to make connections between what they want to happen and the different 'intelligent' groups that operate within a school.

Whilst a school culture can be described, it is not necessarily harmonious (Hargreaves, 1991), and there can be individual sub-cultures which jostle for power positions (Stoll, 1998). These sub-cultures could stem from subject specialisms (Hargreaves, 1994), or differing values about education (Halse, Kennedy & Cogan, 2004). Their influence is important as schools can regulate and classify teachers (Middleton, 1992).

For teachers, the school culture is the local context of their work. Although the educational culture represents the shared macro context, it is the local interpretation at a school level which can influence teachers' day-to-day practice. Teachers may choose to act within or comply with the accepted codes of these cultures or may react against them. Moore (2004) suggests that these contexts can also influence how teachers are judged in their work. If their work is in line with the dominant discourses of these cultures then they may be considered to be 'good'. The concepts of effectiveness or 'good' teaching is therefore socially-constructed with these cultures (education and school) representing important influences on a teacher's practice. Although the importance of sub-groups and subject departments has been highlighted in the research, the dynamic between these school cultures and the effect on how teachers teach their subject has not been analysed in depth.
2.3.3 Personal influences

This section examines how other influences from teachers' personal lives can affect their practice. It argues that teachers' lives and experiences will affect their beliefs about teaching and, in turn, their practice. Examining teachers' lives is important to understand their practice (Goodson, 1996). Work on individual teachers has focused on their professional identity (Beijaard, Meijer & Verloop, 2004) and their careers (Ball & Goodson, 1985; Sikes, Measor & Woods, 1985; Goodson & Sikes, 2001). Goodson and Hargreaves have used the phrase "teacher life histories" (Goodson & Hargreaves, 1996; Goodson, 2003), to place teachers' stories within the context of their social, political and educational landscape. They argue that understanding teachers' lives illuminates their practice beyond defining their personal and practical knowledge. Goodson argues that looking at pedagogy is not enough to understand the influences on teachers' work (Goodson, 2000). Teachers' stories and metaphors about their practice represent a methodological tool and an epistemological tool to understand how teachers' personal lives impact on their practice (Elbaz, 1990). Kwo (2004) agrees that we need to listen to teachers' critical incidents in order to understand their work.

Teachers are influenced by popular culture and popular conceptions of teaching. Although there has been some evidence of the impact of individual training (Dadds, 1997), Marlowe (2006) argues that popular conceptions can be more influential than professional development courses. Harritos's (2004) work suggests that access to popular "texts" about teaching (particularly those of Torey Haydn) can explain why pre-service teachers share similar concerns about teaching. Common myths along with personal histories help to maintain teaching practices (Britzman, 1986).

Teachers' personal circumstances will affect their practice. This can be attributed to their lifestyle (Becker & Geer, 1971), gender (Acker, 1999), ethnicity (Mortimore et al., 1995), and where they are in their life cycle (Bateson, 1989). Although Hamilton notes
that school or local community culture can affect teachers' beliefs (Hamilton, 1993). Wu (2004) argues that teachers' understandings about teaching emerge from their own lives and that this can be traced back to their experiences of their own schooling. These lives are difficult to research as they are often private and context specific (Kwo & Intrator, 2004). But they help to make up an individual's identity, and as Bleijaard, Meijer and Verloop (2004) note, identity and knowledge are so closely related that they could be seen as indistinguishable. Korthagen (2004) also highlights the importance of teachers' identity on their beliefs and motivation to teach.

As well as teachers' lives affecting their work, research shows that their work can affect their lives. Teaching is acknowledged as an emotional activity (Bullough & Draper, 2004), and the classroom is the main site for teachers' self esteem and fulfilment, which in turn affects their understanding of their practice (van Veen & Lasky, 2005) and their emotions about teaching (for example, through experiencing guilt (Hargreaves, 1994)). Teachers are required to engage in emotional understanding with several groups of people (including colleagues, students, parents) (Hargreaves, 2001). Hargreaves acknowledges that there are no universal laws or rules that govern the emotional work of teachers, but that teachers are subjective as well as objective in their work (2001). Teachers work at the relationships they have making them active accomplishments. Hargreaves' (ibid) work places emphasis on the personal nature of teaching and how it can affect how a teacher interacts with others.

Therefore, empirical research has shown that aspects of teachers' personal lives can affect and are affected by their work. These observations are supported by much work into how teachers' values affect their practice (Council of Europe, 1985; Dunne & Wragg, 1994; Starratt, 1994; Thompson, 1995; Kyriacou, 1997), and their classroom environments (Mortimore et al., 1988). Carr (2006) argues that teachers' values are important and difficult to define. Teachers' opinions and beliefs reflect their unique range of experiences and perspectives but it is not possible to distinguish between the
professional and personal values of teachers as both will affect their practice (Van Mannen, 1995; Carr, 2004). Whilst Friedman's (2006) work acknowledges that they can be conflicting, values always affect the cognitive domain, and so will affect teachers' practice right down to deciding what to teach (Slater, 1996).

It has been argued that teachers' personal circumstances affect their beliefs, and these beliefs are unlikely to change (Kagan 1992; Block & Hazelip, 1995; Richardson, 1996). Becker and Geer (1971) argue that teachers' values are carried with them into different contexts. They recognise the power dynamic between teachers' 'personal' cultures and the dominant school cultures they work in. Once established, Parajes argues that teachers beliefs do not seem to shift (Pajares, 1992). In fact, Gates (2002) argues that beliefs are reinforced through teachers' experiences. Brickhouse (1991) concurs that this will also affect how they perceive what they teach and the subject. Work into teachers' perceptions of geography agree that those perceptions are individual and varied (Barrett-Hacking, 1996; Walford, 1996; Cheng Nga Yee & Stimpson, 2004).

Therefore, examining teachers' personal lives is important, not only to determine how these have influenced their practice but also because they can indicate the values that teachers have about teaching. Teachers' personal lives and circumstances are broad and multi-faceted, and so listening to how teachers make sense of them and describe them is important. This section has demonstrated that examining personal lives is an important part of understanding teachers' practice.

2.3.4 ‘Cultures of influence’

The previous sections have reviewed research on influences on teachers from education, school and their personal lives. Section 2.1 also reviewed how teachers' relationships with geography at an academic and school level, affect their practice.
Influenced by the work of Goodson (2003) and Elbaz (1991), this research considers that all these influences are important and that it is necessary to take them all into account in order to understand teachers' practice. However, this presents a wide range of information and it is necessary to categorise these influences in some way in order to make the process manageable and comprehensible. This section suggests that these influences can be understood as a range of 'cultures of influence'. It outlines why the term 'cultures of influence' is used and what it adds to the research.

The influences on teachers' practice can stem from external sources and have a 'collective' or group dimension. This research has adopted the term 'cultures of influence' to describe these influences and breaks it down into five groups:

- Their understanding of geography (geography culture)
- Their beliefs about geography education (geography education culture)
- Their response to the broader policies and trends in education (educational culture).
- Their school context (their school culture)
- Their personal lives (their personal culture).

Culture is a term that has been much used in education (Hargreaves, 1994; Stoll, 1998; Prosser, 1999) but most commonly to refer to the ethos and values prevalent in the school context. Culture is an extremely complex term that has a variety of meanings (Williams, 1981). For the purpose of this study, I have chosen to use the following definition of culture, as adopted by Becher and Trowler (2001) in their analysis of the behaviour of academic disciplines:

By 'cultures' we refer to sets of taken-for-granted values, attitudes and ways of behaving, which are articulated through and reinforced by recurrent practices among a group of people in a given context. (Becher & Trowler, 2001, p 23)

This research has adopted this definition as it places emphasis on two important dimensions of culture. Firstly, it emphasises the group dimension: that culture is shared and understood by the group who participate in it. Secondly, this definition also
emphasises that cultures result in action, through the behaviour and shared values of that group. The practices are shared because they are informed by the ideology and beliefs of that cultural group.

Understanding the influences on teachers’ practices as ‘cultures of influence’ enhances our appreciation of them. In the research on each influence, it has been noted that these influences are themselves subject to changes in society or the economy. However, the response to these outside influences can vary, and these actions can depend on the values or beliefs of that group. Gallego et al (2001) demonstrate how the culture of a school will affect how it responds to change, and that this same process can also apply to individual classroom cultures. Using the term ‘culture’ places emphasis on the shared beliefs and ideologies of a group as well as the practice or action that emerges from them. Gallego et al (2001) cite Kroeber and Kluckhohn (1963) with their distinction that “cultural systems may be on the one hand considered as products of action, on the other as conditioning elements of further action” (ibid, p 181). In other words, ‘culture’ not only influences what we may do but also defines what we do do. Therefore each of the influences described above share these characteristics, as they seek to express shared beliefs and ideologies that can affect action.

That is not to say that teachers’ participation in these ‘cultures of influence’ is always complicit. A culture can express what it considers to be acceptable action and create ways for that to be achieved:

culture as the level at which social groups develop distinct patterns of life ... the way, the forms in which groups 'handle' the raw material of their social and material existence ... made concrete through patterns of social organisation.

(Jackson, 1989, p 2)
A teacher will understand and use the ‘cultural codes’ that are understood by that group (Hall, 1997). This may be a tacit acknowledgement but will be identifiable through the actions that they take or through what they produce (Jackson, 1989). But teachers may not fully participate or agree with the ideas of that culture. Cultures are contested from both outside and within the group, and therefore a participant in a culture may not agree with all the beliefs, values or actions accepted by that culture. A culture can be seen as a “melange of understanding and expectations” (Goodenough, 1994, p 267).

This research acknowledges that teachers are subject to a range of these influences and it is acknowledged that individuals participate in a variety of cultures simultaneously (Jackson, 1989; Hall, 1997; Shurmer-Smith, 2002). Cultures share accepted symbols to facilitate inter-communication. For example, a Muslim living in the UK will be influenced by their religious group, by their community but also by being a UK citizen. The individual may identify themselves, for example, as being a Muslim first, but their social actions will be informed by where they live and the wider cultural context (Nayak, 2003).

The ‘cultures of influence’ are used in this research as a way of understanding the range of influences that affect teaching and the nature of those influences (ie, that they behave like a culture). As such, categorising the influences into five cultural groups is a useful way of categorising and understanding the landscapes of influences that teachers experience and mediate.

It is acknowledged that there will inevitably be some blurring of the boundaries between the ‘cultures of influence’ and that they will necessarily influence each other. It is also acknowledged that teachers’ participation in and agreement with each culture will vary. The landscape of ‘cultures of influence’ is demonstrated in Figure 2.5. The dotted lines around each culture represent how these influences are not bounded or tightly defined but are dynamic. Changes in one culture may influence or change a teacher’s understanding of others. Although all geography teachers may, for example, be part of
the geography culture, their situatedness within this culture, and the extent to which they participate in its accepted codes and behaviours will depend on their individual beliefs and choices and where they are situated within the debates outlined in this review. These individual beliefs may, in turn, have been influenced by other cultures. It is also possible that one teacher’s perspective or understanding of a culture will differ greatly from another’s. Therefore the cultures should not be seen as homogenous or uniform for all teachers, but will reflect how each individual is situated within them, and their perspective on them. Similarly, due to status or role, some members of these cultures may have more power and influence on the culture than others. This way of understanding teachers’ ‘cultures of influences’ will be used throughout this research, and represents a powerful tool for describing the range and extent of influences on teachers’ practice.
Figure 2.5 The Inter-relationships of Cultures of Influence upon the Teaching Practice of a Geography Teacher

- **School Culture**
  - Including: ethos, community, policies, challenges, responses

- **Personal Culture**
  - Including: family, beliefs, class, gender, race, school experience, community, home environment

- **Geography Culture**
  - Including: paradigms, degree experience, areas of interest, research, external agendas, research, funding

- **Geography Education Culture**
  - Including: interpretation of how geography and education are combined, own experience, department ethos, research, funding

- **Education Culture**
  - Including: paradigms, preferred approach, motivation, experience, practice, research, funding

- **Macrosystem**
  - Culture in its broadest sense
Review

Relevant literature on the second theme of this research, other influences on teachers' practice, has been reviewed. Five influences are identified and this research has adopted the term 'cultures of influence' as a way of categorising these influences, their effects on teachers and the way that they describe beliefs and influence action.

The section has also noted that the research demonstrates that the 'cultures of influence' do not affect teachers in the same way, and that individuals do not necessarily participate in each culture to the same extent.

Research has examined how teachers have described how these 'cultures of influence' have affected them. However, this research is specifically interested in how teachers use their subject knowledge, and therefore this research will examine these 'cultures of influence' with respect to how it can affect geography teachers' use of subject knowledge. Martin's (2006) work on ethnogeographies has highlighted that teachers' everyday experiences can add to their geography knowledge. This research seeks to understand how those influences affect how they present and use their subject knowledge.

2.4 The 'Expert' teacher

Section 2.2.1 notes that research from cognitive psychology sought to define teacher 'expertise'. That section argued that whilst that research was useful in defining aspects of teacher 'expertise', it didn't describe expert practice holistically nor helped to explain how it is developed by individuals or understood in education. This section returns to the research on teacher 'expertise' and argues
that research in this area hasn't taken into account where those definitions have come from and the values embedded in them.

Teacher 'expertise' can be easy to recognise but difficult to describe. When conducting research into teacher 'expertise', one of the challenges faced by researchers was how to identify 'expert' teachers. In her review of research into 'expert' teachers, Tsui (2003) notes that most of the expert-novice studies selected teachers with more than five years experience and sometimes with additional recommendations from colleagues or further screening, or teacher awards. Tsui (ibid) notes the subjective nature of these criteria and how they rely on individual perceptions of teaching. She also rejects the use of teachers' academic qualifications or records of student achievement as indicators of teaching competence. Berliner (1986) also encounters this difficulty and additionally notes that using teacher awards are problematic as the judges are often not educationalists. Berliner (as reported in Brandt, 1986) and Tsui (2003) acknowledge that there is little distinction between experienced and 'expert' teachers in these research studies. Tsui (ibid) argues that this is because of our limited understanding of teacher 'expertise'.

This research argues that 'expertise' is difficult to define because of the assumption that it essentially exists. Jones and Moore (1995) argue that the competency-list approach supports a narrowly behaviouristic model that reflects a particular political perspective about teaching. Elbaz (1991) argues that studying 'expertise' with a view to defining it so that others can become experts is circular logic. Hagger and McIntyre (2000) also suggest that this assumes that 'expertise' can be developed by copying the actions of others, ie, that it is about what teachers do rather than their knowledge, understanding or personal qualities. Berliner (2001) acknowledges that his research in this genre neglected to take
talent, experience or context into account. The question then remains as to what we understand about teacher 'expertise'. Moore (2004) has analysed how dominant discourses in education have influenced how 'good' teachers have been defined, and argues that it is the values held in these dominant discourses that can influence how notions of 'good' teaching are recognised.

Although Berliner's approach (Munby, Russell & Martin, 2001) and its conclusions (Eraut, 1994; Sternberg & Horvath, 1995) have been criticised, its influence can be seen in how teaching 'standards' in education are described by governments (DfEE, 1997a; 1997b; TTA, 1998; 2006\(^3\)). Recent research has also generated lists of competences or qualities of expert teachers (see Jasman, 2003) and has sought to define 'effective' or 'good' teaching in similar ways (Hay McBer, 2000, and see Moore, 2004). The attraction of these lists of standards or competencies is that they are perceived as accessible for teachers (Moore, 2004) and appear to define quality in education. However, their ability to define precisely quality teaching is flawed and this is demonstrated by the development of the Advanced Skills Teacher grade.

**2.4.1 Advanced skills teachers**

The need to distinguish 'good' from 'excellent' practice in education resulted in the establishment of Advanced Skills grades (in England and Wales, and Australia), or Lead or Master Teacher schemes (USA). In each country, the introduction of

\(^3\) In 2006, the UK government revised its lists of competencies for teachers. Whilst this introduced a new category of "Excellent Teacher", the competencies for ASTs did not vary greatly from the original competencies identified for Advanced Skills teachers published in 1998.
these grades occurred when education was seen as being deficient, and teaching was perceived as 'low status'. In the USA, the publication of the Nation at Risk report, and the Holmes Group report (both published in 1986) resulted in the introduction of new posts called Master or Lead teachers which sought to raise the profile of teachers (Lindle, 1989). Similarly a wave of criticism on teachers and education prompted the publication of the 1988 Education Reform Act (in the UK), and the publication of the Australian Industrial Relations Commission in August 1988, which were both critical of teaching standards, and subsequently prompted the introduction of the Advanced Skills Teacher (AST) post. The new grade was introduced to reward the work of 'expert' practitioners and to enable them to support their colleagues. The Advanced Skills teachers in England and Australia were allocated similar professional responsibilities and were encouraged to keep their teaching 'expertise' in the classroom (Ainscow et al., 1994; Whitehead, 1997).

Criticisms of AST schemes (Berry & Ginsberg, 1990; Smyth & Watkins, 1993; Watkins, 1994; Ingvarson & Chadbourne, 1996; Graham, 1997a; Smyth, Shacklock & Hattam, 1997; Sutton, Wortley, Harrison & Wise, 2000) show concern with the AST criteria as a definition of teaching quality. Teachers perceived that the AST criteria endorsed bureaucratically preferred ways of educating young people; which did not necessarily reflect accumulated wisdom on successful classroom teaching (Berry & Ginsberg, 1990; see also Smyth, Shacklock & Hattam, 1997).

The AST criteria are expressed as a list of competences (Graham, 1997a) (see Appendix I) reflecting the competency discourse in education (Moore, 2004). Hartley (1997) defines a competency as a "can do" statement, which infers a competence has been achieved if a particular task or skill has been performed.
This type of normative criteria does not reflect the complex self images, reflections and perceptions that make up teachers' work. It also does not distinguish between 'expertise' and experience (Sternberg & Frensch, 1992). A competency model, such as the AST assessment criteria, does not recognise the universality and the complexity of a teacher's practice. Mitchell and Weber (1997) argue that the establishment of criteria does not enable recognition of alternative competencies, and equates competence with performance and effectiveness. Berliner (2001) also states that competency statements about teacher 'expertise' do not take talent or context into account. These criticisms of the competency approach to defining teacher 'expertise' illustrates that even when 'expertise' or advanced teaching skills are defined by government, the definition is not value free, which raises questions of what then is the best way to understand or define teacher 'expertise'?

2.4.2 Defining 'expertise'

The underlying assumption of the competency approach is that if 'expertise' is described accurately it could change practice (Moore, 2004). However, the notion of 'expertise' itself places power with the dominant educational culture which Boler (1999) argues can then influence how teachers act and behave. Welker (1992) questions the metaphor of 'expert' which he argues reinforces a climate of blame and implies that other teachers are therefore less than 'expert'. This political perspective reinforces how important it is to understand how 'expertise' is defined within education.

The definition of 'expertise' is both political and cultural. Influenced by the work of Rich (1993), and Alexander's (2001) examination of teaching in five different cultures, Berliner acknowledges that context is important in defining 'expertise'
Jasman (2003) argues that ‘expertise’ in teaching can only be understood when the teacher’s contexts (both micro and macro) are taken into account. Calderhead and Shorrock (1997) also observe that descriptions of ‘expertise’ in teaching are culturally embedded, being both time and place specific, and are therefore spatially, temporally and contextually defined. Moore’s (2004) analysis of the competency discourse highlights that denotations of competency are dependent on what is understood to be ‘good practice’ at a specific time and location. Therefore, ‘expertise’ can be seen as a socially constructed concept.

Rather than being a quality that possesses inherent characteristics, this section has argued that ‘expertise’ is politically and culturally defined, highlighting that teacher ‘expertise’ is defined by the dominant discourses in education. Accepting this argument indicates that analysis of the practice of ‘experts’ will highlight only what is considered to be ‘expertise’ by that view of education, and so, its constituents are taken as indicative of what the dominant educational culture deem to be important. This understanding of ‘expertise’ has implications for any research on ‘expert’ teachers as it indicates that teachers who are described as ‘experts’ conform to dominant ideas in education. How this understanding affects this research is discussed in section 3.3.

Review

Section 2.1.3 argued that research into geography teachers and their subject knowledge has mostly focussed on teachers in the early stages of their career. What can the analysis of the practice of ‘expert’ geography teachers add to this understanding, particularly if we understand ‘expertise’ as socially constructed?

Section 2.1 noted that both geography and school geography have changed over time and that geography teachers’ subject knowledge will also change as they
engage in other spatial or geographical experiences (their 'ethnogeographies', Martin, 2005). Therefore, researching experienced teachers will enable an empirical exploration of how this more sophisticated subject knowledge affects their practice. However, section 2.3 has also noted that teachers are influenced by other 'cultures'. The dominant discourses in education, particularly those that influence how we define teacher ‘expertise’, will also have affected their practice.

Focusing on how ‘expert’ geography teachers use their subject knowledge will enable an exploration therefore of this broader definition of subject knowledge and also how that is mediated by the dominant discourses and ideas in education. This can contribute to the field of how teachers use their subject knowledge (particularly in geography) and also how ‘expertise’ affects teachers’ practice.

2.5 The research questions

Research into how geography teachers’ subject knowledge affects teaching has been inconclusive and mostly focused on teachers in their early stage of development. More experienced teachers will have not only gained more teaching experience but also will have developed their geographical knowledge through their life experience. The review has also highlighted how both academic and school geography have changed over time and these changes may have affected teachers. PCK has been used to describe how teachers have used their subject knowledge but this review has critiqued PCK, arguing that it is not clear how it develops in teachers, and how it differs from other knowledge areas like content knowledge or pedagogical knowledge. Pulling these two parts together, there is therefore a need to consider how can subject knowledge influence ‘expert’ geography teachers’ practice? This forms the first research question.
The second research theme, on other influences on teachers' practice, has highlighted that schools, education, and personal lives also affect teachers' work. However, whilst the research agrees that these influences affect teachers' practice, it is not always clear how or in what ways each influence can be observed or is manifest. The main focus of this research is on geography teachers' subject knowledge, but the research acknowledges that these other influences are also important. Martin's (2006) work has highlighted how teachers' personal lives can affect their geographical knowledge, and therefore it is pertinent to this research to consider how these other influences affect the dynamic between geography teachers and how they teach their subject knowledge.

Therefore, the second research question asks how can other influences affect 'expert' geography teachers' practice? The literature review has categorised these influences as 'cultures of influence' and this terminology and categorisation informs the research design.

The third theme of this research is on 'expertise' in teaching. The review has argued that 'expertise' is socially constructed and is a quality that is denoted to teachers by others. The review has argued that 'expertise' is embedded with values that people have about education. The research on 'expertise' has mostly described teachers' practice without taking this social construction into account.

'Expertise' is an important dimension in this research as most research on geography teachers have focused on teachers in the early stages of their development. It has also been noted that experienced teachers may have developed their geographical understanding further. Research has not been previously conducted with 'expert' geography teachers and therefore 'expertise' is expressed through both of the previous research questions.
3 Chapter Three – Methodology

This chapter describes the research methodology and design. The first section outlines why a qualitative interpretative case study approach has been adopted, and how it is fit for purpose in relation to the research questions. The second section outlines the research design which has been organised in three stages. The subsequent sections in this chapter describe each research stage, and how the data were collected and analysed. The chapter concludes by outlining how the research has handled ethical issues that have arisen, and how the data are reported in subsequent chapters.

This chapter describes the methodology of the research in a reflective narrative style. The narrative style is important to take the reader through the stages of the research process, and to fully justify the decisions made about the research design. My personal circumstances were significant during the research. For instance, my interest in teachers' development began at the start of my research, when I was a practising geography teacher and Head of Geography in a school, responsible for the professional development of other teachers, which encouraged me to reflect on the professional development process. Subsequent career changes also affected the course of the research and where relevant, are discussed herein. As Bassey (1999) has observed, when working within a broadly interpretative paradigm, one becomes aware that one's own circumstances, reflections and developments are influential in the interpretation and rationalisation of data and consequently, the development of one's own research. This is true in my research and I have adopted a narrative style to make this process explicit to the reader but also to show how my own situation has impacted on the research (after Sayer, 2000).
3.1 Research approach

Chapter Two reviews the literature relevant to the three research themes and argues that previous research has underplayed:

- ‘Expert’ geography teachers' relationship with their subject or how it influences their teaching;
- How other influences on teachers' practice can affect how they teach geography;
- And how teacher ‘expertise’ can affect practice.

From these gaps in the literature, two research questions were identified:

- How can subject knowledge influence ‘expert’ geography teachers’ practice?
- How can other influences affect ‘expert’ geography teachers’ practice?

This section explores how the research will answer these research questions. The third research theme of teacher ‘expertise’ is evident in both of these research questions and this section also discusses its contribution to the research design.

The research questions place emphasis on the practice of the ‘expert’ geography teacher. Whilst teacher ‘expertise’ can be explored through experiments or simulating classroom events (see section 2.2.1), such research designs stem from a cognitive psychology approach and enable a description of ‘expertise’ but does not explain its nature. A quantitative or survey research approach would not enable a research design which focuses on teachers, their perspectives on subject knowledge and teaching, and their classroom practice. Adopting a case study approach would place teachers at the centre of the research.
A quantitative or survey approach to the research questions could have developed a broad understanding of the practice of ‘expert’ geography teachers. However, the research questions how these identified factors influence teachers. Bassey (1999) argues that research questions of this nature are best analysed through a data-rich interpretative approach. The research questions also are explicit in examining the practice of ‘expert’ geography teachers. The following section argues that this is best researched through the adoption of a case study approach. The research questions require an examination of teachers’ practice and an analysis of what has influenced their practice. In order to determine the extent of these influences the teachers’ own perspective is imperative and reinforced by the body of research in this field (Elbaz, 1991; Jalongo, Isenberg & Gloria, 1995; Goodson, 2003).

Ontologically this research takes into account and emphasises that teachers’ knowledge systems are complex. Teachers’ schema are intricate and built up through their formal education and other experiences (Nias, 1987; Doyle, 1990). These schemas can influence their practice and beliefs about teaching. Section 2.3 argues that influences on teachers may be personal or may be common to all teachers (such as those from the educational ‘culture’). The extent of these influences varies: some factors will be conscious, reasoned influences that they are able to articulate (for example through images or narratives (Elbaz, 1990)). For example, a teacher might state that they believe that their perspective on geography makes them teach in a certain way. Other factors that influence their practice may be less obvious, and may not even be a conscious part of their decision making, but nevertheless may be influential. The challenge for an interpretative approach is to determine what conclusions can be drawn from an analysis into teachers’ narratives.
Initially drawing from my own disciplinary background, I was influenced by the 'cultural turn' in geography (Jackson, 1989) and the emerging methodologies to analyse discourses within 'texts'. Adopting an interpretative perspective could result in an analysis of the teachers' discussion of their relationship with geography and how they teach it. Such an analysis would either question their perceptions with a view to counter their assertions with evidence, or to regard their interpretation as valid but singular. As highlighted by Fenstermacher (1994), such an approach raises questions of whose interpretation is being told. I questioned the value of a singular interpretation of another's representation, the double hermeneutic (ibid), and the effect this would have for the validity and generalisability of the overall research findings.

An interpretative approach would not be able to 'test' the validity of the teachers' assertions, as not all areas of influence can be articulated and known either by the teachers themselves or by the researcher. It is acknowledged that there may be influences on a teacher's practice of which we are not yet aware (ie, such as an unidentified classroom phenomena). However, an interpretative research approach will illuminate the teacher's own stories and what they understand to be influential in their understanding and teaching of geography.

The research questions do not ask 'to what extent' certain factors have influenced teachers’ practice. On the other hand, the judgement of variable influence is implied, and so additional data collection techniques are required to find out the other influences on practice beyond those that the teachers themselves consciously are able to list. This represents a considerable challenge as the array of influences is potentially broad and some may not be knowable. A research approach that enables an in-depth look at phenomena whilst taking a broad definition of the context would be a case study approach.
3.1.1 Adoption of a case study approach

A case study approach enables a focus on the relationship between context and phenomena, and facilitates the in-depth analysis of the case in relation to its context. Brown and Dowling (1998) criticize this approach as they claim it “mythologizes” research and “romanticizes” the world. They question whether the need to examine the relationship between context and phenomena is not indeed the aim of all research. However, it is precisely this focus on the uniqueness of case study research that Simons (1996) considers to be its value. She argues:

One of the advantages cited for case study research is its uniqueness, its capacity for understanding complexity in particular contexts. A corresponding disadvantage often cited is the difficulty of generalising from a single case. Such an observation assumes a polarity and stems from a particular view of research. Looked at differently, from within a holistic perspective and direct perception, this is not disjunction. What we have is a paradox, which if acknowledged and explored in depth, yields both unique and universal understanding. (Simons, 1996, p 225)

The particular value of adopting a case study approach to my research is the desire to examine the nature of the relationship between subject knowledge and teachers’ practice. There is a specific dynamic here that will be unique to each case, and yet, as Simons (ibid) suggests could yield insightful observations about the influences on teachers’ practice.
An issue with having chosen to adopt a case study approach is what generalisations can be made for the research. Cohen, Manion and Morrison (2007) state case studies are useful to the education community as they can create generalisations about the population as a whole. However, any generalisation about a population needs to be statistically valid (Yin, 1994). Yin argues that validity and generalisability should come from being able to replicate the results of the case study. This is a positivistic approach based on assumptions that a small number of cases should replicate what happens on a larger scale: that regularity is a key feature of truth: “if it happens a lot it must be true”. Even Stake’s (1995) more interpretative approach which focuses on generalisations in the form of “assertions” or “naturalistic generalisations”\(^4\) has been criticised for not always being applicable to other cases which questions the value of this type of research (Tripp, 1985).

Generalisability in this context is based on an assumption that a phenomenon needs to occur regularly. But as Sayer notes, generalisability due to sampling merely indicates that the relationship is common, but does not help us to understand its nature (Sayer, 2000). Simons (1996) suggests the nature of the relationship between context and phenomena can be greater understood by examining the uniqueness of each case. The question therefore becomes not: does this type of relationship happen a lot, but how can the relationship in each case be described and understood? For this research, a case study approach would enable the research questions to be answered for each case, and then for any similarities to be identified across or between the cases.

\(^4\) “Naturalistic generalisations”: a sort of intuitive conclusion about the case that comes from the researcher’s intimate knowledge of it (Stake, 1995),
Focusing on the unique nature of each case raises questions of the research's validity. Case study research has been criticised for lacking in rigour (Yin, 1994) and even for being anti-intellectual (Atkinson & Delmont, 1985). These criticisms stem from a fear that case study research, particularly that undertaken in an interpretative paradigm, is solely the 'whim' of the researcher who submerges herself in the phenomena and can choose the contexts to 'prove' or 'disprove' her hypothesis. This makes case studies in social research open to a double hermeneutic: analysis becomes based on the researcher's interpretation of what the participant has disclosed. In fact Fenstermacher (1994) argues that one is never sure to what extent the results of such research are the product of the researcher or the case. Miles and Huberman (1994) argue that rigorous techniques are essential to ensure that case study research has validity. The research design has devoted a stage of the research process to deal with validity and this is discussed in section 3.5.

3.2 Research design

This section discusses how both the decision to adopt a case study research, and the research questions have influenced the design of the research and the data collection and analysis. Research on teachers' knowledge, beliefs and thinking has grappled with the problem of how best for a researcher to understand a teacher's actions and reasonings. Research that is done 'to' teachers has been criticised; and Cochran-Smyth and Lytle (1999), Jalongo, Isenberg & Gloria (1995) and Elbaz (1999) highlight the importance of teachers being active participants in research, empowered to 'tell' their own 'stories'. However, the unique situation of each individual who participates in research must also be acknowledged. Both
Elbaz (1990) and Cochran-Smith and Lytle (1993) highlight the importance of context in understanding teachers' 'stories'.

The research design therefore needs to take into account the teachers' narrative whilst placing this in context of each situation in order to understand the influences on that teacher. This 'layering' of data led to a research design influenced by Bhaskar's (1975) three tiers to understanding the world: the empirical, the actual and the real (see also Sayer, 2000). These tiers are defined:

The real is whatever exists, be it natural or social, regardless of whether it is an empirical object for us, and whether we happen to have an adequate understanding of its nature ... the actual refers to what happens if those powers are activated, to what they do and what eventuates when they do ... The empirical is defined as the domain of experience ... it is contingent on whether we know the real or the actual (Sayer, 2000, p 46)

For the purpose of this research, these tiers of meaning have been used as a way of structuring the research design. The research has adopted Walmsley and Lewis’s (1993) terms to describe two tiers of meaning: experiences represent the empirical domain, events represent the actual tier. Walmsley and Lewis (ibid) also use the term mechanisms to represent the real tier; however, this term has not been used here as this research does not aim to identify mechanisms. Due to the complexities of analysing and understanding teacher thinking (Connolly & Clandinin, 1988; Elbaz, 1990; Fenstermacher, 1994; Clandinin & Connelly, 1995;

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5 Fenstermacher (1994) highlights the fact that unless a teacher authors, co-authors or even co-constructs their account, the interpretative nature of the research process will necessarily change and adapt representations. This emphasises the importance of clarity in the roles of the participant and the researcher.
Calderhead, 1996; Feiman-Nemser & Floden, 2001) I have adopted the term relationship for this stage of the research. By applying this structure to the research, it was possible to develop a research methodology to reveal teachers’ experiences of what influences their practice (experience), the other influences on their practice (events) and to then discuss the relationships that are evident between the two. Figure 3.1 summarises how the different stages of the research were designed, the research questions that the stages respond to and the subsequent research activity that followed.

**Figure 3.1 Research Design**

<table>
<thead>
<tr>
<th>Stage of Research</th>
<th>Research Questions</th>
<th>Purpose (ie, tier of meaning)</th>
<th>Research Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Experience</td>
<td>How can subject knowledge influence ‘expert’ geography teachers’ practice?</td>
<td>This stage of research examines how teachers describe their understanding of geography and how they teach it.</td>
<td>First cohort of Cases: Interview with case teachers, lesson observations, analysis of documentation, interview with colleagues. (see section 3.4)</td>
</tr>
<tr>
<td>Second Events</td>
<td>How can other influences affect ‘expert’ geography teachers’ practice?</td>
<td>This stage of research encourages teachers to reflect on other influences on their practice.</td>
<td>Application of a framework. Internal validation of the initial analysis. External verification of the analysis from an External Researcher (see section 3.5).</td>
</tr>
<tr>
<td>Third Relationship</td>
<td>How can subject knowledge influence ‘expert’ geography teachers’ practice? And How can other influences affect ‘expert’ geography teachers’ practice?</td>
<td>Using a new set of empirical data, this stage examines how teachers understanding of geography and how they choose to teach it. The data focuses on the extent to which these influences affect how they teach geography. Reflections on ‘expertise’ in geography teaching.</td>
<td>Second cohort of cases: Interview including significant life experiences, lesson observations, analysis of documentation; participant construction of their ‘cultures’ map, focused discussion on their understanding of geography. Analysis of how ‘expertise’ is defined. (See section 3.6)</td>
</tr>
</tbody>
</table>
Figure 3.1 shows the research divided into three stages. The first stage focuses on the empirical stage called Experience, which focuses on the teachers’ experience of the influences on their teaching (see section 3.4). During this stage of research, the teachers are encouraged to describe these influences during an interview. They are also observed teaching, and other data (planning documentation and interviews with colleagues) are collected. This stage of research is exploratory and the boundaries of the cases are broad, as the teacher is able to define what they believe is the nature of their relationship with their subject knowledge and how they teach, and also they are free to identify what has influenced their teaching.

The second stage of research entitled Events, examines how the teachers’ experiences are situated within the context of each case (see section 3.5). A framework is used to organise and correlate the messy and complex landscape of influences collected in the Experience stage informed through the ‘cultures of influence’ identified in the literature review. A framework, the ‘cultures of influence map’ (section 3.5.3), is developed to represent this data. This is a largely subjective exercise and so the participating teachers were asked to corroborate that it represents their ‘story’. The ‘cultures of influence map’ is returned to the first cohort of participants to ensure that the understandings extracted from it are commensurate. An External Researcher (ER) (see section 3.5.4) also examines the data and constructs a ‘cultures of influence’ map based on their reading of the data.

The third stage of research aims to further understand the nature of the Relationship between subject knowledge and a teacher’s practice (see section 3.6). Having identified from the first cohort of data a series of preliminary findings, it is at this stage of the research, that those findings can be tested against a new
set of data from new case teachers. Informed by the previous two stages, more focused data is collected on the relationship between subject knowledge and the teaching of geography. The data are analysed and themes from across all the case teachers are identified, described and discussed.

The implication of Figure 3.1 is that the research has followed a predetermined linear path. This is not the case. The research was more an iterative process in nature as represented in Figure 3.2 below.

Figure 3.2 Research Process

Key:
- Analysis of Relevant Literature:
- Iterative feedback loop

Stage One: Experience
First set of cases (including pilot case) – establish range of influences on teaching of geography

Restatement of focus

Stage Two: Events
Use of cultures to demonstrate context. Validation of data – establish importance of geographical understanding on teaching of geography, and range of possible alternative influences

Stage Three: Relationship
Analysis of the nature of the relationship between how a teacher understands geography and how they teach it.

Time
1997 1999 2001 2003
Figure 3.2 shows how at each stage of the research, time was taken to reflect on and amend the research focus. A good example of this is how the data collection evolved through the pilot case, the first cohort of cases and then further with the second cohort of cases (see section 3.4.2). Similarly the ideas in the research, particularly those on 'expertise' and the use of subject knowledge emerged from the engagement with the different stages of the data collection (see section 3.3).

Figure 3.2 refers to the "nature" of the relationship between understanding of geography and teaching of geography. The use of the term "nature" is significant as it positions this research apart from a realist paradigm which would assume that relationships are causal (Sayer, 2000). In this research, causal relationships are not assumed, but a relationship of some kind is implied. The use of the term "nature of the relationship" allows for that relationship to be investigated, described and understood.

3.3 *Finding and defining teacher 'expertise'*

This section explores how the theme of teacher 'expertise' is reflected in the research design. Initially, my interest in 'expertise' emerged from a desire to understand the practice of highly proficient teachers. The literature review highlighted the circular logic of this argument (see section 2.4) and argued that teacher 'expertise' is spatially, temporally and politically defined. 'Expertise' in this research is therefore understood as socially constructed and defined by the values of the dominant 'culture'. This section debates how this understanding of teacher 'expertise' affects the research design.
Understanding that 'expertise' is socially constructed enables an analysis of how teacher 'expertise' is perceived by different groups that use the term. 'Experts' are highly skilled in using the accepted codes of their 'cultures' which reflect the accepted ideologies and beliefs of that group. Analysis of 'expertise' would therefore reflect 'fashion' or the political positions and motives of these 'cultures'. For example, Advanced Skills Teachers (ASTs) are 'experts' defined by criteria interpreted under the agreed codes of the AST Assessors: themselves a selected 'cultural' group. Similarly, at school level, some teachers have informal 'expert' status because they are highly skilled in operating within the accepted codes of that school's culture. In my own experience, a teacher from my school, was hailed as an 'expert' because of her ability to get excellent work from often disruptive students with special needs. In the context of my school this was a highly valued skill and one that therefore determined the value of 'expertise'. Should this teacher have worked in a different context, her 'expertise' may not have been so valued. Therefore, 'expertise' is temporally and spatially bound, reflecting the dominant discourse of the localised cultures.

This definition of 'expertise' means that experts are identified by other members of the culture: ie, their peers, other geography teachers, school colleagues, who recognise their proficiency in the accepted 'cultural' codes. For the purpose of this research therefore, it is not just the identification of 'expertise' that is important but who makes that identification, what they consider to be features of 'expertise' and the values that are expressed therein. This understanding of 'expertise' therefore affects who is chosen to participate in the research as they need to be identified as 'expert'. The following section addresses the outstanding questions on how this should be identified:

- How many 'expert' teachers to participate in the research?
- How should they be identified?
- What would be the boundaries of each case?
The first question refers to the number of case teachers selected. All research is governed by time and resource constraints. Other research in different subject areas has featured case studies of a small number of teachers. Polettini (2000) focussed on two teachers of mathematics, Keedy et al (1998) featured one history class, and Bibby (2002) looked at seven teachers of mathematics.

It is significant to note how my personal circumstances affected these sampling decisions. As noted in section 3.2 the research was undertaken in three stages. During the first stage of the research where the initial data collection was undertaken, I was a full-time school teacher. My professional commitments limited the amount of time that I could spend with the case teachers. Therefore, decisions about the number of case teachers had to be balanced with what was feasible, without affecting the integrity and the rigor of the data collection. In the first instance, I decided to study three case teachers. However, the staged process of the research design enabled me to review this decision, return to the case teachers for more data (as I did in Stage Two) and to elicit more case teachers (as I did in Stage Three). Bassey (1999) notes that researchers need to ensure that they collect sufficient data to "explore significant features of the case and to put forward observations for what is observed" (ibid, p 47). The tension between gaining a rich and textured account of each case, whilst also ensuring manageability, and a variety of cases meant that in the first instance, the exploratory stage of the research, three case teachers was considered an optimum number.

Further case teachers were needed for the third stage of the research. As three case teachers had indeed enabled a rich descriptive account but also provided
variety and complexity across cases, it was decided a further three teachers for this stage would balance both stages of the research.

The first case teacher was regarded as a pilot case, and as such after the data collection the research design was reviewed (see section 3.4.2). As there were not significant amendments to the research design and the data collection methods, it was decided that the pilot case would be appropriate to include in the first cohort of cases.

The second issue – how to identify the participants in the research – was considered in two ways: firstly, what should be the criteria for participation, and secondly, how should individual teachers be identified. The answers to both of these questions were modified during the process of this research. This section outlines how the first cohort of case teachers was identified. Section 3.6.1 reflects on how those decisions were evaluated and amended for the second cohort of case teachers.

‘Expertise’ is understood as a quality ascribed by others, and therefore who those ‘others’ are is important. For the first stage of research I wanted recommendations of ‘expert’ teachers to come from those within the educational community that are perceived as having power and authority. This can be established by recommendations from two of their supervisors (ie, a headteacher and LEA advisor) that their practice is of a high standard (the criteria for this judgement being left to the referees to justify in their reference). Along with the agreed participation from the teacher themselves, this was considered to be sufficient for their participation. They are referred to as ‘experts’ but it is acknowledged that the use of this term does not indicate that they are ‘expert’ in
all aspects of their practice but that they are regarded as being ‘expert’ by those who have recommended them.

An important factor in the selection of the pilot case was his agreed participation, particularly in relation to his role in evaluating the data collection methods. I wanted the pilot case teacher’s opinion on the appropriateness of my chosen data collection methods against my research questions, and of any omissions in the research design. These judgements also reflect how the boundary of the case is defined, as one of the problems of describing context is the vast quantity of data available and the selection choices that have to be made to represent that data. The first stage of the research broadly defines the boundary of each case, which was to some extent guided by the participants themselves, but the final decisions regarding research design were mine alone. This emphasis highlights the importance of the pilot study to inform if the data could answer the research questions. The pilot case teacher had to be willing to offer support with this in addition to meeting the criteria for being an ‘expert’ geography teacher.

Having established the criteria for participation, the challenge became as to how to find willing ‘expert’ teachers who were prepared to participate in the research and to meet the appropriate criteria for participation. Each case teacher in the first stage of the research came recommended to me through colleagues. I monitored this selection to ensure that the teachers did not all come from the same area or teach in similar schools, but the initial suggestion of the participating decision initially came from other colleagues who knew the case teachers either informally or professionally.
The pilot teacher, Steven⁶, was a colleague who was interested in the topic of research, and who felt that participation would enable him to develop his practice further. He was able to satisfy the criteria to take part in the research and was happy to work with me in evaluating the data collection methods. As these changes to the research design were only minor, the pilot case was adopted for the full study. Two further cases were identified, and agreed to participate. Mandy was a colleague teaching in the South of England. She expressed an interest in participating in the research due to her own interest in undertaking post-graduate study and research. The third case, Clive, was one of the first Advanced Skills Teachers (AST) of Geography at a school based in a suburb of London. As an AST, Clive had a role for dissemination of good practice, and therefore he expressed an interest in participating in the research. Both teachers were able to satisfy the above criteria to participate in the research.

A critical review of this process was undertaken (section 3.6.1). Informed also by my change of professional circumstances, and my evolving understanding of teacher 'expertise', the strategy for selecting the second cohort of cases changed and is outlined in section 3.6.1.

The third question: on the boundaries of each case is explored in the following section which describes the data methods used.

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⁶ Pseudonyms have been used throughout (see section 3.5.4)
3.4 **Stage one: experience**

The following sections take each stage of the research design in turn, and describe how the data collection tools and methods were designed and analysed to answer the research questions. The first stage (Experience) was focused on the research question: how can subject knowledge influence ‘expert’ geography teachers’ practice?

### 3.4.1 Data collection methods

The focus of this stage of research is on understanding the cases’ experience of what influences their practice and how they describe their relationship with geography and geography teaching. The research design was influenced by the body of research that advocates listening to teachers’ narratives or “stories” (Elbaz, 1990; Clandinin & Connelly, 1995; Jalongo, Isenberg & Gloria, 1995)

This was the first stage of the research and therefore represents an exploratory stage of research activity, where the concepts were explored so that they could be refined for further study. The data collection techniques were designed to enable each respondent to focus on their explanation of their practice and their relationship with the subject. On this basis issues of confidentiality and any ethical issues that may arise in the research could be discussed with the case teachers and agreement reached with them (for a further discussion on the ethical issues pertinent to this research see section 3.5.4).

This section describes the data collection methods used with the pilot case, and then demonstrates how these methods were adapted for the two other case
teachers in this research stage. In the tradition of a case study approach to research I identified data collection methods that would enable the cases to make their representation of what influenced their practice and also to collect data to support and supplement what they said. This is represented in Figure 3.3 which shows how that data influences and relates to each other.

Figure 3.3 Data collection methods

The pilot case data collection consisted of:

- lesson observations
- interview with case study teacher
- collection of documentation and planning evidence
- interview with line manager
- interview with students.

The main data collection method was a semi-structured interview with the case teacher. The questions that guided the interview process were organised along three lines:
• What did he/she enjoy about geography and his own geographical education?
• What motivated him/her to teach geography?
• What was his/her preferred approach to teaching geography and selecting resources and activities?

These questions focus on the context of the case teacher's personal life and experience, his/her geographical education and experience, and his/her motivation for teaching and teaching geography elucidating his/her understanding of the goals and aims of geography education. Interviews were also held with students and colleagues which focused on the case teacher's practice and its features (full details in Appendix II).

It was important that the participants of the research were given an opportunity to reflect on the case teacher's practice and so the interviews were conducted in an informal, semi-structured style with an opportunity for participants to introduce their own ideas or observations. It is noted, however, that the interviewer often dominates and "controls" an interview process (Cohen, Manion & Morrison, 2007) and therefore the pilot case and I carefully audited the questions to ensure that we were confident that all areas of relevant contexts were covered. The interview questions and data construction guidelines are included in Appendix II. The interview data were supplemented by data collection methods that deconstructed his/her practice: through lesson observations, and an analysis of his/her planning and teaching records and student outcomes.

The arrangements for the data collection would need to fit in with the case teacher and his schedule. It was decided that the timeframe of the data collection would be negotiated with each case study. Such a negotiation would also need to take into account the need to observe at least three lessons taught by the case
teacher\(^7\). The process of this negotiation was repeated with each of the other case teachers. They were asked to suggest a day for the data collection to take place where it would also be possible to observe three lessons. Although it was requested that these lessons should be spread across the key stages, it was recognised that due to timetable constraints this would not always be possible. The actual lessons to be observed were suggested by the case teachers in the first instance.

The lesson observations were conducted using an original proforma (see Appendix II). The proforma was designed to focus the observation on the geographical content of the lesson and how the sequence of the lesson episodes, and the activities and resources, reflected the overall content. The proforma was shown to the case teachers so that they were aware of what I was looking for, and also to put them at their ease. During the lessons I also made incidental notes which were also added to the data set and included in the lesson descriptions in Chapters 4 and 5. During the lessons, where I was placed in the classroom and how or if I was to be introduced was negotiated with the case teachers. In all of the lessons, I was introduced to the students as a researcher at the start of the lesson, and their teacher encouraged them to talk to me if necessary.

It is acknowledged that three lessons can only represent a snapshot of practice, and one which may not be representative of the teacher's habitual practice.

Further planning documentation and examples of students' work were also collected to cross-reference data on the teachers' planning.

\(^7\) Three lessons were considered to be appropriate for one day of data collection, as it would give an indication of each teacher's practice and would fit into most teachers'
3.4.2 Evaluation of the pilot case

I kept notes and made reflections on the research process. I also asked the pilot case teacher to reflect on his experience of participating in the research and to critically review the research design. We agreed that the research design responded to the research questions. The interview structure enabled the pilot teacher to express his conceptual understanding of geography as well as his practical teaching experience and practice. The interview structure also enabled the teacher to reflect on other areas of knowledge and motivation. However other aspects of the research structure prompted further discussion on the data collection methods. These resulted in minor changes to the case interview, colleague interview and interview with students. These are discussed below and detailed in Appendix II.

The pilot study raised two issues about the data collection methods:

- the role of the interview with the line manager and if this enabled a critical reflection on the representation that the case teacher provided in their interview
- the effectiveness of the interview with students.

The interview with the line manager provided important background information about the geography department and offered a perspective on the case teacher's wider school role, and in this respect played an important role in establishing the 'context' of the case. However, it did not triangulate or verify the subject and classroom specific data from the case teacher themselves and therefore could not be used in this way.
The interview with students was originally included to gain an insight into the students' perception of the teachers' effectiveness or of their 'expertise'. However, in the time available, it was difficult to get the students to talk about their teacher beyond a superficial level. I felt that the students were more likely to tell me what they thought I wanted to hear (Bassey, 1999). The pilot teacher agreed with this observation. We agreed that whilst the data could potentially corroborate observations made about the case teacher's teaching style, interviewing the students would not yield data that would contribute meaningfully to the data set for this research. On reflection, it was considered that the students' work, rather than their opinions, would give a clearer account of the outcomes of the teachers' work and could also be cross-referenced with their planning documentation and so the data collection strategy for the main cases was amended accordingly.

As only minor changes were made to the data collection methods of the pilot case, the pilot case was included as a main research case. The data collection methods for the other case teachers in this stage of research were:

- interview with case teachers
- lesson observations
- documentation
- collection of student outcomes.

### 3.4.3 Data analysis for stage one

This section outlines how the data collected for the first stage of research was analysed. The analysis strategy adopted informed the data analysis in the subsequent research stages, and this is also detailed in Figure 3.4. The section firstly addresses the strategy adopted for the data analysis, and then the section describes how my personal circumstances affected the data analysis.
The data analysis strategy incorporated the common methods of qualitative data analysis including annotating and coding data, identifying commonalities and differences and gradually elaborating claims (Miles & Huberman, 1994). Each case teacher’s data were analysed first in isolation before themes across the cases were explored. The process of analysis was an iterative and ongoing process undertaken in three steps which were repeated throughout the data analysis (see Figure 3.4). These steps were to code the data, then display it (organised under these codes) and examine the results. This process was repeated and modified throughout the data analysis (as detailed in Figure 3.4).

During the data analysis process, I remained focused on the aim of the research which was to find out how the ‘expert’ geography teachers used their subject knowledge and how this was influenced by other influences on their practice. The research sought to illuminate this phenomenon through the examination of individual case teachers. Therefore, the process of the research needed to be illuminative in nature, and not theory seeking or generating (Bassey, 1999).

Shortly after the first stage of data collection, I undertook a teacher exchange contract in Phoenix, Arizona. This influenced the next stage of my research design in two ways. Firstly, my experience of teaching geography in a different country opened my eyes to new concepts of geography and geography education. I became involved in the implementation of the newly introduced State Standards for Geography. Through my work in this area, it became clear that geography was perceived to be ‘easier’ than History, and was viewed as a subject that was content-driven and factual in nature, and requiring only skills in recall rather than analysis: a type of geography typified by the "Capes and Bays" approach as described by Rawling (2001) and Walford (2001) (for a discussion on school...
geography in the USA see also Unwin, 1992; Clark & Stoltman, 2000; Bednarz, 2004). This experience heightened my awareness of different perspectives on geography, and how my understanding of the subject of geography was not necessarily shared by other professionals in geography education.

During my time in America, I made use of this ‘time out’ to type up the data and transcribe interviews. Through doing this I started to see links between each case: a consistency and relationship between concepts. This reminded me of the nested concepts analysis from Bronfenbrenner (1979): the data seemed to relate to each other in similar ways. Although clearly the contexts and phenomena in each case were very different: there was a relationship and a consistency between the concepts. However, this relationship between the different areas of influence were not necessarily nested (ie, they didn’t sit within each other) and a framework was needed to reflect the emerging relationship connecting these concepts and influences.

I also perceived other important influences on teachers’ practice from the data. Describing the cases as they were presented, with their complexity of detail, enabled the concepts of subject knowledge and teaching practice to be abstracted for further analysis. Initially I considered that these abstractions could be related to the ideological traditions highlighted by Rawling (2001) and the outcomes and process of geography as summarized by Slater (1996) (see Figures 2.1 and 2.2). However, the case teachers were not operating within one geography paradigm or ideological tradition, but using an eclectic approach, and operating within a variety of perspectives (as also found by Martin (2004; 2006) and Barrett Hacking, 1996)). It was not possible to align each teacher against one particular approach (see Brooks & Hopwood, 2006). Therefore I had to return to the data to further understand the themes that were evident (Miles & Huberman, 1994). This
example of the iterative process of the data analysis is detailed in Figure 3.4 for all stages of the research, and shows how conclusions drawn from different stages of the research and with different data sets, influenced the way that the data were coded.
## Figure 3.4 Steps in the iterative process of data analysis

<table>
<thead>
<tr>
<th>Analysis Steps</th>
<th>Which data used?</th>
<th>Analysis action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step One</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data coding</td>
<td>First cohort of cases</td>
<td>Coding of data against frameworks identified from literature review</td>
<td>Initial data analysis of first cohort of cases</td>
</tr>
<tr>
<td>Data display</td>
<td>First cohort</td>
<td>Presentation of each case as a matrix</td>
<td>Initial analysis of data, where responses are mapped against frameworks</td>
</tr>
<tr>
<td>Verification</td>
<td>First cohort</td>
<td>Participant and External Researcher response sought to data display</td>
<td>Enable frameworks used to be critiqued</td>
</tr>
<tr>
<td><strong>Step Two</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data coding</td>
<td>First cohort</td>
<td>Open coding of data</td>
<td>Detailed analysis of first cohort of cases</td>
</tr>
<tr>
<td>Data display</td>
<td>First cohort</td>
<td>Organisation of data into time, role and conceptually clustered matrices</td>
<td>To identify independent themes to emerge from data</td>
</tr>
<tr>
<td>Conclusion drawing</td>
<td>First cohort</td>
<td>Initial/tentative conclusions drawn</td>
<td>Matrix developed to identify themes within each case</td>
</tr>
<tr>
<td><strong>Step Three</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Data coding</td>
<td>Second cohort</td>
<td>Open coding of data</td>
<td>Analysis of second cohort of cases</td>
</tr>
<tr>
<td>Data display</td>
<td>Second cohort</td>
<td>Within case matrix display</td>
<td>To identify independent themes to emerge from data</td>
</tr>
<tr>
<td>Verification</td>
<td>Second cohort</td>
<td>Comparison to conclusions drawn from first cohort of cases</td>
<td>To identify relationship between codes within each case</td>
</tr>
<tr>
<td><strong>Step Four</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Data coding</td>
<td>All cases</td>
<td>Selective coding across cases</td>
<td>Synthesis of results from all cases</td>
</tr>
<tr>
<td>Data display</td>
<td>All cases</td>
<td>Across case matrix display</td>
<td>To identify codes that work across all the cases</td>
</tr>
<tr>
<td>Conclusion drawing</td>
<td>All cases</td>
<td>Analysis of relationships</td>
<td>To identify relationship between codes across all cases</td>
</tr>
</tbody>
</table>

Revisions made to data collection strategy for second cohort of cases.
From Figure 3.4, it can be seen that the themes initially emerged from the first two stages of the data analysis; the initial reading of the data against the frameworks of ideological traditions, and then a more open coding of data in the tradition of grounded theory (as described in Robson, 1993; Miles & Huberman, 1994).

Once the process of coding and recoding took place, it was necessary to address issues of validity and how this would be addressed in the research. The process of verifying the data analysis is recorded in the following section.

3.5 Stage two: events

This section discusses the second stage of the research which presented an opportunity to reflect on the research design. This stage was important to validate the emerging themes from the first stage of research, to reflect on the research design, and to create a framework by which the other influences beyond subject knowledge could be represented in response to the second research question. This section will begin with a discussion of the validity checks in this research and will then explain the validity tools used in this research.

3.5.1 Evaluation of the first stage cases data collection

The debate around the conceptualisation of validity in qualitative research reflects the particular ontological and epistemological traditions of different research approaches (Bryman, 2001). In essence, the debate focuses on whether it is appropriate to borrow validation techniques refined mainly in the physical sciences and apply them to social science. However, the transition of these techniques to social sciences is problematic due to the different nature of data generated. For example, there is the
need to ensure that the research reported is representative of the evidence collected; and also to consider the probability of alternative readings (Silverman, 2000).

As a result, terminology such as internal and external validity have been commonly used and accepted within qualitative research. Guba and Lincoln (1989) argue that these terms are inappropriate for an interpretative approach to qualitative research. They contend that it is vital for the researcher to establish trustworthiness. As such they introduced their own criteria for trustworthiness (credibility, transferability, dependability, and confirmability) which are parallel to the more traditional terms of external and internal validity, reliability, and objectivity. They also introduced authenticity criteria to ensure that accounts in qualitative research were considered to be 'authentic' by the participants themselves, and to empower them to act upon the findings of that research. Although this offers an important challenge to how validity is conceived in qualitative research, it has not been used widely (Bryman, 2001), and even condemned by Morse (as reported in Robson, 1993) for supporting the view that qualitative research is unreliable and invalid.

Guba and Lincoln’s (1989) work highlights that validity in social research performs different functions. Hammersley states that when accounts are used as a source of information about phenomena then validity in how they are used is important (Hammersley, 2002). Hammersley’s approach is one that places emphasis on the plausibility and credibility of the use of accounts (ibid). In contrast, Maxwell’s categorisation of validity places the emphasis on understanding: ie, how can we be sure that we have understood the accounts correctly (Maxwell, 2002). Maxwell’s categorisation breaks validity down into four main types: descriptive, interpretative, theoretical and evaluative. Both descriptive and interpretative validity ensure that what the participants said, and how their accounts have been understood by the researcher, is what was originally intended. Theoretical and evaluative validity refer to
what the researcher concludes or understands from that information. For the purpose of this research, it is considered important to ensure that both forms of validity are given sufficient consideration. Participants were asked to participate in descriptive and interpretative validity to ensure that they are confident that their representations were understood and valued by the researcher. To ensure that what is made of that data (theoretical and evaluative validity) is also valid, an External Researcher was asked to participate in this stage of the research (see section 3.5.4). Each of these strategies is outlined in the following sections.

3.5.2 Validating participants’ stories

Whilst using participants for ‘internal validity’ is often recommended in qualitative research manuals (Silverman, 2000; Blaxter, Hughes & Tight, 2001; McNiff, 2002), it is not without its critics. Guba and Lincoln (1989) emphasise that participation in the validation process has a strong action component, and should require participants to be empowered to act through their participation in the research (hence why their work has been taken up by action researchers). However, most scholars recommend caution in the use of participants to validate. As Hammersley warns: “Nor can we rely on the fact that because participants are ‘there’ that they ‘know’” (2002, p 36, emphasis in original). Brown and Dowling (1998) recommend caution as it is the role of the researcher to make meaning of the data and this may be compromised through placing inappropriate emphasis on participants’ responses. Similarly, Robson (1993) notes that using others to assist in validation can present problems when conflict arises: as it then becomes the role of the researcher to determine to what extent that conflict is due to different interpretations, different understandings or even inherent problems with the data or the research design itself. This is particularly the case where participants may wish to change the data after rereading it subsequent to the data
collection (Robson, 1993). However, if validation is about placing emphasis on understanding of the data then it is my contention that such conflicts should be embraced as they bring to light anomalies both in the data and in the interpretation of that data, and should lead the researcher to evaluate her handling and reading of the data provided.

The aim of the internal validity checks was to establish if the data accurately represents what the participants had intended to say. The timescale between the data collection and the analysis (5 years in total) presented a difficulty in returning to the original three cases. Each of the cases had moved on professionally, one to another country, and their perspectives may have changed dramatically, adding unhelpful complexity (and a temporal dimension) to the data. I wanted the cases to reflect on the data that they presented to me and to consider, with hindsight, if this was an accurate representation. Case teachers were asked to read an initial analysis of the data and to comment on the accuracy of what they read. Unfortunately, Clive had changed his job and suffered ill health and did not respond to the request to verify his data. Both Steven and Mandy did validate their analyses and their feedback is included in Appendix IV and is incorporated in the analysis.

3.5.3 ‘Cultures of influence’ maps

I also wanted to address the second research question and to develop an understanding of how other influences affected the case teacher’s practice. The second stage of the research therefore involved returning to each case teacher and producing a representation of the context of each case. This framework developed into a map of the ‘cultures of influence’ that affected their practice. This section explains how these ‘maps’ are derived.
The 'cultures of influences' are presented as a topological map. One feature of
topological maps is that they focus on the spatial relationships between objects
(whereas topographical maps represent scale and orientation). Monkhouse and
Wilkinson (1978) describe topological maps as retaining the continuity of relationships,
but using other criteria to determine scale and topological information. For the
'cultures of influence' maps in this research, the focus of the map is on the influences
on a teacher's practice. These influences are expressed as five 'cultures of influence'
(see section 2.3.4). The maps are able to represent therefore the extent of the
influence of each culture (shown as the size of the 'culture' or scale) and its
significance (evidenced as situation of the 'culture'). The use of a topological map
enables the relationships between the criteria (in this case, the 'cultures') to be
expressed and compared diagrammatically. The 'cultures of influence' are expressed
in terms of their influence and significance, based on subjective representations of the
qualitative data derived from the interviews and observations. Their main use in the
analysis is in the patterns and relationships that they demonstrate.

The maps were constructed using the five 'cultures of influence' discussed in the
literature review (personal, school, educational, geography and geography education).
The maps were constructed from the data through apportioning relative status and
importance to each 'culture of influence'. The map itself is a representative tool, and a
thinking tool. The size and situation of each 'culture of influence' is subjectively
proportional to the researcher's (or case teacher's) perceived significance of that
culture on the teacher's practice. The map therefore acts as a stimulus for a reasoned
discussion as to why it has been drawn in such a way. The onus is on the
explanation, justified from the minutiae nature of the data and the inferences that
emerge from it. The map offers a way of representing both the micro and macro
messages from the data. An essential component is the accompanying text which explains why the map has been constructed in this way.

When the initial analysis was returned to the case teachers, they were asked to participate in the construction of these 'cultures of influence' maps. I discussed with the case teachers the construction of the 'cultures of influence' maps with an example, and then asked each case to construct their own cultures of influence map for how they were at the time of the research. This would enable me to analyse and compare the two representations. The challenge was to demonstrate and explain the cultures maps without a face-to-face discussion with the teachers, and without influencing them in their own construction. I had presented a summary of the three cases with their cultures of influence maps for a research seminar, and decided to use these as exemplars. The teachers were therefore given a description of one of the other case teachers with my version of their cultures of influence map, and were asked to use these general principles to construct their own.

Unfortunately, attempts to get the case teachers to draw these maps unassisted were only successful with the pilot case teacher, Steven. Clive had changed his job and was suffering from ill health and did not respond. Mandy requested not to draw the 'cultures of influence' map as she felt she did not have time to complete the map sufficiently (see Appendix IV). However, the construction of the maps had proved interesting to me and became an important part of the next stage of the research. The 'cultures of influence' maps and the validity checks undertaken by these case teachers is included in Appendix IV, however, where appropriate their comments and further development of issues raised are also included in the presentation and analysis of cases in Chapter 4.
3.5.4 Validating the analysis

Using research participants' reflections would give the data collection and analysis descriptive and interpretative validity but only goes so far as to show that I have represented the cases as they understand themselves. In order to provide sufficient theoretical and evaluative validity to the research findings and the framework used for data analysis, it was important to use additional validity techniques. Based on Bassey's (1999) concept of a “critical friend” in research and Guba and Lincoln's (1985) "peer debriefing", I asked an External Researcher (ER) to participate in the data analysis process. The ER was a colleague engaged in similar PhD level research based at a different university who had little previous engagement with my research, but was interested in how geography was conceptualised in classrooms. The ER was given a copy of the data analysis strategy, transcripts and copies of the raw data, and the initial analysis sent to the cases themselves. The ER was asked to respond to the representation of my analysis of the data, and to construct his own 'cultures of influence' map based on the data he had seen. He was given similar guidelines to the construction of the maps as the case teachers as detailed above.

The results of the respondent and External Researcher validation then formed part of a discussion with the ER on the data anomalies and findings. Conflicts within our interpretations were actively sought and discussed to help reach a clearer, deeper understanding of the data. Where possible, feedback from the cases on the data validation were also included and discussed. All conflicts and anomalies were debated and eventually resolved, and are discussed in Chapters 4 and 6.

Reflecting on this process highlighted that the analysis of the data had been commensurate with both the case teachers' intentions and the reading of the data
itself. Satisfied that the data analysis was sufficiently verified and the strategy sufficiently robust, I proceeded with the third stage of the research.

3.6 Stage three: relationships

This section reviews the third stage of the research which focuses on both research questions and how influences can affect teachers' understanding of geography when they teach. It therefore seeks to understand the nature of the relationship between a teacher's understanding of geography and his or her practice. The third stage uses a new set of empirical data (see section 3.2) with more emphasis on the relationship between understanding of geography and how it is taught. This also adds data to the research that can be used to challenge assumptions made in the cross-case analysis (see Figure 3.4).

It was intended that the cases in Stage Three would use a slightly modified research design compared to the other stages of the research. This would enable further development of the 'cultures of influence' map. When testing a theory or concept developed from a cohort of cases, Miles and Huberman (1994) claim that the most rigorous way to do this is through applying this theory to a new cohort of cases. This would enable a more rigorous analysis of the theoretical framework and enable me to further question its validity and applicability (see section 3.2). This would also enable me to 'test' my analysis of the relationship between subject knowledge and teaching geography on teachers of whom I have no previous knowledge. This will ensure greater value for the research outcomes and will develop an understanding of the relationship between subject knowledge and teaching geography in those cases.
3.6.1 Selection of cases

Section 3.3 indicated how the first cohort of cases was selected and the relationship to the research theme of teacher 'expertise'. In the first two stages of research the notion of 'expertise' did not contribute to the analysis and representation of the data. This was due to how 'expertise' was conceived at the start of the research. As the understanding of 'expertise' developed, I realised that why teachers are considered to be 'expert' could contribute valuable information to the data set and so should be included in the data. However, the referees from the first cohort of cases were told that their references would remain confidential, and therefore the details of the references could not be reported. A change to the selection strategy for this stage of research would enable the 'expertise' references to be used as part of the data set.

The second cohort of teachers also provided an opportunity to revise the selection strategy. The first cohort of teachers were recommended by colleagues. In order to select a second cohort of cases, I asked members of the geography education community involved in initial teacher education (ITE) to identify 'expert' geography teachers. An email was sent to 60 colleagues involved in ITE, who have wide experience of schools and geography departments in their local area. The email asked them to name an 'expert' geography teacher and to explain what features of 'expertise' they demonstrated. Responses (17 received) were recorded so that the person making the recommendation and the content of the recommendation could be added to the data collection should the teacher subsequently agree to take part in the research. It was also a consideration that the participants in the selection of cases should be aware that what they say about the 'expert' geography teachers would be made known to them. This would enable me to use this data in the analysis (and was the reason why the recommendations from the first cohort of case teachers could not be used).
The geography educators who recommended 'expert' teachers were PGCE tutors who had worked with these teachers. The tutors had an overview of a teacher's practice that was useful for normative comparison purposes (ie, this teacher is better than others) but due to the nature of their connection their judgement was largely subjective. This subjectivity could illustrate the influences that were impacting on their identification of 'expertise', and thereby adding to the data set. The members of this group are also different from the actors who participated in the recommendation of teachers in the first cohort of cases. This is important because these actors are also influential as academics and teacher educators within the geography education community.

In total 39 teachers were recommended (from 17 responses) and approached to participate in the research. Initially three men volunteered, of whom the first two to respond were chosen. Unfortunately, none of the women approached (five had been recommended) wished to participate, each indicating either that it was not possible for them to participate or that they felt uncomfortable with the term 'expert'. Considering it important to have a mix of genders, I approached female geography educators, who were able to make more personal recommendations, one of which resulted in my third case for this stage in the research.

The combination of three cases in the first stage of data collection, and three cases in the second cohort, presented a total of six cases of different 'expert' geography teachers. Taken together this represented a balance between each cohort and a range of teachers with unique contexts and different teaching styles and approaches to geography. As stated in section 3.3 the aim of the research was not to create generalisations about the population of expert geography teachers as a whole, and therefore this number of cases enabled me to examine the practice of a range of
teachers whilst still being able to balance the depth and complexity of the data in each case.

3.6.2 Additional data collection techniques

Due to the tighter focus of the third stage of the research (on the relationship between each teacher’s academic and school geography), I wanted to collect more data on the relationship between subject knowledge and teaching. New data collection techniques would need to complement the data collection techniques already used (ie, the interview, lesson observations and documentation collection), but would be used to further illuminate the case teacher’s understanding and use of geography. I therefore chose to ask the case teachers to construct their own ‘cultures of influence’ map and to include two new data collection techniques: significant life experiences and ideology triangles.

Teachers were asked to construct a ‘cultures of influence’ map. Unlike the first cohort of cases, I was able to be present during the construction of these maps. I adapted a similar strategy of demonstrating a completed map as I had with the first cohort of cases, but to also talk through the process of completing the map with the teachers. All were able to complete their map easily. The originals were scanned with names removed for anonymity and can be found in the data Chapters 4 and 5. The shift from using these maps as a way of representing data to using them as a heuristic device is subtle but significant. In Stage Two of the research, the ‘cultures of influence’ maps were used to represent the extent to which the teachers had described how their practice had been influenced. They were constructed by the researcher, the ER and one case teacher. In Stage Three they were used as a heuristic device to enable teachers to discuss the influences on their practice. This means that the cultures of
influence maps are part of the initial data set rather than used as a validity check. Validity of the second cohort of case teachers is discussed in section 3.6.3.

The first additional data collection tool is adapted from the environmental education movement that has analysed the impact of Significant Life Experiences on professionals involved in environmental action (Chawla, 1998; 2001) and has been used in geography education (Jenkins & Ward, 2001). This technique uses a series of questions and prompts to encourage participants to recount what significant life experiences (SLEs) have resulted in them choosing to work in this field. The use of the narrative in this context is not without controversy. As Neisser (1988) highlights autobiographical memory is selective and may not be an accurate depiction of what really occurred. However, this memory selection process and the subsequent representation in the telling of these experiences, does indicate what the participant values in the recollected experience. It therefore has validity when used to identify what the cases consider to have influenced them. This view is supported by Elbaz (1990), Calderhead (1996) and Connolly and Clandinin (1988) who stress the importance of enabling the teacher’s ‘voice’ to be heard when examining teacher knowledge. Adopting a more open style of questioning would enable teachers to tell the ‘story’ behind their motivation and influences. Elbaz (1990) stresses that using stories is more than a methodological tool, but in itself represents an epistemological view of a teacher’s thought and knowledge. Incorporating SLEs along with the data collection methods from Stage One further illuminates what has influenced each teacher’s practice. When used in conjunction with the other data, SLEs will highlight the case teachers’ own representation of the nature of their relationship between geography and teaching geography and distinguish it from the other influences.

The case teachers were also asked to complete an ideology triangle (see Appendix II). The ideology triangle is based on the soil texture triangle which classifies soil texture.
In the original model the three components of soil (clay, sand and silt) are placed in opposition to each other, so that a soil texture can be situated at the point where the three variables meet. This principle does not have a direct comparison for a geography teacher’s perspective, as it is not made up of discrete percentages of beliefs unlike the texture of a soil. The use of a triangle, also only allows three points, or three ideologies, to be represented. (Note that Rawling, 2001, actually identified six ideological traditions in geography education.) The triangle, therefore, is flawed as a quantifiable measure of where someone is ‘situated’ ideologically. However, the soil texture triangle and how it works is familiar to geography teachers and therefore is a useful heuristic device, to enable the teachers to discuss how they viewed themselves in relation to the contrasting ideologies presented, and to provide an opportunity for them to discuss their views on these contrasting ideologies.

The ideology triangles (see Appendix II) represent three perspectives: the top corner a positivistic view of geography, associated with the quantitative tradition. The right hand corner represents a ‘people and environment’ approach to geography education. The left hand corner represents a more critical perspective. These three traditions broadly represent a chronological development of school geography (see section 2.1.2), but do not represent the whole picture. What is missing for example is a ‘regional geography’ perspective, a ‘humanistic perspective’, a ‘vocationalist or utilitarian’ perspective. It is possible that the users of this device might highlight that these areas are omitted, or that they might try to ‘fit’ themselves into the limited alternatives offered. The actual result of the diagram is only useful as data when taken with the dialogue and description that the teacher provided as to why they were situating themselves in this way.

The data were then analysed by comparing the results of the ‘cultures of influence’ maps and the accompanying conversations with the results of the SLE activity and the
main case interview. The validation of the first cohort of cases showed that the data
collection and analysis methods were robust (see section 3.5). To ensure rigour in the
second cohort of cases, the transcripts and initial analysis were returned to the
participants and sent to the ER. No significant amendments were made by the case
teachers, and the ER's comments are recorded in Appendix IV.

The additional data collection methods were designed to focus on the relationship the
case teachers had with their subject knowledge. Therefore whilst the case teachers' colleagues were still included in the data collection, this was not included in the analysis unless relevant.

3.6.3 Analysis of data

The data for this stage was to be initially presented in the same way as the cases in
the earlier stages of the research (see Figure 3.4). The representation made by the
teachers themselves was open coded and arranged within lists and categories (Miles & Huberman, 1994). At this point, the cases had been treated as independent, separate cases. It was clear however, that similar codes were starting to emerge from across the cases. In this respect, the cases were arranged in tabular form, as a cross-case matrix, so that these themes could be highlighted (ibid). Not only was similarity identified, but also differences between how each case dealt with these themes. The final stage in this data analysis was the construction of cross-case matrices as this would enable drawing attention to similarities and themes that have emerged from between and within the cases. Presenting the data in this way enables it to be understood within the particular sense of each case, within the wider context of each case (ibid) and the relationship between subject knowledge and the teaching of geography. These questions would be specifically focused on the relationship
identified between subject knowledge and teaching of geography would seek to understand the nature of this relationship. Once the themes had been identified, I then returned to the original data set and highlighted appropriate quotations and referencing that exemplified each case’s perspective on them (detailed in Chapter 6).

3.6.4 Ethical issues

In line with the ethical guidelines for conducting educational research as outlined by British Educational Research Association (BERA, 2000), the research design has been mindful of respect for democracy, truth and persons (Bassey, 1999), and the duties and responsibilities of an educational researcher. In addition, specific consideration was given to the participants in the research and the potential implications of participation were discussed with each of them in detail, prior to seeking their consent.

It was agreed with participants that although their identity would not be revealed directly and would be protected, the context of their practice was an important part of the research, and that it might therefore be possible for others to identify them from this description of context. All participants gave their consent whilst being aware that their anonymity could not be entirely guaranteed. The relevant headteachers were informed of the details of the research and their permission sought before any data were collected (see Appendix II). It was acknowledged that participants in the research would be subject to the ‘cost’ of providing the data required through the time and effort required to participate (Robson, 1993). This was made explicit to them, and the ‘benefits’ of participation were also discussed. Each of the participants agreed to take part in the research because they were interested in the research theme and focus. Many felt that participation would benefit them, either through their own
professional development or because they were interested in the process of education research. Fully informed consent also allows participants to have the right to withdraw from the research (Cohen, Manion & Morrison, 2007), and in this research, one participant, Clive, did choose to withdraw from the opportunity to verify their data, but indicated that this was due to personal reasons, rather than lack of trust in the researcher.

A related issue regarding confidentiality and anonymity also arose in the reporting of the data collected through interviews. In many cases, the teachers talked about people who had influenced them, and mentioned these people by name. It was decided that where these influential people were academics or geography educators in the public arena who had published their work, then it would acceptable to include their names. Identifying these people could help the reader who was familiar with their work to understand the case teacher's comments. When other people were mentioned, such as colleagues, friends or family, these names would be changed or omitted. Omitting the names of these individuals would be for two reasons: primarily to protect the identity of the individuals themselves, but also to protect the identity of the case teacher who had named them.

During the research process some additional ethical issues emerged and these are detailed below.

Of the initial cohort of cases, two of the case teachers were known to me prior to the research. This presented an ethical issue as to the degree that my collection, and subsequent reading of the data, might be influenced by my knowledge and already formed views of these teachers (Cohen, Manion & Morrison, 2007). This issue was made explicit to the External Researcher (ER) who was asked to look for evidence that this had occurred. These teachers were also asked to review their data and look
for evidence that my personal knowledge had influenced the data presentation and interpretation. In one case, the case teacher Mandy, did feel that I had made a judgement based on my personal knowledge of her, and this is detailed and discussed in section 4.3. For the other cases, both the ER and the case teacher were satisfied that my reading of the data had emerged from the data itself.

For the initial cohort of cases, references were sought from two independent referees who had knowledge of the teachers’ practice. As the referees were not informed that their references would become part of the final report, it was decided that the detail and origin of the references should remain confidential. However, for the second cohort of cases, referees were informed, prior to submission, that their references would become part of the data set and therefore are included in the data description and discussion. Although the source of the reference was kept confidential to the reader, it would have been possible for the case teachers to identify the source of this reference, and this was made explicit to the referees.

As outlined in section 3.4.2 participants were given the opportunity to comment on the data description and analysis of their case. This presented a potential ethical issue regarding ownership of the data if conflict arose between their reading and the analysis of the data and that presented by the researcher. Prior to this occurring, it was decided that any occurrences of this type would be examined with due respect to the engagement and comments raised by the participants. In fact, where this did occur (with Mandy), this engagement and her criticisms led to a changed understanding of the data. It was decided that both readings of the data had relevance but her further comments added clarity to her intended meaning and was therefore also included (see section 4.3.3). Throughout this process, due attention was paid to the comments of the case teacher whilst the final decision about the
inclusion and interpretation of the data was left with the researcher. This is described in detail in section 4.3.

A further ethical issue that emerged concerned the inclusion of one of the case teachers in the second cohort of cases. Although this teacher had been recommended as an 'expert' geography teacher in the same way as the other cases, I was concerned after having observed his or her practice that I didn't think it was sufficiently skilled to be called 'expert'. The resolution of this issue came through reflection on the use of 'expertise' in this research. The position adopted throughout is that 'expertise' is socially constructed and defined by those who knew the teachers' practice and had offered their recommendation. My limited experience and observation of this teacher, in comparison with the detailed knowledge of the person who made the recommendation, caused me to reflect critically on my judgement. It is also relevant to acknowledge that my own considerations about the constituents of 'expertise' in geography teaching were not relevant to the selection of the cases in this research and therefore it was important and ethical to include the teacher as a case. However, I also felt that it was important to use my research notes in the data analysis as I had with the other cases. This is outlined further in Chapter Five.

3.7 Reporting the research findings

This chapter has outlined the methodology and research design, and described the data collection methods used. The primary data were referred to constantly to check against codes and emerging understandings. Quotations were selected that enabled a 'story' of each case teacher to be represented. In the following chapters, I detail each case teacher in turn. Due to the research design, data on similar aspects of the case teachers' work emerged however, the individual 'stories' were markedly different.
In order to emphasise each cases' individuality, they are presented in the following chapters under the same structure: through an examination of their relationship with geography, with teaching geography and other influences on their practice. The results of all the data were brought together under this structure, and are reported as such. Although there is not sufficient space to include all data collected, such as examples of students' work, this data was incorporated and critically examined as part of the analysis process. Chapter Four discusses the case teachers from the first cohort. Chapter Five discusses the second cohort of case teachers. The emerging understandings from across all the case teachers are discussed in Chapter 6.
4 Chapter Four – First cohort of cases

This chapter describes the first three case teachers in turn. The data for each case teacher is divided into four sections which describe his or her relationship with geography, relationship with school geography, other influences and his or her classroom practice. Figure 4.1 shows how the research themes, the research design and the structure of this chapter are connected. Included in this description of each case teacher is also validation feedback from the case teachers and the External Researcher, where relevant. The values expressed by each case teacher are highlighted, and the influences on their practice considered. Additional data, not referred to in this chapter, are included in Appendices III and IV.
Figure 4.1 Structure of Research design for Chapter Four

Chapter One

Research Theme: Geography teachers' subject knowledge

Research Question:
How can subject knowledge influence 'expert' geography teachers' practice?

Chapter Two

Research Theme: Teaching "Expertise"

Chapter Three

Experiences

Research Theme: Other influences on teachers' practice

Research Question:
How can other influences affect 'expert geography teachers' practice?

First Cohort of Case teachers:
Steven
Clive
Mandy

Chapter Four

Events

Relationships

Relationship with Geography

Other Influences

Classroom Practice
4.1 Steven

Steven is the first case teacher and was also the pilot case teacher (see section 3.4), making him an appropriate first case to present. Steven has validated his data, providing feedback on all stages of the data collection. At the time of the data collection (in 1999), Steven was a geography teacher in a secondary school in Nottinghamshire where he had taught for five years. Steven's 'expert' recommendations come from his headteacher and LEA advisor.

4.1.1 Relationship with geography

Steven recalls a fairly unremarkable early academic career. He describes himself as successful at school, but found that success came through his study of geography. This success inspired him to take geography at A' level, where he was taught by a charismatic geography teacher with a particular interest in physical geography. He chose a degree in geography because it was his "best" subject, but also because of the influence of this teacher.

Steven's degree course offered a range of optional modules, so he could choose which geography topics to study. Steven elected to study topics from across the geography discipline including: "Human, physical and regional" (Steven interview, 1999, lines 69-70). He had already decided that he would like to become a geography teacher and so chose those subjects that he thought would be useful to a teaching career.
And by that stage I was thinking of teaching, and I considered a broader spectrum: one, it would suit me anyway, but also I considered that it would suit a teaching environment better. (Steven, interview, 1999, lines 71-74)

Steven studied a diverse range of topics, from human, physical and regional geography. Steven explains why these topics interested him:

The bits that I didn’t enjoy was the heavy, economic [theory] side because it is not explaining a process, it’s not explaining a human reaction... So I enjoyed the population and retail studies. And I enjoyed immensely getting a greater appreciation of the physical stuff we did, whether that was the geomorphology or environmental systems, or ecology. (Steven, interview, 1999, lines 80-86)

Steven’s emphasis is on explanation: that he enjoyed topics that explained the world. This enjoyment is also reflected when Steven talks about the role of geography:

For me, it’s understanding the processes, understanding motivations, understanding reactions, so the units that encompassed that were far more enjoyable. (Steven, interview, 1999, lines 94-96)

The emphasis on explanation is reinforced by repetition of the word “understanding”. Steven describes studying geography as a process of collecting, interpreting and evaluating information to lead to a greater understanding of phenomena.
Steven's degree module choices were influenced by a desire to study a balance of topics within geography which can also be seen in his experiences outside of his degree. Steven had travelled widely on two sabbatical trips and had worked for a mining company and for a factor\(^8\) doing forestry and land management work. Steven describes his understanding of geography as being enhanced through this involvement in travel and working with the land. He reflects on how this experience affects his approach to teaching geography:

I also did six months of travel – not employment based. Again that exposed me to things that I had learnt on Africa, North America and the Caribbean which provided a real life context to base my ideas on. I worked for a mining company in Scotland which from a teaching point of view, was an interesting context because you got to see why people think what they do – getting to see the other side of the argument. It’s far too easy to give the view of the conservationists: the environmentalists’ viewpoint. It’s quite an easy one that kids empathise with, but I think it needs to be a balanced argument and having that experience has exposed me to that. (Steven, interview, 1999, lines 106-115)

Throughout Steven’s interview he makes several references to balance in geography, both in academic and school geography and in relation to the balance between human and physical geography, and balance between different viewpoints. When I asked him why balance was important he replied: "I think that is what the main role is; or needs to be" (Steven interview, 1999, line 99). Later in the interview he elaborates:

\(^8\) A factor is employed by a Scottish landowner to maintain their land.
I still prefer to teach the environmental elements. But that's because it typically has a physical process that needs to be explained or it has a human response or involvement that needs to be put in context. So it's involving both elements which arguably is the direction in which geography is supposed to go in. (Steven, interview, 1999, lines 134-138, my emphasis)

Steven emphasises here that balance across geography is how he would like to see the subject develop. Steven is aware of the dynamic nature of the academic discipline:

I certainly don't believe that doing a degree, you don't know anything other than being exposed to a few things, and there's a hell of a lot more to learn. I mean one of the key things we appreciate is that geography has certainly been evolving ... it seems to be going in different directions. So it's very definitely an ongoing thing. So its something that I certainly perceive that I retain an interest in and I retain desire to keep on learning about. (Steven, interview, 1999, lines 149-156)

Steven goes on to reflect on how the dynamic nature of the subject affects his classroom practice: "I'm still keen to develop the geography side of my teaching ... in order to deliver well in the classroom ..." (Steven interview, 1999, lines 171-173). Although the word 'deliver' was a key term in the educational vernacular at the time of the interview, how it is expressed here indicates that Steven's view of geography is as a body of knowledge to be passed on. This contrasts with Steven's earlier assertion that geography is about explanation and understanding. Later in the interview he asserts:
A measure of what we were exposed to at our degree level is arguably what we should expose pupils to even at A' level, and so I think that the depth of knowledge is only something that has increased. (Steven, interview, 1999, lines 197-200)

The dominant values expressed in Steven's interview (of balance and explanation) do not neatly ‘fit’ in the different paradigms within geography (see Figure 2.2). This is also noted by the External Researcher (ER) who tried to place Steven within an ideological tradition (Figure 2.2). His report categorises Steven's feedback as reflecting Scientific, Behavioural and Humanistic traditions:

Although he talks about explanations and a fleeting glance would suggest Scientific, I think he was less about predictions and more about understanding … (ER response, 2004)

The ER rejects the ideological traditions as being a helpful way of categorising Steven's responses in this case:

The importance of inference from the whole of the interview or passages of text came through here. And the idea that some of the labels [of geographical traditions] can be mentioned but interpreted as vehicle to other more important ideas about geography. (ER response, 2004)

This suggests that Steven's understanding of the subject has been informed by different traditions but is a product of them all. The ER also identifies that Steven has described his core values and thoughts about geography:
In terms of geography, I think the underlying values are balance. No extremes of physical/human. This balance translates into an interaction/explanation human value. (ER response, 2004)

Steven, in his validation of the data analysis, also reflects on the results of this analysis and concurs with the observations made:

Having no particular specialism was deliberate, to gain a balance, but additionally because genuine interest was evident in all chosen areas of focus ... I feel (felt) Geography is a wonderful vehicle to explore not only processes, features, concepts and events but also additionally people's values and attitudes. (Steven, communication, 2004, brackets in original)

The use of the word "vehicle" implies that the process of understanding phenomena is important, possibly more important than 'geography' itself. The themes of explanation and balance reoccur throughout Steven's interview. He uses both terms to describe his relationship with the academic study of geography and can also be seen in his planning documentation and lesson observations (see Appendix IV). To what extent did he extend or qualify this view of school geography when discussing teaching geography?

4.1.2 Relationship with school geography

In the second year of his degree Steven decided that he wanted to teach geography: "Because it was the thing that interested me it was the thing that inspired me beyond ... " (Steven, interview, 1999, line 148). When asked why he
thought that geography is an important topic for students to study, he focuses firstly on synthesis and understanding:

... I think geography is a subject that puts virtually everything into context, a real life context. It is a subject that gives an explanation of what's going on, why it's going on, and what people may feel, or respond to as a consequence. ...I think that otherwise they will just grow up knowing a couple of processes, knowing a couple of equations or phrases and not having any real understanding of where they are, or the context of where they are (Steven, interview, lines 205-213)

He also returns to the theme of balance when he reflects on the value of geographical content:

I think the kids need a balance: the physical processes, and human elements for human responses etc. There are very definitely strong environmental issues to deal with especially the attitudes and the conflicts. Ultimately I think that geography is more balanced a subject now than what it has been before, and I think that is a very healthy one because its not just one dominant process: they all interrelate. However, I think some things need to be separated into separate entities especially when you are talking about Key Stage 3 and Key Stage 4. Obviously some things are tremendously complicated. And interrelationships and interactions are not something that are easily grasped ... (Steven, interview, 1999, lines 217-227)

In the above quotation, Steven refers to the same themes highlighted in his own relationship with geography: balance, explanation and understanding. However,
as Steven talks about school geography, there is a change of tone as he speaks with more authority and confidence. He discusses how he thinks geographical concepts can be broken down for different age groups, and the range of approaches relevant to school geography: "I think we need to mix all of them. They all have proved to have limitations and are not the only thing on offer. ..." (Steven, interview, 1999, lines 238-239).

When asked about the geographical content of his lessons, Steven acknowledges the limits of what he is able to do, but that he is guided by his subject knowledge:

So that's much more a prescriptive thing about finding the resources and case studies that are most suitable. The most suitable for what we have, and the subject knowledge that you have (Steven, interview, 1999, lines 256-259)

Steven's description of geographical study has not changed between his discussion of school and academic geography. However, when talking about school geography, Steven is more confident about describing geography content. This is evidenced when he talks about how he teaches unfamiliar topics:

... by the time you had gone through doing an A' level and doing a degree, you have skills in looking for information, editing data, looking for questions and posing questions all in quite a methodological, logical way and so I don't see any harm in imposing that sort of system, that sort of structure, and using it to generate a pathway through a topic. (Steven, interview, 1999, lines 358-363)
Steven demonstrates here the process that he uses to adapt his geographical knowledge for teaching, reflecting an enquiry route (see Roberts, 2003). The knowledge itself has not changed, but he uses it as a guide to help him teach geography.

Steven's confidence in handling school geography topics is further emphasised when he discusses his use of resources:

Textbooks are okay but they mostly need to be adapted or as an introduction. Videos can be excellent but can become dated quite quickly on an issue. The one [teaching resource], if it works well, is the actual pupils' knowledge. (Steven, interview, 1999, lines 303-306)

In indicating that he is prepared to critique resources produced by a textbook author or video producer, Steven is acting as a curriculum maker, controlling his resources and the lesson content so that it can be understood by his students.

Steven values his students' own experiences and their needs:

I think you need to have an appreciation of difficulty of content and a clear understanding of where pupils are coming from. You need to attempt to get pupils to understand, involve them in the process, and find where their perceptions are coming from. Sometimes this is instinctive but it is most successful when it has been thought through and different avenues are thought of. (Steven, interview, 1999, lines 442-447)

Steven considers it important to get to know the students’ perceptions to enable him to make the appropriate decisions about what and how to teach.
In describing a set of revision lessons with Year 11, he summarises the lesson as pulling together what they already know:

The style has very much been a “let’s summarise, lets come together, lets generate something fresh, something quick”. So we have been generating key notes. … The kids have been motivated, they’ve been switched on, they have generated generally good discussion, they’ve made very good decisions, they’ve interpreted stuff. … From a class point of view they have been bouncing ideas off each other, they’ve been recording things in a precise systematic way. (Steven, interview, 1999, lines 311-322)

The emphasis is on the students’ experience of learning and encouraging them to generate their own understanding, which on this occasion is to prepare them for the examination. Steven shows a lot of concern for his students, and this is reflected in his career direction. Steven had just been made Deputy Head of House. This concern for the pastoral support of students is evident in his classroom practice:

One of the things that I believe in as a teacher and not just as a geography teacher is that a kid comes into the classroom and that kid comes in with a lot of baggage and you can’t just teach that person as a separate entity without the baggage – you’ve got to take into consideration the baggage … (Steven, interview, 1999, lines 175-179)

This was echoed later in the interview, when asked what ‘residuals’ he wants students to leave with, Steven replies:
I would hope that they would leave having enjoyed the subject, even if it's not their passion, appreciating that it can be someone else's passion. I would hope that they would leave with a desire to still find out more. With an ability to find out how something else works, or to appreciate why people reacted in a certain way to an event. To appreciate the fact that an issue isn't purely black and white that there are several issues there to the story. There are several reasons for why things can happen and I would hope that they would try to offer an explanation to an awful lot of things that crop up. If they have a passion for geography or to find out more and more about it, that's the ultimate job. (Steven, interview, 1999, lines 373-382)

Steven concurs (in his validation of the data) that his relationship with students is a strong driving force:

I still retain the view that the best outcomes for individuals as well as groups are achieved, by working with pupils (and their baggage), and by trying to generate a rapport. (Steven communication, 2004, brackets in original)

Steven's approach to geography and teaching geography are consistent: echoing the themes of balance, explanation and understanding. His geography teaching is also influenced by his students, their needs and the relationships he builds with them.
4.1.3 Other influences

Steven makes little reference to the National Curriculum or other education policies, but the data shows that his work context influences his practice. Steven's worked in a large rural comprehensive school. As a geography teacher, Steven worked within the Humanities faculty working alongside teachers of History and RE. The teachers in the department work closely together and share an office as a working and resource base. The office walls are lined with a filing system that contain worksheets and files that correspond directly to each scheme of work.

At department meetings, the curriculum units are delegated to individual teachers for writing. The individuals are responsible for deciding key ideas and concepts and what content should be obligatory or advisory and how this curriculum should meet the National Curriculum. These decisions are influenced by 'what fits' with other Humanities subjects and what resources are available. The curriculum is then monitored by the Head of Department through evaluation of the schemes of work and through the results of the End of Unit tests. These tests are set and marked by one person, which means that all teachers need to ensure that they follow the curriculum precisely to prepare students for the test.

This departmental approach requires prescriptive Schemes of Work. All worksheets are coded to show when they should be used (see Appendix IV). The assessment and marking process enforces this way of working and means that the same resources and activities are used with different groups. Although this approach to teaching and planning seems uniform across the department, the department handbook reflects a concern for students’ experience. The Humanities handbook covers all subjects in this department and so makes no reference to...
individual subjects. The department aims (detailed in Appendix IV) omit any reference to subject contributions. The focus of the handbook is on the pupils, for example, in the discussion on teachers' professional development, the impact on students is considered to be the most important factor.

Steven has developed his own system of planning and organisation. In addition to the coded worksheets held in the department office, Steven had developed a folder for each unit with his own scheme of work with reference to the National Curriculum, copies of the worksheets with his own notes on and examples of outcomes (see example in Appendix IV). Each one contains copies of individual worksheets annotated with Steven's notes of how they should be used, where the activities refer to and the answers to the closed questions. Steven's planning is more prescriptive than his department's but pays more attention to the geographical content, for example, he annotates his planning with content specific notes: "Land use zones and models" or "Strategies to improve quality of life in cities (developed)."

This is supported further by Steven's detailed lesson-by-lesson plan for each student, indicating what he expects them to learn and the progress they have made (see example in Appendix IV) and his own daily planner. Analysis of these documents shows that this emphasis on students and the meticulous planning can be seen in both Steven's practice and in the school department's approach.

The 'cultures of influence' map (see Figure 4.2) shows that Steven's practice is placed within a dominant school culture. This is due to the strong influence of the school ethos on the individual student, which is reflected in his lesson planning and teaching. Steven described his school as a dominant influence and so the
school culture is the background for all of the other 'cultures of influence', and both the personal and the educational cultures lie predominantly within it.

There are two reasons why Steven's personal culture is also dominant. His travels have played an important role in his teaching. He also chose geography modules for this degree to ensure he had the subject knowledge required to make him a 'good' geography teacher. This is based in his values about geography that emphasise balance and explanation. This is also demonstrated in the 'cultures of influence' map by placing the geography culture largely within his personal culture, representing that his previous life (ie, work and study) was influenced by geography.

Steven's geography culture is relatively small as it does not feature strongly in interview responses about teaching. It is placed largely within the geography education culture as Steven describes geography as a resource for his teaching. The geography education is located within the school culture, demonstrating the dominance of the school ethos over much of Steven's work. Finally the educational culture is small. Although influenced by the National Curriculum, Steven did not focus on this in his interview. Therefore, the educational culture only appeared to influence him when it was interpreted through the school culture.
Steven was also asked to create his own 'cultures of influence' map (see Figure 4.3).
Steven's map shows similar dominance of school and personal cultures and similar proportional importance of geography and geography education cultures.

The main difference between our maps is in the size of the educational culture.

Steven annotated his map (see Appendix IV) explaining that his educational culture was proportionally bigger because he is a:
Hums [Humanities] dept. contributor therefore taught other subjects and consequently value the contributions other subjects can provide to a pupil’s understanding/learning (Steven, communication, 2004)

The influence of the Humanities department in my diagram was included within the school culture, for Steven it is included within the educational culture, thus explaining the main difference between our diagrams.

**Figure 4.4 ER’s version of Steven’s ‘cultures of influence’ map**

The ER also drew a ‘cultures of influence’ map (Figure 4.4) with the following explanation:
His ideas about teaching geography (Geography Education culture) are strongly influenced by his own geography, and this is largely framed by his personal values. Hence big overlap by these three squares. The Personal goes outside the Geography and Geography Education squares because of his emerging pastoral interest which overlap with School but not Geography or Geography Education.

Education more broadly seems to bother him little and certainly seems to be largely isolated from Geography, Geography Education and Personal. Education becomes important through school decisions and culture, hence Education box totally within School box, Education box is small.

School is biggest - big overlap with Personal, Geography and Geography Education. The school seems to be the main culture in which he acts. The school is the mechanism and location for him mediating geography into geography education. (ER, response, 2004)

Although the maps appear differently at first, they all emphasise the importance of the school, geography and geography education cultures. All three ‘cultures of influence’ maps agree that the school culture is the main influence on Steven’s practice.

Steven’s ‘cultures of influence’ map demonstrates that he is influenced by his school, both in terms of departmental structures and educational policies. His primary focus is on enabling students to achieve and be successful; and it is here that the geography is important to him: as a vehicle to enable him to achieve this. His particular view of school geography does not appear to vary greatly from
academic geography, but is characterised by an emphasis on balance and explanation.

4.1.4 Classroom practice

During the data collection, I observed Steven teach four lessons to a range of classes, of which three are described here.

Lesson One

The first lesson that I observed Steven teach was a morning lesson with a small class of Year 11 students of whom only 4 out of 15 were girls. The aim of the lesson was to revise work covered on National Parks with particular emphasis on land use conflicts and for students to develop their ability to understand different opinions.

The lesson began with a map activity where students had to label National Parks, firstly in groups, without, and then with, the textbook. The students had to list uses of the National Parks, who would use the parks and what they would use them for. They then identified the aims of the National Parks and evaluated whether those aims could be met. Finally, they were required to identify the problems of each identified usage of the National Parks. In order to complete this lesson, students had to revise their knowledge of National Parks and related vocabulary. They also had to identify different interest groups. They used their textbook to revise problems associated with different land uses. The emphasis was on developing skills of recall and data gathering.
This was a revision lesson and therefore students were building on their previous study. They worked in small groups and then fedback to the class as a whole. Steven extended their initial recollections by adding different groups of people and different factors for consideration. The homework extended this by looking at impact assessment and the effects of the change in the National Parks. The lesson demonstrated what Steven described in his interview, that he started by using the student’s prior knowledge and by building in additional factors. In this example, the emphasis was on reviewing content that the students needed for the examination.

**Second Lesson**

The second lesson was with a Year 10 Geography group of 23 students evenly balanced between girls and boys. The lesson bridged two units on Settlement and Population and the aim was to introduce population distribution and the factors leading to dense and sparse population. The lesson aimed to give students an example of each factor that affected population density and distribution.

The lesson began with a whole class discussion on what they remembered about the settlement topics covered. The class used a textbook spread on population distribution. Each factor affecting distribution was discussed with the aid of a table from the textbook. Individually, students were then required to draw a spider diagram which defined and gave exemplars for each factor. The lesson used the textbook as the main source of knowledge, but also used the exercises in the textbook as the process of the lesson. The students were required to take the data from a table in the textbook and transpose that on to a spider diagram.
Steven developed students’ understanding by asking “why” every time a factor was identified. Steven also referred to examples from his own travels: he referred to being bitten by mosquitoes and how their presence relates to climate. Steven encouraged students to use their understanding and prior knowledge to develop their learning.

Lesson Three

The third lesson was at the start of the afternoon session and was with a Year 8 class of 24 students evenly mixed between boys and girls. The lesson was about the source of fresh water and how it is supplied. The lesson began with a teacher-led discussion on reservoirs and their uses. Students were then directed to the textbook, where they read through and completed the exercises from a double page spread on fresh water supply. The exercises involved copying and labelling a diagram, and identifying whether sources of water were natural or expensive.

During this lesson students examined the use of reservoirs and their place in the water cycle. The lesson also examined how the water cycle operates on different scales. The students began with the local area and moved to global examples from the textbook. They also had to use their reasoning skills to identify natural sources of water and the likely expense of some of the options offered.

Steven helped the students by referring to things they understood; for example, when discussing permeable rock, he asked the question of how do rocks hold water, and used the example of an Aero bar.

Each of the lessons that I observed had a similar format where the students are required to review what they had already learnt. This is a particular feature of the
revision lesson for examination classes but is also prominent in lessons with younger students where they were encouraged to reflect on previous learning.

Students then test their knowledge or gather further information usually by using a textbook spread. Steven teaches from the front of the class and asks “why?” when his students answer his questions. He uses examples from his own travels to illustrate his explanations.

**Review**

Steven expresses similar values about geography and teaching geography: that of balance and explanation. However, there is a difference in how these values are expressed. This is because for Steven his study of geography was for teaching – in that he wanted to equip himself to be a ‘good’ geography teacher.

Steven appears more confident when talking about school geography and makes authoritative decisions about using it in his teaching. Steven uses his personal experiences and knowledge in his teaching. His planning is highly organised and both his planning and teaching are influenced by his students and their perceived needs.

The school has been a strong influence on his practice, stronger than his relationship with his subject knowledge, and more so than his educational or personal cultures. This is reflected in his ‘cultures of influence’ maps.
4.2 Clive

Clive is an experienced teacher (19 years at the time of data collection), and had achieved Advanced Skills Teacher status for geography. Clive did not comment on his data, having moved on professionally and having suffered ill health. However, the data have been verified by the ER and where appropriate his comments are included here. Clive’s ‘expert’ recommendations come from his headteacher and AST assessment.

4.2.1 Relationship with geography

Clive experienced academic success at school and went on to read geography at a college of the University of London. Clive enjoyed geography at school despite originally wanting to study architecture:

I think it was probably looking at places ... I always had a fascination with how people lived their lives which is probably why I enjoyed History - another dimension to the same issue. I was fascinated by what it was like to live in other countries — this was the attraction for me. (Clive, interview, 1999, lines 15-19)

Clive talks with pride and enthusiasm about his degree course, describing it as “traditional”:

It was very broad based, I mean, one of the strengths of the old London degree was that you trained as a geographer, as a physical geographer, as
a human geographer, as I developed I became incredibly interested in the physical environment, my final options were geomorph [geomorphology] and bio-geography. (Clive, interview, 1999, lines 24-28)

He describes his degree as promoting a "highly compartmentalized" view of geography:

Although you had Haggett talking about geography as an integrated subject – we only paid lip service to that - it was still very highly compartmentalized: you didn’t look at the environment as a whole. Clearly that was one of the failings of the course. This was classical geography. (Clive, interview, 1999, lines 35-39)

Clive studied for his degree at an exciting time, where the academic discipline of geography was shifting away from this traditional view to what was known as the Quantitative Revolution (Unwin, 1992). This move from Regional Geography places strong emphasis on the physical/human sub-divisions in geography, and seeing geography as a spatial science. Clive prefered physical geography: he had studied for a Masters degree in geomorphology and biogeography, and had started a PhD.

When Clive discusses his relationship with geography he begins in fairly bland terms:

I enjoyed other subjects as well but Geography, of all the subjects I studied, was the one that I most enjoyed. (Clive, interview, 1999, lines 10-11)
As he discusses this further, his passion with the subject became clearer:

I've taught all of those areas but I am essentially a geographer – that's my core experience – that's me (Clive, interview, 1999, lines 121-122)

Which he further elaborates:

I am a trained geographer, so this is the core of my academic experience and is what makes me tick. (Clive, interview, 1999, lines 129-130)

Clive describes an intimate relationship with the subject. He uses strong language to describe his relationship with geography, choosing to emphasise the importance of the subject, noting how it makes him “tick” and is part of his “core experience”.

This intimate relationship with the subject also influences Clive’s practice. He begins by saying:

At the moment, I am much more interested in geography education than geography … (Clive, interview, 1999, lines 96-97)

which he then qualifies, placing greater emphasis on the geography:

I am doing it as a geographer I am not interested in it as my own interest over the theory of education. I am particularly interested as a geographer in applying Leat’s work and others’ as well as taking the idea of multiple intelligences, Howard Gardner’s ideas for instance – there is a huge area really that we are slowly entering and that’s the focus of my interest really.
It is as a geographer, as a geography teacher, more than as an educationalist. (Clive, interview, 1999, lines 102-108)

Later in the interview, he again places greater emphasis on the education component:

No, I think I have moved from being mainly a geographer who teaches to being primarily an educationalist who is a teacher ... (Clive, interview, 1999, lines 112-113)

The tension is between Clive defining himself as an "educator" versus being a "geographer", or indeed: a "teacher of geography", as reflected in this statement:

I still see myself as a geographer as well as being a teacher. Primarily I am a teacher but I am also a geographer. (Clive, interview, 1999, lines 130-131)

Clive has stated that geography is at the core of his experience, so, it is understandable that Clive's interest in trends in education (such as thinking skills), is for both the educational potential and the impact on geography education. Clive had also started a Masters course in education. He reflects on this as a transition: "So I've basically swopped" (Clive, interview, 1999, line 89) indicating that his interests in education are becoming more important than his interests in geography.

Whether it is geography or education, Clive presents himself as an active creator of knowledge. He has conducted academic research both in geography and
education. He regards geographical knowledge as part of his essential make-up and character. This theme is also highlighted by the ER:

This guy sees himself as a geographer and geography as something important, but there was little explicit mention of what the core of geography actually is. (ER response, 2004)

Throughout the interview, Clive indicates that he has a clear vision of geography, but he does not define or explain what he understands that to be. It is possible that Clive finds it difficult to describe something that is so intimate to him, or that he believes that the definition of geography is a shared understanding. How then does this view of geography affect how Clive teaches it?

4.2.2 Relationship with school geography

Clive makes strong statements about the centrality of geography in children's education: he describes it as "essential" (Clive, interview, 1999, line 188) but he also focuses on how it could enable individuals to contribute to society:

I think that it [geography] leads to effective global citizenship - it sounds very pompous but I think, that if children are going to play an active role to modify the society that we actually live in, they need to understand and know their geography. We're teaching them about the processes that shape the land, the state of the world as it is. (Clive, interview, 1999, lines 210-214)
Clive links individual understanding of geography with the development of active citizenship. He argues that this can be achieved through an issues-based approach to learning:

I am firmly committed to issue based geography. They [the students] are confronted with the issues and I would like to think that through that we are helping them advance global citizenship and become better citizens, more aggressive citizens, more inquiring citizens. (Clive, interview, 1999, lines 214-218)

Clive’s approach to teaching geography is to engage students in active learning, which is reflected in his authoritative attitude towards resourcing and ‘making’ the curriculum:

I mean we have had a cut in capitation, so we may not be quite so adventurous in the future but I refuse to be limited by resources. If I think something is important then we go for it, you seek the resource. Particularly with ICT, it's too easy to say we only have one computer and that's that. We've acquired what we've got over a period of time and the latest thing is our video-editing suite. We are saying, “look, we want a share of this money, we want to be involved in the technology bid, Why shouldn't geographers be involved?” (Clive, interview, 1999, lines 258-265)

In this statement, Clive is speaking as a decision maker and manager. His emphasis is on the importance of resourcing a geography curriculum well, and on the role that geography needs to play in the development of the school. He presents himself as an advocate for geography within the whole school context.
Clive's attitude to teaching geography is also emphasised in his approach to curriculum development. This is further emphasised when he discusses the Geography National Curriculum:

Well, obviously we are constrained by the National Curriculum, and that is a major constraint – we've worked through it and we've adapted it to meet our needs as far as we can. ... Through that we interpret issues that we want to explore, places that we want to deal with. (Clive, interview, 1999, lines 225-229)

Although he acknowledges that the National Curriculum is a constraint, Clive ensures that the curriculum reflects his preferred approach to teaching geography. This is the second occasion when Clive expresses himself as a change agent driven by the importance of geography.

Yes, it's not just a question of whether it interests us, obviously we have to look at the broad, geography as a whole, we must deal with the core, with the whole geography. (Clive, interview, 1999, lines 237-239)

Clive's reference to the "core" and "whole" of geography implies that geography is a subject discipline that has a readily recognisable structure. The ER highlights that Clive had a sense of the "core" of geography which was not defined. However, the organisation of his medium-term curriculum is also influenced by individual preferences:

We selected Brazil strictly because [his colleague] got a Masters in Latin American studies. We always selected Brazil before that, but through his interest we are building up our focuses. We do a fair amount of geomorph
[geomorphology] and 11-16 a fair amount of bio [biogeography] – that's my interest. (Clive, interview, 1999, lines 270-274)

There is a link between what Clive finds personally interesting and what he values in teaching:

I love doing weather with Year 7 we do a project with the variation of wind and temperature on the outside and we use the data logger and put that onto a chart, map it and they love it. It is a very successful unit. I am fascinated by the weather but this unit is great fun … hopefully there is nothing in the curriculum that I find a dreadful bore … Sometimes if you have done something too often, but that's when it's time to change. (Clive, interview, 1999, lines 277-283)

Clive describes how his relationship with geography has influenced the resourcing of the school curriculum:

We use different resources for each topic as appropriate so this is my favourite – very clearly I'm excited by the use of ICT and I suppose in some ways it's my favourite resource but I still enjoy and look forward to maps, and I still like the traditional skills of the geographer as well. We use textbooks, I'll use a textbook today. I insist on textbooks being used in a sensitive manner, in a thoughtful way as a resource and not as a "sit down, copy that out, answer those questions" as a replacement for the teacher. I love books. (Clive, interview, 1999, lines 292-299)
Clive considers resources as important as they represent the geographical knowledge in a lesson. However, he emphasises that his geographical knowledge also influences his teaching:

"Well, it's an essential component – it's my geographical knowledge that underpins, well it's not just my geographic knowledge, knowledge of education, children and child psychology and development – the whole caboodle. It is me as a geographer and my knowledge of geography that underpins this. I don't really know how to expand on that ... It is my geographic knowledge that controls it and creating not just the knowledge but also the skills in geography is in a sense it's not just knowledge but the whole package of being a geographer." (Clive, interview, 1999, lines 437-451)

Clive's understanding of geography has played an "essential" role, one which is at the root of his teaching, and "underpins" it. However, he also acknowledges that it is not the only influence on his teaching, and that other factors (including pedagogic knowledge and what he knows about learners) also affect his teaching. The ER also identifies this as a theme in the data. He remarks:

"This was interesting in that this was the teacher with the most explicit and clear sense of geography and geography education, yet in many ways the hardest to classify ... The underpinning value for him is certainly geography, and his actions are based on his idea of geography but mediated from this to the classroom by what he knows about teaching and learning ... He seemed a little confused throughout about the relative role of geography and geography education and education ..." (ER response, 2004)
Clive describes the subject as part of his core experience, as a driving force in his decision making about teaching.

4.2.3 Other influences

Clive teaches in an oversubscribed 11-16 mixed comprehensive school situated in south London. The school aims to create a culture of lifelong independent learning and for high standards which has been recognised by Ofsted. Ofsted noted the high standard of fieldwork, good research skills, and that students enjoyed geography and teachers had good subject knowledge.

Clive's AST appointment was a temporary one and after his AST term, Clive went on to become a Deputy Head in the school. Clive was the only AST in the school which reflects his high status within the school.

The ethos of the geography department is reflected in the department handbook. The cover page features a quote from Michael Palin: “Geography is the subject which holds the key to our future”, demonstrating a strong geographical identity. This emphasis on the importance and role of geography education continues in the handbook. The aims for geography education (see Appendix IV) speak with authority about what geography is and why it is important to teach with a focus on ‘places, patterns and processes’. The statements demonstrate a clear predisposition as to what style of geography is beneficial, focusing on a pro-enquiry approach with an emphasis on process and content. The handbook goes on to contrast this enquiry approach with a statement that: “Didactic teaching is important and will always be necessary.”
The Department handbook also contains the Key Stage 3 Long and Medium Term Planning (see Appendix IV). The curriculum is divided into themes and country studies which are closely laid out in accordance with the National Curriculum using the same thematic headings. Each Medium term plan includes references to National Curriculum Programme of Study, a brief description of the lesson activities to be undertaken and the homework. No specific lesson objectives are detailed. The lesson activities emphasise what is to be taught and student outcomes, focusing again on the geographical content of lessons.

The 'cultures of influence' map (Figure 4.5) represents the scale and situation of these influences on his practice. Geography is represented as the biggest and most powerful influence. Clive describes geography as being intimately held by him, and therefore, it has a very close relationship with his personal culture. On the 'cultures of influence' map, the personal culture is almost entirely situated within the geography culture to reflect the close way they are related. Similarly, the way that Clive expresses the importance and value of geography education also echoes how he described geography and therefore this is reflected in the situation of that culture close to and nested within his geography and educational cultures. Clive also makes statements about development in pedagogy and teaching such as ICT and thinking skills. These developments from the educational culture are also part of his AST work, and therefore this is reflected in how the educational culture is represented. Clive's relationship with the school culture is also strong, but in a different way to Steven, as Clive perceives himself as an activist within the school, who is able to influence change, rather than be changed by it. This is further reflected in how the school culture is situated and its size.
Clive chose not to comment on his data analysis or his 'cultures of influence' map. However the ER constructed his version of the 'cultures of influence' map (Figure 4.64), which is similar to the one above.
The ER explains why he has constructed his map in this way:

Geography is overriding important. Personal contained entirely within it. Education also quite large (becoming larger) and overlaps with geography mainly, and also his personal culture. School is playing a role mainly through personal and education (themselves within geography). Geography education seems to nestle in/within all these. (ER response, 2004)
Comparing the 'cultures of influence' maps shows that they both emphasise the importance of geography culture. The ER places the geography culture as dominant of all the other cultures. Both maps share the view that the personal and educational cultures appear to be isolated in his practice.

Clive has suffered from ill health and chose not to comment further on his data, and this is a weakness in this case. However, the data suggests that geography is an important influence on Clive's professional practice. Clive appears to have a personal relationship with geography and one that is reflected in his role as an advocate for the school subject.

4.2.4 Classroom practice

As detailed below, I observed three lessons taught by Clive during the data collection.

Lesson One

The first lesson was the first of the day and was with a top-set Year 9 class of 33 students evenly balanced between boys and girls. The aim of the lesson was to look at the impact of tourism in South Africa. The lesson began with a teacher-led introduction on the history and economic growth of South Africa. The students were then directed towards photographs of South Africa in the textbook and they had to conduct a paired discussion focusing on the key attractions of South Africa. They were required to write a summary of their discussion. The results were then fed-back to Clive and he clarified why South Africa was an attractive tourist centre.
The students were required to make notes from the textbook under key headings identified by Clive. Although the students are working autonomously in this lesson, Clive controlled the knowledge by guiding the students to the information and prescribing the headings for the notes. Students were also required to interpret visual data and had to listen and process information by answering Clive's questions. Clive developed their geographical understanding by asking further questions, for example, regarding the social background of tourists, and by making them consider development and different groups of people. He told them relevant information which they wrote down.

Clive used a lot of techniques to maintain interest and encourage understanding. He began by referring to a recent election. He asked questions about why tourism was a recent phenomena, requiring students to use their prior knowledge. His exposition included examples of his own knowledge, and he turned the scale of discussion from the national focus to a focus on individuals.

Lesson Two

The second lesson took place after morning break with a Year 8 top set dominated by boys (19 to 10 girls). Students were required to continue writing up coursework on the changing function of Rye. The lesson began with a teacher-led review of the task. The students filled in a chart on the changing function of Rye, based on information from text extracts, whilst Clive circulated and monitored the work of individuals. The students were investigating the environmental change and impact on Rye (which they had recently visited). This required them to understand the changing functions of a settlement for which they needed knowledge of the area and to analyse evidence and to draw conclusions. The students had data to
identify the patterns and Clive encouraged them to give more complex answers using this data.

Clive used what he knew about the history of Rye to build the picture. He talked about the French Revolution and told stories of the Saxons as great writers – he reminded them of their visit and talked with enthusiasm of the exhibition.

Lesson Three

The third lesson was held before lunch, with a Year 10 Geography Option Group with 17 students (8 boys and 9 girls). The lesson was held in the computer room where students worked individually on a computer. Students were writing up the fieldwork data on coastal erosion that they had collected on their recent trip to Norfolk. They were using word-processing skills, and an Excel spreadsheet. The style and structure of the lesson was in contrast to the other two lessons observed, with little exposition and students working individually.

The above lesson took place in an ICT suite and was different in structure and style to the classroom based lessons. During the ICT lesson, the students were concerned with writing up a coursework study, which they did independently whilst Clive dealt with technical issues. The classroom based lessons were highly structured. Clive led from the front and instructed students on tasks for them to complete. Student-teacher interaction was high, and dominated by whole class discussion. Clive consistently drew upon his extensive subject knowledge to guide and support students in their work.
Review

Clive describes an intimate relationship with geography where it is part of his “core”. This is because geography enables him to understand the lives of others. He believes that learning geography will help students to understand others and to be better citizens. This is echoed in his issues based approach to teaching the subject. Clive feels that geography contributes to both an environmental and social understanding of the world.

Clive’s close affiliation with the subject means that he is open to other influences, particularly from educational and school cultures, as long as these can assist or inform the development of teaching geography. Therefore Clive sees other influences through his perspective as a geography teacher. These influences still affect his teaching, but do not become more important than the subject.
4.3 Mandy

At the time of the data collection, Mandy was Head of Humanities with responsibility for Geography, at a school in Eastbourne, Sussex. She had taught for seven years. Mandy is unique in this study as she did have a geography degree but specialised in geography through a modular Humanities course. She is also the only participant from a 'dual heritage' background (her parents are first generation Irish and Greek Cypriot immigrants) which she refers to in her interview. Mandy did comment on her data, but did not (due to time constraints) construct her own 'cultures of influence' map. The ER validated Mandy's data and his comments are included where appropriate. Mandy's 'expert' recommendations come from her headteacher and LEA Advisor.

4.3.1 Relationship with geography

Mandy studied for a Humanities degree at Sussex University. She chose this style of degree because it offered her a choice of subjects and enabled her to study modules on philosophy, English and religion as well as geography. She was initially interested in doing geography and theology, but specialised in geography topics including the North and South divide (both British and Global), Environment, and Spatial Inequality and Development. In the final year she focused on environmental issues. Mandy valued the wide range of modules on offer, rather than traditional discipline definitions.

Her chosen geography modules reflect an interest in social justice. Mandy explains why she chose these topics:
It was issues based really, and they were issues that had a historical context but were also ongoing issues that, what you were doing could actually make a difference in the future as you pursued the studies ... I knew that I wanted to go into something that I could make a mark with.

(Mandy, interview, 1999, lines 26-32)

Mandy is motivated by change, and the geographical topics she chose are all related to issues of social justice and environmental stewardship.

Mandy had considered a career in environmental impact assessment but decided to teach because:

I felt that that would be more me in terms of what I would want to do in life and it would bring me greater happiness and fulfilment than the other one [environmental impact assessment] because ... I did realise that I would have to work for companies and be political and I thought I can't do that.

(Mandy, interview, 1999, lines 115-121)

During my initial analysis of the data, I understood that Mandy wanted to reject direct political involvement. However, Mandy's feedback on this analysis, clarifies this point. She writes:

Interesting how this comes across, I mean to get across that I may be in a position where my 'employer' would want me to justify a project that I didn't agree with (Mandy response, 2004)

Mandy emphasises the moral responsibility of having certain knowledge.
Mandy's degree experience is also influenced by the modes of assessment on offer. She remarks that she liked the ongoing assessment on her degree course because she does not enjoy reviewing work completed a long time ago. Mandy describes a desire to be able to participate in knowledge, and to use knowledge to inform action. Her view of academic geography is that it is important for it to have a moral dimension and to highlight inequalities that could be changed through action.

4.3.2 Relationship with school geography

Mandy's had always wanted to become a teacher, but chose geography specifically because:

It is important so that they [young people] can understand and appreciate the world that they are living in. It is important so that they can be sympathetic, and that they can make positive decisions, as adults and citizens on issues that affect them. One area that the kids are always most interested in is to do with the environment, and environmental issues because they have a direct impact on them and it is also an area in which they can take direct action. That’s important to them. Also because of the pure fascination of things like earthquakes and volcanoes, changing natural landforms … There is just innate awe in all people and so [geography gives] the opportunity to explore and discover things about that. (Mandy, interview, 1999, lines 259-267)

Here Mandy reflects a spiritual dimension to learning about geography by referring to “pure fascination” and “awe”. However, she also emphasises how geography
can empower students. She uses the term “direct action” to describe geography’s contribution to the education of young people, reflecting the link with social justice and action that she describes in her own geographical education. Her response also emphasises the process of learning geography by referring to students taking active roles in their learning and engaging with the natural world.

Mandy considers it important to study the natural world so that it can result in action:

It's the type of thing that adults enjoy: there’s been a series on recently that everyone is talking about. There will always be this fascination with the earth and how it works and I think that it goes back to the humanities thing where it puts people’s lives into perspective. Because they realise what they are in relation to everything else and also there is a role there, for if there might be a kid who does well in life and who pursues something that might require a geographical background and is going to have an impact on development and technology and if it rouses interest in someone to pursue geology and then they go and use that for something, or if it’s going to rouse an interest in water and wastage and they go and work in that field. (Mandy, interview, 1999, lines 268-278)

Mandy emphasises the spiritual dimension of experiencing the environment and empowering students to be active agents of change. The ER also identifies these themes, but notes that they are not exclusively geographical:

Talking about geography with her is problematic as she is not really a geographer. Part of her underlying values seem to be things that are not exclusive to geography. Then her ideology is a mixture of something
which rests in this rather curious sense of geography she had, and then things about her teaching ideas. (ER response, 2004)

Mandy's focus on geography centres around the outcomes of a geographical education for students. This is also reflected in her faculty which teaches an integrated humanities course. She defends this:

Because I think [integrated humanities] is more relevant to students and I think that it is more realistic really – you don’t need to make those distinctions at the lower level ... I do think it is more relevant (Mandy, interview, 1999, lines 195-199)

She expands on this argument:

No I think that a lot of the skills they develop that are related to geography that are KS3 skills are very relevant to their lives eg, mapping skills, graphicacy skills. I don’t think that beyond that they need the intricacies of the old O' level and early GCSE courses offered. I think that the decision-making activities that are required at GCSE and A' level actually relate quite closely to some of the methodologies that you have in Humanities. (Mandy, interview, 1999, lines 222-228)

It is interesting to note here that her argument is based around the skills that the students acquire rather than the content covered in these exam courses.

Her preference for an integrated humanities curriculum, coupled with her Humanities degree, could lead us to conclude that geography is not important to Mandy. Indeed in part of his report, the ER writes: “She is certainly not a teacher
of geography" (ER response, 2004). And yet, an analysis of what Mandy prefers to teach presents a different story:

(long pause) I love doing development. Um, I enjoy weather and opposite to what I said about being stronger on human, I really enjoy doing all the work on coasts.

Why?

Interesting. Because they [the students] can be quite methodical and for the coast work it is methodical and the students get a response from it. For the development I am really passionate about it and its something that I've got a commitment to anyway, and, for the weather, I just enjoy it, I just like it. (Mandy, interview, 1999, lines 362-371)

Mandy therefore demonstrates that she does enjoy teaching geographical topics, particularly as they enable her to take into account her students' needs, and reflect her own interests.

Mandy enjoys the process of teaching geography:

(long pause) I like using anything that is touchy or feely.

For example?

I like doing things like cutting up oranges and I like making models, because kids get really excited, as you actually get more out of them as they realise that they are achieving, they tend to reach higher levels of understand without realising that they are learning. I love doing fieldwork but we don't get that many opportunities because we find it hard – like the coastal work next week. ... [we do] lots of going down to local areas and going down the streets and even out on the school field. To understand
soil erosion, even though we are on the base of the Downs it’s not possible
to get them out for a lesson and it’s not a day trip, and so we study soil
erosion by walking around the school field. (Mandy, interview, 1999, lines
374-390)

Mandy describes an active approach to learning where the students use their
experience to develop geographical understanding. Mandy shows a depth of
geographical knowledge which enables her to make connections between
geographical phenomena in different places. By doing this, Mandy is able to make
examples of abstract concepts accessible to her students. She emphasises the
quality of students’ learning and their prior experience. She is motivated to
empower students and her teaching focuses on their experience.

Enabling the students to access geographical concepts through experience or
simulations is also evident when Mandy describes her favourite set of lessons:

(Long pause) Umm!! I’ve always enjoyed teaching industrial location.
Why? Because of the reality of it and all the different ways that you can go
and use computers to do certain aspects, and bring kids in to do
calculations on the computer, the games that are available, you can play.
It’s strange, because again it’s quite a concrete thing, kids really respond
to it and seem to understand that.

*It’s quite tangible isn’t it?*

Yeah. They do understand it and they do appreciate all the factors of
location and they can come up with it themselves and they can take it and
run with it. I really love actually (referring to your last question) I really love
simulations and I use lots of pre-packed ones: trading games, the trainer
one, paper bag and cotton pair of jeans because what comes out of those
is far more than you even anticipate as a teacher is going to come out – you can’t cover all of it and it changes every time you do it as well depending on the children who are doing it. It doesn’t get boring or stale. (Mandy, interview, 1999, lines 393-409)

Mandy focuses on active learning strategies, such as simulations, to enable her students to understand these difficult geographical concepts.

In my initial analysis, I emphasised that Mandy wanted to help her students. She reacted strongly to this in her validation response:

I am very uncomfortable with the notion that my motive to ‘support and help’ students from challenging socio-economic circumstances is ‘worthy’. An absolute commitment to equality of opportunity, success and challenge for all and improving self-esteem/life chances of individuals is what I am to achieve – empowerment of the individual through his/her educational experience.

Empowerment is about strength. ‘Worthy’ suggest there is a victim to be helped. I do not consider the students to be victims but I do consider them to be individuals that need to be empowered through the development of particular skills, attributes, knowledge and understanding. These are of benefit to the individual, the community and society. I do believe that geography, as a discrete subject, can contribute to that. (Mandy, response, 2004)
In this comment, Mandy links empowering students with wider benefits to society. Her last comment that geography "can contribute" to these goals implies that other subjects can play an important role in achieving these aims.

How then did Mandy use this perspective on subject knowledge in her own teaching? Mandy begins with the students' perspectives:

[I] Always re-lay things back to the most basic level of their own experience: the knowledge like – let's go and look at the soil erosion on the school field – why is it in this area? Why is it that all the way down the sides of the tennis court there is soil erosion? and identifying it as a major route or something. And so anything that you do in the classroom relating it to their local area as far as I can … Today we were doing settlement and they told me the names of villages in their local area and we looked at where the people in those villages would go to buy different order goods without saying to them that we are looking at different order goods – and we talked about: if I gave you fifty quid to go and buy some clothes, where would you go, if I gave you 30 quid to buy some CDs where would you go, if I gave you a quid and told you to get me a pint of milk and a newspaper where would you go. If I said you can redecorate the bedroom here’s two grand, where would you go. I did it more from this perspective than the – "we have things called higher order goods and lower order". (Mandy, interview, 1999, lines 485-502)

Mandy has adopted a constructivist approach that builds on what the child already knows and scaffolds his/her learning (see Roberts, 2003). In order to achieve this, she uses examples from the local area (ie, the school field), students' experience and her own family background:
I teach a lot of the Humanities course through talking about me and my family. And talk about socialisation in terms of difference between me and my sisters and [my brother] and where my parents come from – what does it make me? And [my niece] and [my nephew] as well. What's their cultural background and what is their predominant culture? Because that is so outside the kids' experience at this School. (Mandy, interview, 1999, lines 517-523)

Mandy’s students would not have had direct experience of multiculturalism and so she uses her family as examples to enable her students to understand concepts that are beyond their experience.

4.3.3 Other influences

Mandy’s 11-16 comprehensive school is situated on an estate at the edge of Eastbourne. The catchment area served by the school experiences significant material deprivation and this was reflected in a high number of students receiving free school meals and a high level of unauthorised absence.

The school faces great challenges, with a white urban population with low levels of attainment. The intake data demonstrate that these are students who are below the national average in attainment and above the national average in Special Educational needs. It is possible that Mandy perceives that there is a role here for her to solicit social change and to empower these young people to get out of the poverty trap indicated by the school statistics. However, there is also the issue of ethnicity to take into account. Mandy is of mixed race, her school is ninety-nine
percent white. She describes in her interview how she uses many examples of her own family to help the students understand issues that were outside of their experience (presumably of ethnicity, although this is not explicitly stated). Mandy teaches in a Humanities Faculty, where the explorations of such issues can normally be discussed.

The Humanities department is situated in their own block at the back of the school. As the department is quite cut off from the main building and staff facilities, staff in the department tend to congregate at break and lunchtimes in the office. This is where a lot of the department communication and sharing took place. The department discuss individual students, trends and whole school issues. The department work together in the planning of schemes of work by deciding on the broad topics and a small team of up to three teachers from different subjects specialisms then write the unit in detail. The Head of department (Mandy) oversees that all the units correspond to the National Curriculum.

The first page of the Department Handbook explains that the Humanities department teaches Humanities subjects together rather than as discrete subject disciplines. This is explained:

The traditional school subjects of History, Geography, and Religious Education contribute to our understanding of human behaviour. These subjects together with other subjects such as Environmental Studies and Citizenship, which may be better described as fields of interest or cross curricular themes, can be grouped under the umbrella of “Humanities”.

(Department Handbook, 1999)
The Handbook goes on to outline the aims of Humanities education (see Appendix IV) and they have a strong geographical emphasis, even though they are making the case for not teaching geography discretely. Aim One refers to an understanding of society, and for that understanding to be applied at a variety of geographical scales: "local national and international". The second aim refers to beliefs and values, within a geographical context by referring to Britain (ie, a bounded place) and the multivariate nature of that place. It is in the third aim, that it becomes clear that these are not considered to be discretely geographical, but enhanced by a wider study. The department aims echo Mandy's preference for a multidisciplinary approach that enables a deeper understanding of geographical concepts and ideas.

The Department Handbook also contains extensive advice on how to differentiate work for the needs of individual students; this makes up three pages of the handbook and is the largest single section. This is further indication that the departmental approach is very student-centred, placing emphasis on teachers to cater for the needs of the students.

The department planning materials are made up of a Long term plan, an overview over Key Stage 3, and Key Stage 4, Medium Term Plans that detail what objectives are to be met within the Modules and suggested lesson activities, and Short Term plans that are the individual teachers' responsibility for their day to day planning. Examples are included in Appendix IV.

The school follows a GCSE Integrated Humanities course, of Core and Optional Modules. The Overview in Figure 4.7 demonstrates how these have been planned and the Optional Modules selected:
Figure 4.7 Overview of GCSE Integrated Humanities Course

<table>
<thead>
<tr>
<th>Year 10</th>
<th>Year 11</th>
<th>Revision Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture and Beliefs</td>
<td>Persecution and Prejudice</td>
<td>Co-operation and Conflict</td>
</tr>
<tr>
<td></td>
<td>Equality and Inequality</td>
<td></td>
</tr>
<tr>
<td>Exam Paper 1</td>
<td>C/work + paper2</td>
<td>Module Test</td>
</tr>
<tr>
<td></td>
<td>C/work + paper2</td>
<td>Module Test</td>
</tr>
<tr>
<td></td>
<td>Module Test Paper 1+2</td>
<td></td>
</tr>
</tbody>
</table>

It is evident that despite the integrated nature of the course, some areas have a clear geography focus (such as Resources and Conservation). However, it is the style of the course that reflects what Mandy discusses in her interview: the emphasis on issues of personal and wider significance and on encouraging change.

The Medium Term plans refer to the National Curriculum and are clear on the process and content of the topics to support the non-specialist. The activities require students to become autonomous learners and to apply what they learn to a real life context.

Mandy explained that there is an agreed departmental approach to short-term planning. Every teacher makes a weekly outline of what aspects of the medium term plan they were covering with each class, and Mandy, as Head of Faculty had access to this so that she could ensure that adequate resources are available. Her own short-term planning covers the same format, and lists the topic with corresponding activities or textbook pages (see examples in Appendix IV).

Mandy's 'cultures of influence' map (Figure 4.8) shows a dominance of her personal culture as the most influential on her practice. Mandy has expressed values regarding social justice which have influenced her decision making from degree level all the way through to her current teaching practice. These values have also influenced her engagement with geography both as an academic
subject and as a resource for teaching. Therefore, Mandy's geography culture is also dominant but situated between her personal culture and her geography education culture. Her interest in geography (particularly in geographical issues) also influences her choice of pedagogy and her teaching practice. Her geography education culture is underpinned by this as she chose pedagogy to encourage student autonomy and empowerment.

The school and educational cultures are important, but the educational culture is situated inside her personal culture, demonstrating that she interprets what is happening in the world of education through her personal perspectives. An example of this would be how she resisted the move away from teaching geography as a discrete subject as she believed that the Humanities approach is more beneficial for her students. This is also reflected in the dominance of the school culture. Mandy shows, particularly through her teaching, her awareness of the individual needs of her students.
Although Mandy did contribute comments on my initial analysis of her data, she did not draw her 'cultures of influence' map due to time constraints. It is possible to compare my 'cultures of influence' map with that of the ER.
The ER explains why he had drawn the ‘cultures of influence’ map for Mandy in this way:

I put school and education as both big and pretty much equal. I think the main nexus of her practice involves the overlap of these two. School a little bigger because the geog vs. humanities and school approach seems more immediate and significant than the broader education. Personal culture is important. It totally contains her geography. Personal nearly contains Geography Education as well – but this is also influenced by School and Education external to her – hence some extra bits outside personal. The overlap of Personal onto School and Education is important.
I think she has her take on these – much of her practice is not
determined by School and Education – but she has her way with them –
but not all, hence large School and Education overlap outside Personal.
(ER response, 2004)

This is the only ‘cultures of influence’ map where there is a discrepancy between
the ER and myself. The differences are mainly with the situation of the geography
education culture and its relationship with the school and educational cultures. I
place greater emphasis on the personal culture than the ER. These discrepancies
were discussed, and we agreed on which had been the most dominant influences
on Mandy’s practice, but had minor differences in our interpretation of the cultures.
One of the difficulties we encountered was attributing Mandy’s principled position
with regard to social justice to an educational, geographical, or personal influence.
After returning to the data and to our own value positions with regard to these, we
agreed that they could be viewed as being situated within many of the cultures.
The debate surrounding the ‘cultures of influence’ maps therefore clarified my
understanding of Mandy’s data.

Mandy’s commitment to social justice affects her teaching. This is reflected in her
departmental documentation and the context she chose to teach in. Mandy’s case
raises questions about the ‘cultures of influence’ map due to the anomalies that
arise from them. However, the discussions reinforce their use as a heuristic
device.

Mandy stands apart from the other cases as she is not necessarily a ‘geography’
teacher, but values teaching geography for what it can achieve. Her perception of
geography as a resource enables her to use it in line with her own values about
education and this becomes evident through the use of the ‘cultures of influence’ maps.

4.3.4 Classroom practice

I observed three lessons taught by Mandy during my visit which are described below.

Lesson One

The first lesson was a Humanities lesson with a Year 10 class of 18 students (8 boys and 11 girls) that started after break. The aim of the lesson was for students to complete their coursework and to commence revision. The lesson began with students working individually deadlines were given and targets discussed. Mandy circulated around the students, marking and checking work in progress. Towards the end of the lesson, students were stopped working and Mandy discussed revision for an approaching examination. For this, they identified a glossary and looked at revision techniques.

The students were working on individual pieces of coursework concerned with development data, indicators of development and the evaluation of development projects. The projects required them to use their skills of data analysis and interpretation and to present their information graphically as well as evaluating the data.
Mandy used herself as a tool to support students. She asked open questions:
“What's the biggest problem? People dying? Babies dying? Or people who can't read or write? Look at your aid project – would this help?”

**Lesson two**

The second lesson was a Year 9 lesson with 9 boys and 18 girls. The aim of the lesson was to prepare students for a field course on coastal geomorphology. To give the students some background information, they were required to watch a video on coastal processes.

Mandy introduced the lesson and some of the key concepts, explaining the objectives of the field course. The class then moved to the Resource Centre where they watched the video and took notes. Mandy frequently stopped the video to expand on points discussed, highlight important details or to assist in the note taking. Her questions enabled students to make connections between the sections. For example, she asked: “Why doesn't the wave come in at an angle?” to refer to fetch. “Why is it called a spit? .... Because it looks like a tongue”.

She also made the content relevant to their experience of Eastbourne seafront:

“What changes have you seen recently? Did the lighthouse move?”

She also related the action of waves to work done in science and to a long-jump. She explained erosion as being like rubbing a penny and scratching away at bricks, and used the example of messages in a bottle to explain sediment movement.
Lesson Three

The third lesson took place at the end of the day with a Year 7 class with 9 boys and 12 girls. The aim of the lesson was to review key vocabulary and to introduce a settlement case study of Buckminster, focusing on its services and facilities. The students were also reviewing map skills.

The lesson began with a teacher-led question and answer session on geographical vocabulary. Mandy explained why they were studying Buckminster, and the students worked through the activities in the textbook which involved examining the sphere of influence using maps in the book. Mandy circulated, supporting individuals.

The students were required to understand about village services and facilities and to become familiar with the concept of sphere of influence. Students needed to use their map skills such as six figure grid references, symbols and reading photographs and sketch maps. Mandy used questions to assist their learning. For example, she asked them to imagine that they were an old person like "Mr Alan" (a teacher who had difficulty walking), and to reflect on their own experience: "Have you ever been to a pub, do you have a pint of lager? No? Where do you go?".

The lessons all encouraged independent working, stimulated by different resources. Mandy behaved as a facilitator, not leading from the front of the classroom, but supporting individuals or small groups. Mandy used analogies to help explain complex concepts (for example using the example of a piece of chalk...
for erosion). Mandy's interactions empowered the students to work independently, and her interjections were skilled and informative.

**Review**

Mandy expresses strong values of social justice and environmental stewardship that influence how she relates to geography. For Mandy, these values are more important than the subject itself, and working within a Humanities faculty enables her to reflect these values in other subject areas. Mandy's teaching also reflects these values by adopting a constructivist approach and valuing the students' experience.

The values of social justice and stewardship are powerful to Mandy and act as a lens through which she views other influences. This can be seen in how she uses her personal culture as a way of introducing her students to issues of multiculturalism. It seems that these values affect how Mandy responds to other influences on her practice.

### 4.4 Findings from the first cohort of case teachers

Each of the three case teachers described here are very different. They have developed different understandings about geography: Steven focussed on balance and explanation, emphasising geographical synthesis. Clive revered the subject's academic structure referring to the “core” and “whole” of geography. Mandy found geography and environmental issues fascinating, due to her interest in social justice. Each case teacher also has developed their practice in different ways. Steven liked to start with his students and use textbook resources. Clive directed and controlled his learning environment and Mandy used a constructivist
approach, guiding and supporting students. Despite their differences, it is possible to see a relationship between how they understand geography and how they teach geography. This is discussed further in Chapter 6.

As the ‘cultures of influence’ maps show, geography is not the only influence on their practice. In fact, only with Clive does it appear to be a dominant influence. How the case teachers perceive geography and how they teach it, is also influenced by their other values. In the case of Clive, this stemmed from his values about geography as a subject. For Steven, his emphasis on students has influenced how he views geography and how he constructs learning experiences. Whereas Mandy’s interest in social justice drew her towards teaching in a particular way. Therefore, these case teachers show that, as Gudmundsdottir (1991) suggested, teachers have values that affect how they teach. However, to fully understand this relationship it is necessary to focus on the nature of this relationship and how it affects their teaching. Using a similar structure, the next chapter describes the second cohort of case teachers.
5 Chapter Five - Second cohort of cases

This section describes the second cohort of three case teachers. As with the previous chapter, each case teacher is described in four sections which describe his or her relationship with geography, his or her relationship with school geography, other influences, and their classroom practice. Each section also refers to who recommended the case teacher as an 'expert' and the details of that recommendation. Figure 5.1 shows how the research themes, the research design and the structure of this chapter are connected. The data are taken from all areas of the data collected and where relevant, validation feedback from the case teachers and the External Researcher is included. From these descriptions, the values that each case teacher expresses are highlighted, and the influences on his or her practice considered. The data set for all the case teachers are detailed in Appendices III and IV. The focus of the data in this stage is different from the previous chapter, paying attention to the relationship that each teacher describes between their subject knowledge and how they teach geography.
Figure 5.1 Structure of research leading to Chapter 5

Chapter One

Research Theme: Geography teachers' subject knowledge

Research Question: How can subject knowledge influence 'expert' geography teachers' practice?

Experiences

Chapter Two

Research Theme: Teaching "Expertise"

Research Question: How can other influences affect 'expert' geography teachers' practice?

Events

Relationships

Chapter Three

Research Theme: Other influences on teachers' practice

Chapter Five

Second Cohort of Case teachers:
- Paul
- Dan
- Anna

Relationship with Geography

Relationship with School Geography

Other Influences

Classroom Practice

Expertise recommendations
5.1 Paul

Paul is an experienced teacher who was Head of Humanities in a school in Wiltshire. He is the author and co-author of several Key Stage 3 and 4 school geography textbooks. He has spent two decades teaching in his current school, and has recently taken on whole school responsibilities. He also works with Bath Spa University as a school mentor for trainee teachers.

5.1.1 Relationship with geography

Paul describes his relationship with geography as starting with an early interest in stamps:

My aunts worked at Horlicks in Slough and two aunts ran the postal department consecutively. And they had all the stamps and these stamps came in in their hundreds and my mum helped me sort them out, where they came from. And this would be when I was 4 or 5 and then as I went through primary school I had a really good stamp collection and I knew so much about where places were, and that went right on until I was about 16 … because of that I became interested in place. (Paul, interview, 2003, lines 5-12)

He travelled around England with his father who had a railway worker's free travel pass. He describes how this enabled him to know more about places than his peers at school, and also sparked a sustained interest in travel.
When he recalls other early significant geographical experiences these are tied up with understanding place:

I was in the Boys Brigade. Some of those camps that I went on were absolutely amazing. You know, we went to Hayley Island on the Isle of Wight, and I went to an international camp at Blairstone in Scotland when I was 18 and I climbed a little mountain with John Hunt. He is the Everest man. And it is those little things that I remember. (Paul, interview, 2003, lines 176-181)

The connection between places and travelling is reinforced when he recalls his university experience. He remembers meeting people who had travelled widely such as an Olympic athlete recently returned from Japan, and a TV programme maker interested in the North Pole. These people inspired Paul, both in terms of the places they had visited and in their experiences of travel.

When he describes travel experiences, he couches these terms in geographical language, relating their influence to geographical themes:

... it wasn't just the unknown, it was the excitement of travel and looking at the variety of life. And I wouldn't say it was particularly physical. I think it was physical and human: it's a “people and landscape”. Some places though, if you ask me about my travel I've done and what I have brought back into the classroom, it would be very physical. You know I have been to Iceland three times, and I think in Iceland I have always brought back the physical. And I've been to America recently: Lassen National Park and Yosemite, and it's the landscapes, the physical that I have brought back. But
in my experiences in the Gambia, it has never been physical, it has only been development issues. (Paul, interview, 2003, lines 63-73, my emphasis)

Paul uses geographical terminology to emphasise the geographical understanding developed from visiting these places. He may have used this terminology to emphasise the geographical significance of these trips or to illustrate their geographical content.

Paul's strongest memories of his university career are again related to travel through fieldwork:

I think the fieldwork at university to Finland and Morocco [were the most influential] and some of the simple visits around south east England with experts who were showing us the chalk landscapes and Greensands and Ashdown forest. Just simple things around me that I didn't know about, and my parents didn't know about ... (Paul, interview, 2003, lines 123-127)

Paul continues to be a keen traveller and values sharing the experience of places with others:

... 3 weeks I ago, I took my dad out to Dungeness. Because I love places like Dungeness, and it was quite a cold October day and the sun was shining, and I said, it might be a bit bleak and that's the thing that he remembers about it: it's a bit bleak. And he asked me absolutely clearly: why are we going here and my only reason was because I haven't been there before and I think it's great. He never understood that, he had a lovely day out with me, but he never understood why we went because he thought it was a bleak place. (Paul, interview, 2003, lines 128-136)
Paul contrasts his enjoyment of this visit with that of his father’s experience. Paul emphasises that his experience of place is more geographical than that of, say, a tourist.

Paul also stresses that he likes to enjoy sharing these experiences of places with those close to him. In the following quotation he uses the term "need" to emphasise a pull to experience the geography around him:

Yes my wife and I have often talked about that ... when we go away with other people we find it quite tense sometimes because on holidays or on weekends away they don't always want to do what we want to do. Because we need to get down to the beach, and we need to go to the end of Hurst Castle Spit and see if there are birds nesting there, and they all want to have a drink or walk the other way towards civilisation. That's gone on for years and years, and when I am with my other geography friends it’s absolutely fine. My good friend **** whenever I go to see him, we go off to visit an old spit or go up some corrie and we never have to ask why we are doing that, we just do it. (Paul, interview, 2003, lines 142-152, my emphasis)

As well as sharing these experiences with friends, Paul also discusses how they are a distraction from his working life:

Isolation. Being in places where no-body else is, and one of the reasons might be that when you are a teacher and in a profession with so many people all day ... [you need to] go off to see somewhere that is a bit more wild. So when we went to California we went to Lassen National Park ... I'm quite happy to sit down in a national park and talk to Americans about their
lifestyle and all these things. But I've enjoyed my walking without anybody during the day. (Paul, interview, 2003, lines 156-166)

This is also echoed in his future travel plans:

We are going to New Zealand South Island and hiring a camper van, because we can go off then in our own little world. We will meet people and we will be very sociable, but we will be able to see glaciers and penguins. (Paul, interview, 2003, lines 208-211)

In all of the above examples, Paul's emphasises the physical features of the places and the direct experience of having been there. Paul cites this as being more significant to him than the accumulation of material possessions:

Well I suppose it is not as important as my book writing and my teaching. It's a break from it and sometimes I suppose you could say it is my career. I have worked hard in order to spend it on travel. And I've got better travel than I have carpets and curtains. But then a lot of my geography friends do as well. (Paul, interview, 2003, lines 214-218)

Travel is influential for Paul but his relationship with geography is also influenced by experiencing academic success at school:

... I just loved geography ... I came top in geography in both the exams in Year 7. And I suddenly realised I was good at something: I was good at geography and I continued to be top in geography all the time in that form. I was always in the top three in geography in the whole intake ... So I got a lot of self-esteem and status through that. (Paul, interview, 2003, lines 15-22)
It was this academic success that encouraged him to study geography at university. In his interview he describes that attending university was a ‘first’ for his family (see lines 272-274) and was therefore prestigious. He studied geography at University College London. He was “put off by some of the geomorphology and systems diagrams” and was more interested in economic geography, even studying a subsidiary subject in economics. He recalls his degree (and fellow students) with great fondness and pride, and emphasises that it left him with many ‘residuals’:

The most amazing [residual] is my memory because it was factual: of the facts in geography. We learnt the most amazing places, I’m not very good on TV quizzes but I am amazing on some things, and I just know a lot and because I know a lot my memory is still good if I need it to be. (Paul, interview, 2003, lines 226-229)

This “amazing” memory is also linked with his knowledge of places, as he recalls his participation in a weekly quiz with this tutor group:

... A lot of them come from the news, but a lot of them [questions] are about place – [the students] don’t know that – and even pop singing questions are sometimes about place. “where were Steps performing last week?” Oh good I saw a picture of them in Berlin or something. (Paul, interview, 2003, lines 249-253)

Paul records that this memory is a residual from his geographical education which seems to indicate that he studied a traditional geography that was fact-dominated, content driven. This contrasts with Paul’s relationship with place which focuses on experiencing a place, a more humanistic perspective. When Paul discusses his
relationship with geography, two themes emerge: the self esteem from being successful at geography, and his fascination with place. His appreciation of place is also connected to his relationships with his friends and family.

5.1.2 Relationship with school geography

Paul describes why he decided to become a teacher and remembers his experience of the PGCE. Although, he was initially impressed by the salary range of a teacher at the time (lines 283-286), he recalls that moving into teaching seemed to be a natural development from his degree, which he finds difficult to explain:

I enjoyed the experience at school, definitely enjoyed the experience of university. My friends went into university lecturing and they are still there, and I just didn't do that. I was asked: “do you want to do an MA?” Because that is what you did, you just stayed on. “Are you going to do an MA?” “No I'm not, I'm going to Cambridge to do a PGCE.” So I just went off to Cambridge and had a good year doing that. (Paul, interview, 2003, lines 290-295)

Paul offers no further explanation for why he decided to teach. His PGCE was also dominated by geographical experiences:

PGCE at Cambridge was just very interesting indeed. Because I read books that I never realised were around ... And I was very interested in the sociology and socio-economic background of education. One of my assignments was on comprehensive schools in New Towns, and how every neighbourhood unit could have a comprehensive school and I was very
interested in that because it was brand new to me, and I think even to my
tutor, that concept, that comprehensives could have very tight hinterlands,
and I really enjoyed that, that type of geography of education. (Paul,
interview, 2003, lines 299-309)

Although his PGCE enabled him to develop an understanding of the 'geography of
education', his actual teaching experience was more haphazard. The teacher at his
placement school was absent for most of his teaching experience, undertaking MA
studies, leaving Paul to do most of the teaching unsupervised. He reflects on the
impact this had on him:

It was a great help to me because it boosted your morale and your self-
esteeem! I just went there and taught his timetable, well bits, well most of his
timetable, with very little, almost no, help ... (Paul, interview, 2003, lines
316-318)

When the teacher returned from his studies, he sent Paul back to the university.
Paul describes an argument that ensued:

And my only defence was Mr P*** said I could go, he said I'd done a good
job. He [PGCE tutor] said “don't talk to me, you people from red-brick
universities”. And I said “excuse me, I came from London”, and he said "I'm
sorry, very sorry, Paul, I'm very sorry indeed" and I will always remember
that because he made a mistake because he regarded University College
London as pretty acceptable ... [my wife] was from Newcastle and there was
prejudice there. (Paul, interview, 2003, lines 326-333)
The pride he expresses in his academic credentials is tied in with his success both in his teaching practice and from his university education. Academic success and the prestige have had significant influence on Paul's self esteem.

Another influence on Paul's early career was a relationship with an inspirational geography teacher:

[A colleague who had written widely] spoke Italian and he was a role model, and he was just a wonderful geographer of the old school. He knew loads of things. He didn't just know about Italy, he knew about the whole world and I taught alongside [him]. I was working with [him] as a factual geography teacher, slightly wrong to say factual geography teacher but relative to what I do now factual. (Paul, interview, 2003, lines 341-355)

Paul's admiration for this teacher stems from his wide ranging knowledge. Paul also draws a distinction between his current practice and the "factual geography" that he taught then. This shift away from focussing on "facts" was due to changes in geography education. Paul reflects these changes were also influenced by feedback from Ofsted:

Yes, it was about teaching, and more and more we have started thinking about "is it learning?" now. Even in the last ten years, I remember the first Ofsted here. They were bothered about me and my teaching, and the last Ofsted here were very much bothered about learning but we weren't all sure of that and so we were very much teaching the lesson. They said "lovely lesson, where is the learning?" And we were confused. And the next Ofsted to come we won't be confused at all, and we will focus on the learning and we won't worry about our teaching. (Paul, interview, 2003, lines 364-371)
Paul describes how his current practice of teaching geography has been influenced:

Well the geography I teach comes from the National Curriculum, so it is not necessarily the geography that I want to teach. It happens to be the geography that I want to teach ... I take examples from where I want, so from within the geography national curriculum framework or from within the GCSE syllabus I do what I need. (Paul, interview, 2003, lines 374-379)

Paul indicates that he likes the geography described in the Geography National Curriculum. This is because the structure of the National Curriculum places more emphasis on the study of places than previous versions. Paul elaborates on the impact on his teaching.

... I was pleased to see [place] come back in the national curriculum, and we've gone big on place here ... we do our GCSE through three places: Italy, Nigeria and Japan. If you want to do population, we do it of there. If we need to plot a climate graph, we do a climate graph of there. Before that when we were working out the GCSE we used to have case studies from all around the world. Now we have just three places where we take our case studies. (Paul, interview, 2003, lines 412-419)

Paul has written several geography school textbooks, and he uses these books in his teaching. He describes how his travel experiences have influenced his book writing which has then, in turn, become his main teaching resource:

So you will see that are doing Gambia today because it is in my book, because I have been to the Gambia, I tend to bring me into the lessons. And
I have always seen my book writing as being a two-way process, planning for my lessons and I have got all my books from the classroom at the same time. So they have come from the classroom and they go back into the classroom. (Paul, interview, 2003, lines 379-384)

Here we can see how his experience of travel has had a direct impact on his teaching. There is an example of this in one of the lessons observed (see section 5.1.4).

Paul explains why he considers place to be so important for young people's education:

I just honestly believe that if they have some sense of place, they will be good citizens and they will understand where they are in the world, because the lack of sense of place grieves me sometimes because they go off to a place, and I say “Oh the Canary Islands, that's just off Africa” and they'll shout at me: “no it isn't – it's in Spain”. Oh I'll get the Atlas out, “Here's Africa, here's Morocco” – the ignorance about place is so amazing. (Paul, interview, 2003, lines 390-396)

Paul's passion about place and understanding place is something which he values in educating young people.

The ideology triangle (Figure 5.2) gives Paul an opportunity to discuss his approach to teaching geography.
Figure 5.2 Paul's Ideology Triangle

Note: the ideology triangle has been used as a tool to enable the case teachers to discuss their approach to teaching geography. It is not meant as a definitive description of the range or variety of possible ideologies in geography teaching (see section 3.6).
Constructing the triangle (Figure 5.2) enables Paul to describe how he has changed during his career. Whilst filling in the triangle he recalls:

Yes, I was a fountain of knowledge thirty years ago, I'm a guider now. I do like facts in a way, but I move back more towards that now funnily enough.

(Paul, interview, 2003, lines 458-460)

He has a clear idea of his ideal position:

Yes I want them to understand conflict over issues. This is the Year nine lesson this morning. I am an issues person and I have just written an issues book (Paul, interview, 2003, lines 469-471)

The ideology triangle also enables Paul to describe his own development, and how he views the teaching of geography:

Slightly moving there might bring me down here because I do like this idea about guiders, do like things about values and attitudes and conflict, but isn't to say there is a conflict but a conflict of interest, and I wouldn't have put land use I would have put a whole range of issues ... I've gone through hypothesis testing and problem solving. I think you'll find these coming back in, I'll be down here somewhere ... to use a whole range of geographical phenomena as text. (Paul, interview, 2003, lines 479-490)
5.1.3 Other influences

In the construction of his 'cultures of influence' map (Figure 5.3) Paul identifies that certain influences have had different effects on him at different times. He describes that whilst he 'carried' these influences with him, they have dwindled in significance over time. The first box that he drew was the geography culture. Despite saying that he had moved into other curriculum areas and other aspects of school work, Paul identifies that geography was a key motivation in his teaching. He then situates both the school and personal cultures inside the geography culture. Whilst he did this, he describes how he made sense of the school and how his personal life was influenced by his understanding of geography. For example, he explains that it was through his degree that he met his wife and they chose to spend their leisure time on 'geographical' pursuits. Similarly he describes understanding the school through a geographical 'lens'.

However, he is keen to point out that how he operates in the school and his lessons are also influenced by the wider educational culture. Here specifically he highlights the work that he is doing with literacy that has stemmed from the National Literacy Strategy, and which has had an impact on how he perceives teaching and learning.

Initially, he wanted to place the geography education culture as a small influence, but then he recalled his writing work with other authors. He decided that this had been a major influence on his understanding of geography education and therefore drew this culture as quite large. The situation of this culture is also significant, because it has happened outside of the school, but has influenced the work that he
does within it. It has also been informed by movements in the educational culture and hence its placement largely over this culture.

Figure 5.3 Paul's 'cultures of influence' map
(Please note, due to extensive labelling of individual names and places, Paul's original map has been substituted with a digital version.)

5.1.4 Classroom practice

Paul does not keep detailed lesson plans. He uses his book writing as his lesson planning, so that when he teaches sections from his own books, he recalls the objectives of the spread and plans his lessons towards that objective. For the observed lessons he had prepared an A4 sheet for the Overhead Projector that includes the title of the lesson, the main activities for students and the key page
numbers; this appears to be his main planning tool. Examples of these can be seen in Appendix IV.

During the data collection I noticed that Paul’s classroom walls and his textbooks were dominated by the Enquiry Ladder (see Appendix IV). Although Paul had discussed in his interview a new focus on learning, and his desire to get students to appreciate a sense of place, he hadn’t mentioned adopting an enquiry approach to teaching geography. Paul also showed me a sheet (see Enquiry Ladder, Appendix IV) outlining how the Enquiry process linked the Places and Themes they taught in examination classes. Paul did not mention enquiry in his main interview, but did discuss it in a later conversation. I recorded in my research diary:

He showed me the enquiry ladder from his [key stage 3] book. I asked him about why enquiry was important to which he said “well, it’s the first sentence in the National Curriculum” – and has been a key feature of all his books – he has been doing it for 15 years. He says the enquiry ladder comes from a colleague and he has kept it in and uses it in every classroom. He also reflected that he had seen more and more enquiry and that it was in the Key Stage 3 Strategy. (extract from research diary, 2003)

The planning documentation (and the wall displays) indicates that enquiry is a key approach of the department. Paul also makes reference to it during the observed lessons. This may have been because it was such a key part of Paul’s practice that it had become intuitive and therefore, difficult for him to articulate (see Schón, 1987). I recorded in my research diary:

As the day emerged, a pattern became much clearer – he is clearly motivated by enquiry and has made this a key feature of his teaching, lesson
planning, and work with the department. Although he was not particularly articulate in why he thought enquiry was important – I got the sense that this was because this was implicit to him, intrinsic to his work at Key Stage 3 – too obvious to be explained. He has built this into his schemes of work which are not very detailed, and when I pointed out that this prepares them for GCSE, he seemed almost surprised, like he hadn't thought of this.

(extract from research diary, 2003)

Paul had included references to enquiry in his planning documentation that he was compiling for his forthcoming Ofsted Inspection.

**Lesson one**

I observed Paul teach three lessons during the data collection. The first lesson was to a Year 9 top set, mixed gender group. The students had been working on an ongoing homework enquiry project in small groups (of four) to prepare a presentation on different issues around poverty. The lesson aim was for each group to feedback their progress so far, and to explain what further information they needed. Paul began the lesson by introducing me and the reason for my presence, and reminding the class about the aim of today’s lesson. The groups were clearly excited about their presentations and had entered the room talking about their projects. They were aware of the aim of this lesson and had been preparing for it. Paul began the lesson by reminding them of the project task and that they had started from nothing, and that this wasn’t the final presentation. He made expectations for the lesson clear and set up the roles and responsibilities for the class by assuring them: “I will not judge you, I will thank you, and I hope 11 people will briefly tell you what you could be doing”. This guideline emphasised that he
expected the students to respond and ask questions of each other. He also emphasised that at the end of this lesson, they would negotiate the deadline for the final projects.

After this introduction, each group stood up in turn and gave their presentation. During this time, some of the other groups continued to whisper and prepare theirs, whilst others listened. There was a variety of outcomes at different levels of completion. The topics covered by the groups were:

- Unfair trade
- Multinational Corporations
- Dependency on few primary products
- Role of women
- Land fertility
- HIV/AIDS
- Desertification
- Nomads
- Poor hygiene standards
- Aid
- Access to clean water.

The list of topics had been put together by a former trainee teacher. After each group’s presentation, Paul thanked the group and made a positive comment usually on their presentation skills. A typical comment was: “I love that, I love the way that it was organised”. He also encouraged other members of the class to ask a question or to present a comment to the group. An example of this was when the group that had been researching Nomads expressed empathy for the decline of the opportunity for nomads to live a traditional lifestyle, and one student asked them a question about whether the nomads had protested against their plight.
Paul's responses to the students were always very positive, and full of praise. At one point, a student left the room and he enquired: "Where are you going? Guitar lesson? Okay, have a good time!".

At the end of the lesson Paul praised their presentation skills and confidence and thanked them for participating. He also related what they had done to the geographical skills (of enquiry) that they had exhibited and how this might be useful for them in the future.

**Lesson two**

The second observed lesson was with a Year 11, GCSE Geography group. The lesson aimed to evaluate the appropriateness of development projects in Gambia. The lesson began with a check on the homework that the students had completed on development indicators. He asked one student which indicators he had chosen. The student responded, and he then asked another member of the class to criticise those choices. A small discussion was invited on the problems associated with using that development indicator. Paul then focused on another student and asked them what they had learnt from this discussion. He asked questions about comparing different countries and data and then explained to the class that this was a typical GCSE topic. Paul asked two more students direct questions: one regarding Italy and why it had a minus population statistic (showing negative growth), and for another student he questioned his use of ICT and where he had got the data from. He focused on two further indicators: explaining the difference between GNP and GDP, and relating the changes in Infant Mortality Rate to the historical change in
this country. He then moved them onto the next lesson episode by referring them to the appropriate page in the textbook.

In this lesson, Paul used one of his own textbooks. He introduced the lesson episode by discussing his visits to Gambia with a charity organisation and how they had helped him to visit some development projects (featured in the textbook). Paul then outlined to the class what he wanted them to do: he explained the process of the lesson, giving them some flexibility ("you can work on your own or in groups"). He began to read from the textbook and then asked one of the students to continue. He frequently stopped the reading to add some additional information about the aid projects described in the textbook:

"I have visited that – very humbling"
"What surprised me was the low sums of money offered as loans"
"In the puppet show I went to, they used an apron with the reproductive organs drawn on – and the women were fascinated".

The students were then required to read about six development projects for Gambia. They then decided which projects they liked by allocating them marks. At the end of the lesson the marks were pooled and the class decided which development project was the best. Paul told the class that this was a Decision Making Exercise, and was similar to what they could expect from a GCSE examination.

In my research diary I recorded that "He kept emphasising that the examples and people in the book are real". At the end of the lesson, he asked each to offer their preferred choice (at this point a trainee teacher was supporting the lesson and had created a tally chart on the board), and they discussed and offered reasons why
they have chosen particular projects. At the end of the lesson, Paul asked them: “tell me anything you have learnt today”, and thanked them for their contributions.

Lesson three

The third lesson that I observed was taught by Paul’s trainee teacher, but with Paul supporting. The lesson was to a Year 7 class and was part of a topic of water. This was a new unit and the students were about to start a project on where their water comes from. The lesson was introduced by the trainee teacher who explained the topic: Where does water in Swindon come from?, and explicitly explained to the students the enquiry process that they were going to follow. Once the explanation was finished, Paul interjected and talked to the students about the enquiry ladder (see Appendix IV) and the enquiry process. He used simple language: “I climb the ladder with many classes, each answer is a step up”. He explained that it was okay to fall down the ladder and that each stage should always start with a question.

Paul directed questions to the booklet they had been given, and on the students’ behalf asked the teacher further questions: “Do I need to do a front cover?” “What is a water system?”. These questions were ones that Paul had anticipated the students might ask, and filled gaps left by the trainee teacher’s introduction. I recorded in my research diary that this seemed to perform a dual function, also letting the trainee teacher be aware of the weaknesses of his introduction. Paul also then directed questions to the students: “What is boring about this map? How could we make it good?”. At this point, Paul then took over the rest of the lesson and led the students through reading the resource provided. At the last part of the lesson, some students were selected to use the ICT suite, and they began their enquiry.
5.1.5 ‘Expertise’ and recommendation

Paul’s recommendation as an expert teacher comes from a geography PGCE tutor who had worked with him. The recommendation outlines Paul as an expert teacher because he is a:

- successful textbook author with wealth of experience in the geography classroom (11-16), excellent mentor of new geog teachers ... speaks with authority on subject matter” (referee email, 2003)

Paul's colleague also highlights that he has strong relationships with students and is able to bring an extra dimension to the classroom due to his links with outside organisations. An example of this is his work with the Marlborough Brandt group which had given him first hand experience of aid projects. His colleague also describes him as a strong advocate of the enquiry approach.

She summarises that his ‘expertise’ mainly lay in:

- Not just from geography, managing people and managing students I think he comes over well that way and I mean he gets on well with his tutor group and stuff like that he tends to get awkward ones given to him.

That doesn’t mean to say he is weak on knowledge on that side. (Interview, 2003)
Review

Paul describes place as an important part of his understanding of geography. Paul sees place as not only an important concept for students to learn but also something that needs to be experienced. This is a dominant value and one that affects how he perceives other ‘cultures of influence’ such as the educational culture (as seen through how he interprets the National Curriculum). Paul's emphasis on experiencing geographical phenomena can mostly be seen through his own experience of geography and travel. However, his approach to teaching geography also demonstrates that he is sensitive to his students' experience in his classroom. His emphasis on enquiry requires that they use their own experience. Paul seems therefore to be driven by his understanding of geography and this is evident in his ‘expertise’ recommendation.
5.2 Dan

Dan was Head of Geography at a school in a small town in Shropshire, where most of the students are bussed in from the predominantly rural district. He originally taught in an independent school, but five years into his teaching career upon completion of his PGCE, he took up this post. He had been teaching for 14 years, and held a Master's degree in geography.

5.2.1 Relationship with geography

As Dan discusses his relationship with geography he stresses his desire to see things differently. The desire to see things differently began with his school experiences of geography. Dan studied the Schools Council 16-19 syllabus which he explains:

... was very much issues based and I really enjoyed that, and really got me into it and so there were no questions as to what I would do at University. And from then on, that was what got me into geography. (Dan, interview, 2003, lines 11-14)

Dan elaborates how it was both the content and the style of the 16-19 syllabus that inspired him:

Um. I think that it was very much based on case studies which I was interested in. It wasn't theoretical too much. It was a nice synthesis of human and physical, and all sorts of things brought them all together which I
have always enjoyed; that is characteristic of the 16-19 course really. The issues based thing was crucial really and it really got me going actually. All the time we would be looking at: “should the bypass be built here" and that kind of thing. And we did a DME\(^9\) and we went on fieldwork as well, which for everyone was a factor you know. And so we looked at: “should they build a Pontins at the top of the cliff at Weymouth?” and things like that, and arguments for and against, and I really, really liked that. In fact, for quite a long time through my degree course, it was issues based in planning that actually I thought was my main interest. And it lead me to choose planning options … (Dan, interview, 2003, lines 18-30)

Dan was inspired by the approach of the 16-19 syllabus which focussed on geographical enquiry and issues. He reflects on the reasons for enjoying the course:

... probably more the process actually. I liked the intellectual challenge of that kind of thing. It was that element of challenge, of problem solving, that we are supposed to include to encourage in boys, aren’t we? And it encouraged me. I did like the fact that it was issues which were political issues, like “should we cut the rainforest down?”. The London Docklands was one thing that really got going actually with the political thing. It was in 1984, and it was just starting up, and we went to London Docklands for a day. And I was really enthused by this Thatcherite sort of monstrosity that was developing. And it has since improved, and all this people who were missing out on the redevelopment that was going on and that kind of thing. Seeing graffiti with "LDDC out" and that kind of thing. And that was the subject matter that interested me as well. (Dan, interview, 2003, lines 36-48)

\(^9\) DME: Decision Making Exercise
I have always been interested in the issues and the slightly political side of things, and something to get your teeth into ... (Dan, interview, 2003, lines 56-58)

Dan links the political approach in geography to his interests at the time. He has already used the term “seeing things differently” and this he reflects is a key part of his personality:

I had a very conservative upbringing with my family in suburban London, and I was looking generally as a person to stretch out and to get interested in different things that I had grown up with. I wore different clothes, and I watched different films, and it was a whole different way of learning and a whole different approach to the world, you know, deconstructing the iconography of things. (Dan, interview, 2003, lines 92-98)

However, this interest in seeing things in a different way did not influence his decision of where to study geography at university. Here he made a practical decision:

I went to Loughborough, and, er, and I went there because I wanted to go there for sport. Because I was good athlete at the time ... As it turned out, it was the best place for me to go for the geography because they were interested in cultural geography and Denis Cosgrove was there ... And the planning stuff I got real sick of and really bored, because when you get into the details of it, it does get a bit dry. (Dan, interview, 2003, lines 68-81)
The influence of the cultural geographer, Denis Cosgrove, enabled Dan to maintain his interest in geography by encouraging him to look at things in a different way:

It drew together some other interests of mine. I had done RE and English A' level and I remember a very key moment, when I did a lecture and a seminar following it, done by Denis Cosgrove which was about post-modernism. And we were talking about language and its’ meaning and stuff like that and I just loved it. You know, of all the academic experience, learning experiences, that I have had that would stand out as being, you know, the thing that really got me going. Because it was challenging and it was different I think. (Dan, interview, 2003, lines 85-92)

This influence was sufficient to direct him away from his original plan:

I went down the planning route, and I realised too late what my interests were. So even in the third year, I went down the planning route. Partly because I didn’t do all that well in the second year which was worth 40%. And so I had to go for the safe option to make sure that I could get a 2.1 which I did in the end. So I went for industrial geography which was safe, and you know, all right, and planning geography which was really boring, and in fact was counter productive because I got so bored with it, I didn’t do very well, I don’t think. I went for African Studies as well, which was taught by Morag Bell who was again one of these people with a different take on life and a different approach. And she really enthused me and got me interested. Her stuff was all about South Africa and Apartheid and that was great: issues based, and political, and really interesting. (Dan, interview, 2003, lines 111-122)
On one hand the practical need to get a good result in his degree encouraged Dan to follow the planning route. However, the change in tone and language in the above quotation shows that his real interest was in the more challenging political content of the courses he studied.

After studying his degree, Dan considered going for a PhD but chose to study for a Master's degree at Leeds University. When Dan discusses his Master's course it is the challenging topics that grabbed his interest:

The Latin American stuff was all right but it was much more interesting at the start when they were talking about colonialism and things like that. But when it got up to economic issues I wasn't interested again. But I was allowed to do whatever I liked and I went back to Denis Cosgrove's articles on Ruskin and he had done a thing on his romantic view of nature early in this life and the environmental thought associated with that. I took it and did a follow up if you like and looked at this later life and his environmental thought then and the influences on him and [it] went really really well, and I really enjoyed it.

(Dan, interview, 2003, lines 164-173)

Dan shows how his interest in geography has changed from looking at geographical issues, to planning, and then to cultural geography. He identifies that these themes are linked by the need to see things in a different way, and to engage with political issues. However, Dan has also made practical career choices which are not necessarily linked to his geographical interests, such as choosing where to study.

I encouraged Dan to consider what other influences have affected his changing interest in geography. Unlike the other case teachers, travel does not appear to have been a great influence on Dan:
Not for me, I've travelled a lot around England and Wales a bit and so I suppose that has been a minor influence. We went to Dartmoor with mum and dad lots of time and we went by train everywhere and I still enjoy going to see West Ham. (Dan, interview, 2003, lines 224-227)

However, one fieldtrip experience has offered him an opportunity to see things in a different way:

I went to Gambia on a fieldtrip with Loughborough and that had quite an impact on me. Just seeing somewhere that is so different and made me reflect more on England and what that is like and again, more interested in places and so they were influences but not as major as the academic side of it really. (Dan, interview, 2003, lines 230-234)

These influences have continued to influence how he perceives geography:

As a geographer? Well my main interest is in fieldwork and for the academic side of things I am very interested in the qualitative ways of doing fieldwork and I suppose it is drawing on the cultural geography interest and background but taking it into the fieldwork area, finding different ways of doing things and looking at the world in a different way. Again with a slightly post-modern approach if you like, and that would be my main drive and interest really. (Dan, interview, 2003, lines 238-244)

Dan reports academic success in geography at school, but relates this to feelings of success and getting attention:
And I enjoyed, right from the start, the intellectual challenge, which I had never had, I think partly, I wasn’t stretched which is one of the reasons why I messed about, and was naughty. I remember the first lesson at A’ level geography and ... I remember sitting there thinking, “I’ve got to behave here, with all these girls and things. We are 16 now.” And I started to listen a little bit and started answering questions a little bit and I remember him saying to me, and again a key memory I remember him saying “what a fantastic answer that was, really really good” and he referred to it about 8 times in the lesson, and I was really glowing at the end, fantastic, “I am good at geography” and it was quite an influence really, and I thought I can do this. And so I became quite self-motivated and settled down generally and so it was completely different experience post 16. (Dan, interview, 2003, lines 205-219)

Dan also recognises the impact of his A’ level teacher on his enthusiasm for the subject:

I used to look forward to the lessons. I used to love it, the lessons. And Mr D***** especially used to really get me going, really enthusiastic and was funny – it was great. (Dan, interview, 2003, lines 219-221)

Dan’s discussion of himself as a geographer tracks how his geographical interests have changed and developed. However, there is a common thread to his development: an intellectual pull which challenges him to see geographical phenomena in a different way.
5.2.2 Relationship with school geography

Dan has already indicated that he was practical in his decision making. In the interview, he reflects that this was also the reason why he initially went into teaching:

Yeah. I ran out of money … I wasn't quite sure what to do, didn't have any direction and really wasn't convinced about PhD. I also got married straight after finishing, and so pragmatic needs kicked in. We went to live in London, so needed a bit of money, and so I jumped for teaching in an independent school which said no PGCE required, and so I thought I would do this for a year, pay off my debts and then maybe do a PhD. (Dan, interview, 2003, lines 183-190)

After starting this job, he realised that teaching requires more than just geographical knowledge and did consider other careers either as an academic geographer or in transport planning. It was at this stage that he changed his mind about teaching:

I gradually found that I was getting better and better at teaching and enjoyed it more and more as I was going on. I found that I liked teaching but I didn't like the school or the independent sector, so it was a gradual process again – everything happens slowly for me I think! (Dan, interview, 2003, lines 263-267)

Dan chose to do a part-time PGCE at South Bank University which he didn't particularly enjoy (see lines 284-300). It was when he was able to issue his own intellectual challenge that he became more interested:
But the thing that was by far the most useful was the dissertation which was my first foray into qualitative fieldwork and again, I made something good myself really. It was limited but it was interesting I think and I did some work on London Docklands and two different approaches to fieldwork and I compared them and I did reading on qualitative fieldwork techniques and on research design and that kind of thing and that was really useful and in terms of time it was not too bad, I did a lot of it on the train on the way to work and last minute on the weekend of work at the end to get it done and it wasn’t too bad. (Dan, interview, 2003, lines 292-300)

Dan expresses here a tension between time constraints and his desire for intellectual challenge.

In his practice, Dan has developed strategies to enable him to work efficiently but also to get good results:

I think I have got academic ability and the way that my brain works does help I think at times, so I think I have got quite a clear way of thinking and so when it comes down to breaking up difficult ideas at A' level for example, and making them straightforward and simple and logical. (Dan, interview, 2003, lines 330-334)

He achieves this by considering what his students need and then planning accordingly. His ability to do this has been identified by Ofsted inspectors:

Certainly an Ofsted inspector said to me recently I know what is important and I work on that and I hadn’t really thought of that before but I think it is probably true and I try to ... I recognise for example that if you are going to
do well at GCSE they have to be able to write 10 lines really well, getting in examples and developing their points and I just really really flog that and I have loads of ways of doing that. I work on that a lot and that is one example. The same with coursework, I realise that coursework for the children were all over the place and I worked on a big weakness and worked on that weakness very directly using various strategies to sort that out – so there is identifying the important things. Partly as well, I don’t work as hard as a lot of people, because if things are not that important I leave them, and I’ve learnt that – very very slowly, but I have learnt the importance the working as little as you can so you are fresh. (Dan, interview, 2003, lines 358-371)

Dan has an efficient and focussed approach to planning. Dan offers an analogy to explain this further:

Yeah, it’s like the grand prix driver that is supposed to win the race in the slowest possible time, because if you go racing ahead your car might break up and I think, and I have learnt very very slowly, because it is not in my nature really, that I tend to be a bit of a perfectionist, or used to be. I am not anymore because wiser older teachers have taught me to get out of school as soon as possible and to get home and to see the kids and to try not to work in the evenings if you can. When things are important do them well but when they are not, can they be left? And so that has kept me fresh I hope. (Dan, interview, 2003, lines 374-382)

He also believes that his personality has a positive impact on his students, echoing sentiments that he recalled from his own geography teacher:
In the classroom I can project my personality quite a lot and I use humour a lot and a fairly personal touch and I think liking the children and I like being amongst children helps as well. I think that gets them going a little bit, and keeps them interested and they like geography and they quite like my lesson as a result. That is the way that I get discipline because I am not a strong disciplinarian in terms of really having a go at kids ... but I can do it because of the way that I try to avoid problems by planning reasonably well and projecting personality ... (Dan, interview, 2003, lines 345-355)

The desire to see things in a different way is evident when he discusses why geography is important for students:

I think it is important to know about the world they live in. Very often I find that I am teaching something and I think, I am glad they are learning this, I am glad that they are becoming aware of this and I think it is important. Like for example trade, and why some countries are rich and some are poor.
(Dan, interview, 2003, lines 386-390)

He is also critical of a purely practical approach to education:

I think that it is a shame if you are just doing things preparing them for work all the time – I think that we would end up a very shallow society ... but my education was not very much preparing me for work directly but the things I gained most from education were things like an understanding of the world around me things that I know about, the apartheid system and what happened there for example and I feel that I am a better person for that. Also this approach that cultural geography gives on looking at the world in a different way and with a different slant on things and it has influenced me all
the time and the way that I look at things ... geography can do that kind of thing. (Dan, interview, 2003, lines 399-413)

This tension between the practical and the intellectually challenging is something that Dan is keenly aware of:

I try but I mean, more in KS3 than KS4 and A level because I keep finding myself becoming a bit of an exam factory to be honest. I've become quite good at getting kids through exams and hopefully some of that seeing the world in a different way is a by-product ... If there is an exam that we have got to get them through. I'll get them through as well as I can because I feel a responsibility to them and so that has got to be my priority. Also I get judged on it as well, very much, and it's very helpful to me all the time in many ways that I have got good results. (Dan, interview, 2003, lines 417-429)

Dan describes the tension between the overall value of his teaching and his geographical values. He later reflects that geography does not greatly impact on this decision making:

More than the mission to get the subject over, I'm not particularly fussed about that. Although I like the subject, I am not particularly driven by that, and I don't think that a lot of it is all that relevant to them and I am not particularly driven by that ... I think they have learnt about drainage basins and about volcanoes a bit, but I don't think it has it has particular relevance to them, it's got a bit but ... um more important as an influence to me is what is the best way of teaching them — it's pragmatic. (Dan, interview, 2003, lines 573-582)
He however uses geography as a way of mediating broader educational influences, to ensure that the students benefit:

In fact, I’m not really bothered about what the content is too much anyway, I’ve made sure we cover the national curriculum roughly but with our Year 9 exam work for example I can’t even remember what we are supposed to do on Japan but we make sure that they know a few important features about Japan and also their literacy develops when they do Japan – that is the thing that we really work on. (Dan, interview, 2003, lines 435-441)

His current interest in geography: fieldwork, is influenced by another inspirational person:

I think a big influence on me has been my contact with the Field Studies Council and particularly David Job actually and he has been a big influence actually. … I think the whole Slapton way of life, and David’s way of life, is very much the kind of thing of being fairly minimalist and not worrying too much about making money, and materialistic things and that kind of thing and being very green and very sustainable and that kind of thing did have an influence on me. (Dan, interview, 2003, lines 456-471)

This deep green perspective shares similar features to his desire to see things in a different way:

... they bring me further towards a different take on life, probably a little more politicised and a bit less materialistic … I think when your outlook on life comes through your teaching which it does quite a lot and it has. For
example I was teaching about Slapton yesterday about the road on the shingle ridge and how it has eroded and probably my slant on it was more towards the environmental approach. (Dan, interview, 2003, lines 475-483)

Dan's interest in fieldwork has been the subject of a Best Practice Research Scholarship. In this work he pulls together his interests in literacy and qualitative fieldwork:

Well one of the things that has come out of the many discussions that I have had with David has been the problem that the quantitative fieldwork that is being done by so many schools so much of the time allows children to collect numbers and answer some questions but doesn't engage them with the place and doesn't help them to answer the questions that are really important about the place ... Qualitative fieldwork on the other hand, I have found has got it's limitations as well, so, you can have a great time setting up haiku poems and stuff like that but I am wondering where you can take them, what you can do with them, I want to give them a bit more structure. (Dan, interview, 2003, lines 491-501)

He also discusses how this recent interest has brought together many of the geographical and educational interests that stimulate him:

Also I was thinking if I could bring in some of this Socratic dialogue thing that Denis Cosgrove wrote about, used with his students in Venice trying to challenge the way that the children think about the place in a completely
different way. You know what would happen if there were no cars here? For example how would it be different? And challenge the assumptions that they would have. So I have ended up with a whole model/approach to fieldwork and I want to try and publish it. (Dan, interview, 2003, lines 536-543)

Dan recalls these themes when he discusses his ideology triangle (see figure 5.3) and how he feels an allegiance to all three areas of geography education expressed in the ideology triangle:

It's tricky – I'm all three. I would like to move towards that. I do all three, but this is more about philosophy than what you do, isn't it really? (Dan, interview, 2003, lines 547-548)

He also mentions that he values some aspects of geography:

Values and attitudes I do that quite a lot as well, so I'm probably about here I reckon – a long way from that, but slightly nearer this than this. (Dan, interview, 2003, lines 552-553)

But he knows which direction he is moving towards:

I want to move towards this. (Dan, interview, 2003, line 556)

Dan values the different geographical approaches of geography. When told as a narrative there are clear links between the developments that he has been through.

10 Best Practice Research Scholarship (BPRS) – funding from the DfES to practising teachers to develop a piece of action research on an area of best practice for wide
He brings these themes together when he constructs his 'cultures of influence' map (see section 5.2.3).
Figure 5.4 Dan's Ideology Triangle

Note: the ideology triangle has been used as a tool to enable the case teachers to describe their approach to teaching geography. It is not meant as a definitive description of the range or variety of possible ideologies in geography teaching (see section 3.6).
5.2.3 Other influences

The 'cultures of influence' map is a useful device for encouraging Dan to reflect on different influences on this teaching. He begins by underplaying the importance of the personal culture:

So for instance, my family has an influence in that it makes me work more efficiently, more quickly, but probably doesn't have a great deal of influence in the classroom for example. (Dan, interview, 2003, lines 562-564)

He adds this culture group last, when he had further reflected on its influence:

Personal – travel? Yeah, that's bigger because I draw on that, you know, case studies, anecdotes and things like that, teaching about London Docklands for example, I've been there loads, that kind of thing, so yeah, quite a bit bigger than I originally thought. Oh dear, overlaps with geography, quite a bit, geography education as well. Well it has made it my interest, yeah, part of the reason why I am interested in geography education is furthering my career and moving on that way. Overlaps with education quite so much actually with a bit in education and a bit like that. (Dan, interview, 2003, lines 621-628)

The first culture that he identifies as being significant is the educational culture. Here Dan emphasises how he takes key ideas from the National Strategies which influence his practice:
When you are going through that what comes to mind is that I am very influenced by the general education system and the ideas that are coming up like developing literacy, what the exam boards say, what makes a good way of writing, styles of differentiation, starters and plenaries all that kind of thing, and the Strategies stuff and stuff before that. I’ve collected ideas and improved my practice all the time I have been teaching and I have been quite heavily influenced by that I think from other teachers as well and that kind of thing. (Dan, interview, 2003, lines 567-573)

He compares how this educational culture has more influence over his teaching practice than his geography culture and how this influence is driven by the need to get students to pass exams:

It’s pragmatic.

Very heavily influenced by the exam – less so Key Stage 3, but even then I am teaching them more influenced by literacy really, but then again I am influenced by the fact that they need to be able to write well that is partly for the exam goals and partly for the literacy strategy.

Big box then for the education world. (Dan, interview, 2003, lines 582-587)

At this point Dan reflects on how geography has influenced his thinking and teaching:

Hmm yeah, I suppose, there’s things like fieldwork techniques and that sort of thing, that gets me interested in different ways of teaching geography. Ways of differentiation sort of influence me in terms of geography education
that would be quite a bit bigger but in terms of pure subject knowledge, I'm not very motivated by it. (Dan, interview, 2003, lines 593-598)

When adding the other cultures, he is careful to ensure that their sizes reflect that they are a minor influence on his teaching practice:

School, context you work in, hmm not a big influence really, its external things that – it's exams, strategies, and things I have learnt elsewhere. I don't feel I do things; I'm not motivated particularly by this school. (Dan, interview, 2003, lines 604-606)

He recalls that there have been key moments that influence his practice:

I watched one guy teaching, he was a supply teacher and I learnt a lot from him: he changed my style a little bit but no I haven't been influenced that much by the school. (Dan, interview, 2003, lines 612-616)

He therefore situates his school culture within his educational culture to reflect how these cultures are nested.

And finally, once he finishes his map, he shows that he does not take himself too seriously when he asks:

Now can I colour it in? (Dan, interview, 2003, line 630)
5.2.4 Classroom practice

Dan uses a lesson planner for his day-to-day planning where he details his lessons and he records other tasks that he needs to do that day. His longer term planning is shared with the department as Schemes of work that break the learning down into 4 columns entitled: Learning Objectives, Resources, Teaching Activities and Differentiation (see Appendix VI). These tables are dominated by the Objectives and Activities and many of these are expressed as questions. Key Stage 3 schemes of work are more detailed than the others. In all the schemes of work, the learning activity is expressed in terms of what the students actually do rather than referring to a textbook activity. For example, "Write a newspaper headline to describe primary and secondary effects".
I observed Dan teach three lessons, and the details of these lessons are recorded below.

Lesson One

The first lesson I observed was to a Year 11 geography GCSE group. The aim of this lesson was to compare the eruption of Nevado del Ruiz to Mount St Helens. This aim was expressed as a question that formed the title of the lesson: "Why was the Nevado del Ruiz in Colombia more destructive than Mount St Helens?"

The lesson began with the students arriving from break, and Dan greeted them at the door using lots of praise and thanks and giving jobs to the early arrivals. At the start of the lesson he thanked those who had handed out resources, then introduced the lesson by informing them that they were going to look at a different volcano. He introduced the main question and made it clear that the lesson emphasis was on why this eruption was worse. He set up the purpose of the lesson by explaining that although the size of the eruption was not very different, the effects were and they were going to find out why. He outlined that they would be watching a video, answering questions and then they would end with an exam question. I noted in my research diary, that he made the objective of the lesson “really clear”.

He began the lesson by asking the students to highlight the main points that they had covered in a previous lesson on Mount St Helens. As they did this, he focused them on the key themes that were relevant to this lesson. He directed his comments to individuals “Heidi focus on these ideas”. He then explained the location of Nevado del Ruiz and introduced a three minute news clip of the eruption,
asking the students to focus on why it was so devastating (again emphasising the lesson objective). Whilst they watched the video clip, he wrote the main title and paragraph headings on the board:

- The Eruption
- Reasons for the large number of fatalities
- Rescue Attempts
- Longer Term.

Once the video clip was finished, he drew these 'themes' to the class's attention. The class then examined one of the newspaper clippings that had been handed out. As the students interrogated these clips, he asked them to respond to the main themes he had identified. The following dialogue demonstrates how he developed the students' ideas:

Student: The expertise was there but it was ignored.
Dan: Why would they want to do that?
Student: Would it cost money?
Dan: What is the main economy there?
Student: Tourism?
Dan: Is it too remote?
Student: Farming, all the field crops will have gone, there will be no money.
Dan: Good, where is this place?
Student: In a valley.
Dan: Why do they live there?
Student: That's where the water is.
Dan: Brilliant, you are really thinking.
They then looked at another textbook resource and summarised the content held here. The reading was focussed and directed, highlighting the relevant factors within each paragraph. He made reference to their impending examination by reminding them: “Facts and figures: keep the examiner happy”. He also encouraged good behaviour: “Be polite: that would be really nice”.

At this point of the lesson, he recalled a personal anecdote about the eruption that he remembered about a girl drowning. He then turned the remainder of the lesson to them, asking them to look at the other resources that they had been given. He highlighted which resources were harder to read, and asked them to interrogate the resources to find additional information under the appropriate headings, again referring them back to the main question. During this main part of the lesson, he walked around the class offering support and encouragement, this was again directed at the main question, and examination techniques: “Brilliant, excellent, now give me the details. That’s what the examiner wants”. During this point in the lesson, I noted that:

There is a nice atmosphere in the class – it is not hurried, rushed or pressured, but it is purposeful. He looks bothered and uses a lot of non-verbal clues and names to ensure all are on-task … the style and the approach really reminds me of the 16-19 that he talked about in his interview. (Extract from research diary, 2003)

At the last part of the lesson, he thanked the students for their attention and praised them on the process that they had just gone through. He then encouraged them to share the main points they had made. During this feedback he continually brought them back to the main question and asked them to compare what they had found out from this case study with what they knew about the Mount St Helen’s eruption.
He also asked for specific detail, reminding them of what would be expected by the examiners.

Lesson two

The second lesson that I observed, was also being observed by a PGCE student. This was a Year 12 lesson and the aim was to understand how urbanisation can affect drainage basins. Dan began by asking the students what they already knew about the passage of water in a drainage basin. He asked the students directed questions:

What happens to it [the water]?
How does it get to the river and how fast?

He also reminded them of work they had completed on rural change and how this would impact on drainage. He explained to them what they would be doing in the lesson: completing a flow diagram and a worksheet, and explained explicitly how it built on their prior learning and how it was relevant for the examination. He reminded them of a local example where houses had recently been built and there had been an increase in population. He used this example to start a flow chart on the board (see Figure 5.6).

Figure 5.6 Boardwork used in Dan’s lesson
He reminded them of what they previously studied and asked them to complete the flow chart using their prior knowledge and peer support. He encouraged them to share their expertise: “James knows all the technical terms – so he can help you”.

During this part of the lesson, he circulated around the class monitoring their work. This involved direct discussion with them. For instance, he observed that one student had misunderstood evaporation and took her to the window to observe some melted snow and the effect it had had on the roof.

The next stage of the lesson was used for further peer support, as he asked them to swop their flow charts with the people next to them and to add something. Whilst they did this, he prepared the next activity (which was a model on a transparency). He asked them to give themselves a mark out of ten on their flow chart, and then showed his version of the model which contained most of the features he had expected on the flow chart. He went through the model with them, highlighting specifically what was relevant to the main question of this lesson.

The next lesson episode was for the students to interrogate an article and underline relevant points and then to examine two storm hydrographs (one before urbanisation, and one after). He drew their attention to a photograph that had been used in a recent examination paper, and asked them which hydrograph it referred to, encouraging them to be specific on the evidence. He was clear about his expectations, informing them that he did not want full sentences, but for them to add the information to their flow chart.
At the end of the lesson the class discussed what they had added to their flow chart. He reminded them of the detail that they needed and what the examiners would be expecting: “What makes a good answer”. He told them that they would be answering an exam question on this topic in the next lesson and that this lesson had been preparation for that. In my research diary I summarised this lesson as having a “clear focussed approach that fulfils their needs with the least impact and maximum effect”.

Lesson Three

The third lesson that I observed was different in structure, as the A2 students were working individually on their coursework in an ICT suite. The lesson began with a brief introduction reminding them of deadlines and highlighting key areas to focus on. During this lesson the students worked individually on their coursework and Dan circulated around asking each individual formative questions about their work. These questions were focussed on enabling them to explain what they have done and what they had understood:

Can you tell me clearly why ...

What do your graphs tell you?

What does that show?

Use a range of examples: refer to the sand dunes and the local area.

Be clear about the limitations, remember the examiner.

Think of the wider aspect of geography, remember your project is a tiny place, so you need to link it to the wider environment: the CBD, houses ...

Can you bring in the organic farming? What would happen if the trend continued?
For each individual he set a target for what should be achieved during that lesson. For instance, with one student he said at the start of the lesson: "I'd like to help you with the writing so get that done really quickly …"

The lesson continued with this style of support and guided encouragement.

5.2.5 'Expertise' and recommendation

Dan's recommendation comes from a PGCE tutor, but not because of his work with training teachers. The tutor is a school governor, and is particularly interested in Dan's work with the department. The original recommendation describes Dan:

He is currently completing a BPRS thing where he has been looking at interesting ways of doing fieldwork – he was due to write a theory into practice book with David Job. The department gets excellent A-level results and he is a good mentor (for Worcester not us) according to the Senior Tutor in the school. (referee email, 2003)

Dan also confirms that this was why he feels that he had been recommended as an expert:

I don't know. I suppose the exam results. He doesn't know me that well, but he does know that I have good exam results, and recommendation from the head I think [the headteacher] had spoken to him and said, you're geography you must come and see our geography Head of geography because he is doing alright, that kind of thing – that's why.
He has watched me teach for a little bit which wasn't very good, and I had had a long talk with him about my fieldwork interests and BPRS and all that – probably why. (Dan, interview, 2003, lines 634-644)

I asked Dan if he concurred with this perspective and asked him where he thought his 'expertise' lies:

Well, with fieldwork techniques, with sensory fieldwork I suppose it is fairly good in their field and there isn't many people in that field and I know a lot about that compared to most people, and I have pursued an academic interest much not most Heads of geography have done. And I've found I have been very successful in putting that over to other teachers actually. I've done some very successful inset – that's one of the most successful things I have done in my career. And let me think and I think also within the school in turning what I need to teach into something that is very purposeful – like we were saying in planning and how I am going to deliver things is probably the other area I would have thought – I'm not an expert on that but it is a strength. (Dan, interview, 2003, lines 647-657)

Review

Dan's relationship with geography is driven by the value to see things in a different way. This value has influenced his development in geography despite conflicting with his other need, to be practical in his decision-making. In teaching geography, Dan experiences a similar tension between getting students good examination results and enabling them to see things differently. In this case, Dan has suppressed his values regarding geography, as he does not perceive it as being in line with other expectations on him as a teacher, such as getting good grades for his
students. Dan is also influenced by other ‘cultures’, such as his personal culture and educational cultures.

The areas of his work that Dan values: his work on fieldwork and getting good examination results were mentioned in his ‘expertise’ recommendation.
5.3 Anna

Anna held two responsibility posts as Head of Humanities and Head of Year 11 at a grammar school. The school is situated in a large town on the outskirts of London, and she has been teaching there for over ten years.

5.3.1 Relationship with geography

One of the strongest themes to emerge from Anna's data is her emphasis on geographical studies. She found school geography uninspiring and easy:

When I think about what school geography was like when I did it, I can't imagine why I chose to do it. Because, I mean, really, learning lists of imports and exports, and drawing maps of Africa with where they grew soya beans, it's enough to drive you to distraction. I suppose it must always have been the kind of brain I have which some would say, "lateral thinking", others would say "butterfly mind", is well suited to geography, I never had (sounds terrible) I never had to do any work for geography, whereas my other two A' levels were Maths and Physics and I devoted far more time to working for my Maths and Physics than I ever did to my geography, and my geography was always of a much higher standard. (Anna, interview, 2003, lines 19-29)

She recalls finding studying geography for S' Level easy:

I did the old S' level in those days and we didn't do any preparation for it at school, nobody was ever taught to do S' level. I remember my cousin who
was three years older than me and did a degree in geography, came to visit me just as she was finishing her degree and I was lying in the back garden. She said “haven’t you got your S’ level next week?” and I said “yes, but I don’t know what I’ve got to do for that, I just have to think geographical thoughts haven’t I?” And I went into it and I got a distinction. (Anna, interview, 2003, lines 29-37)

Anna uses this anecdote to reflect her approach to geography and to emphasise that success in geography seemed to come naturally to her. Anna also reflects that her geographical awareness has enabled her to connect emotionally and spiritually with places:

So I suppose my brain must have always meant that I found doing geography very easy and therefore to that extent you enjoy it and enjoyment as I was talking about before the awe and wonder thing: going to places and looking and going “wow, why is that like that?”. I suppose [that] would be why I ended up in geography really. (Anna, interview, 2003, lines 37-41)

Anna studied geography at Cambridge University. Anna showed me academic geography books that had been written by her lecturers at Cambridge. She uses these books to explain the dominant view of geography in the university at the time.

oh and of course, Richard Chorley, this is an important book – but yes I bought this, well, you can see what I bought it with [a school prize], and you see Chorley was a lecturer at that point, Derby was the Professor … and it was my first introduction to systems in geography because, as I indicated, when I was in the sixth form, geography was very much maps of Africa, and maps of soya beans and all that. (Anna, interview, 2003, lines 81-88)
She compares how this type of geography varies from what she studied at school:

Very much regional geography and that was what it was [at school]. I didn't know what human geography was. I had to do an entrance exam, and the entrance exam was physical geography and human geography and I didn't know what human geography was. (Anna, interview, 2003, lines 91-94)

She describes the type of geography that she learnt at Cambridge:

The first two years was a mixture of both physical and human topics … In my third year I took more human units than physical [ones] largely because we are talking 1972, we were right at the height of the quantitative revolution and literally physical geography had almost become mathematics, and I felt it was a bridge too … for me it was just … a bridge too far. Every time you did any physical geography you were into integration again and I had left that behind. …

So at degree level your interest was more in the human than the physical? Only in the last year, that was probably again … we are talking frontiers and we are talking learning for the first time about Christaller, learning for the first time about diffusion. All of these things that now we teach to Year seven, these were all models, you know. The models of human geography appealed to me and I found all of that quite exciting because of course I had never done it before. (Anna, interview, 2003, lines 114-137)

Anna therefore had a mixed response to the 'new geography' that was emerging at this time. However, this did not affect how studying at Cambridge has influenced her self esteem:
Well I suppose ... they were "it" and so I suppose by implication I was "it" too.
I suppose at that age, I – I mean I was a fairly average Cambridge
geographer, much more a work-a-day Cambridge geographer than your
genius Cambridge geographer ... nearly everyone now either gets firsts or
2.I's I think that it is a recognition that the degree is actually a lot harder than
elsewhere, whereas when I did mine, two people got firsts and the rest of the
year group was split equally between upper and lower seconds, and you
know, I got a 2.2 and there was no shame in that because half the year
group got that. (Anna, interview, 2003, lines 99-110)

Although Anna had not enjoyed physical geography topics at University, her early
interest in geography was tied up with the physical environment. Anna had grown up
in Sunderland and the sea had been a big influence on her. She reflects on how
she wanted to explain geographical phenomena:

According to my brother in law ... "ever since I have known you, you have
been on about Long Shore Drift" because it really puzzled me. I used to think
"why are there no groynes in Sunderland?, why isn’t the beach getting
eroded, where is the long shore drift?". Well clearly, there was no long shore
drift as the angle of the coast is completely perpendicular to the waves, so
you only get onshore, offshore processes and it was very interesting also to
look at the beach sediment. (Anna, interview, 2003, lines 215-236)

She continues to discuss beach profiles, pebble patterns and the cannonball rocks
that she discovered as a child. Through these examples, Anna demonstrates her
active interest in geography through experiencing the world around her and applying
her geographical understanding. She elaborates on this:
When I was little we used to go to the beach and play on the cannonball rocks which are a very interesting limestone feature ... they are completely spherical and they look like balls, and all the rocks on the beach are spherical. And it is quite exciting and we used to play on those and so I suppose that would be a thing that I grew up with was the waves ... and I used to love watching the waves, and thinking about the waves. (Anna, interview, 2003, lines 244-250)

More recently, this interest in physical environment is reflected in a desire to travel:

I suppose I always wanted to travel and when we went to university we went to the States, and ... did the journey round Niagara, across Yellowstone, Yosemite, etc and the Grand Canyon obviously, and that was something we very much wanted to do ... we haven’t been back to Yellowstone yet, but we have been back to the Grand Canyon and Yosemite twice and so I wouldn’t have said that they were life changing events thought they were just what I wanted to do. (Anna, interview, 2003, lines 252-260)

Anna’s concept of herself as a geographer emerges from an interest in the physical environment and success at school. This is reinforced by an influential degree course which she values. She also emphasises that she has been influenced by natural environments and the sense of awe and wonder that they generate for her. She expresses an emotional and spiritual response, placed alongside an academic understanding of the world.
5.3.2 Relationship with school geography

Anna has strong views as to why she feels it is important to teach geography:

Well they've got to make judgements. A number of years ago, my mother got a letter about the fact that they were going to block off the bottom of their road, and her immediate reaction which was very conservative (with a small and large C). We don't want the road blocked off, and I said "why not, I would quite like to have ridden my bicycle on the road when I was little – if the road is blocked off you won't get people driving through, you won't get ..." – because there used to be a hospital at the bottom, and emergencies you used to get ambulances coming belting down our road, at God knows what speed – "you won't get ambulances coming belting down the road it will be much quieter". "Oh right yes, fine, I am quite happy with the road being blocked off" and she is happy, it is much nicer and that is one level ...Global warming decision making: what should they do about switching off lights? Should they drive to the shops at the bottom of the street in the car or should they walk? Raising an awareness of all of those issues. And of course, there is the famous awe and wonder thing that they would want to ... hopefully, not just go over in an airplane over the Grand Canyon but actually walk into it, walk down and breathe it in. So I think in so many different ways it affects your life. (Anna, interview, 2003, lines 142-163, brackets in original)

For both of the examples, Anna reflects both awe and wonder and decision making. However, the depth of argument she presents is quite superficial. She elaborates that her knowledge of geography has enabled her to construct learning experiences to challenge students.
Anna's focus on academic success is reflected in the pride she feels in the success of her students:

[I] Always start with the principle that it doesn't matter what level text you use with a group of people so long as you lead them on to the next level. ... I don't care what book I use with whom so long as it adds to their understanding and particularly if you have got sixth formers who are not very bright and you do get some, mainly those who come into this school ... who have come from another school and haven't had the background that ours have had. I don't know how they have got the grades but we get some who got As or Bs at GCSE and the level of understanding is pathetic they just don't know how they got that grade, they don't know anything. (Anna, interview, 2003, lines 167-183)

Anna is concerned that this decline in academic standards is due to the external examinations:

I did understand that a little bit when I looked at a GCSE exam paper ... and the trivial depth of understanding required by that syllabus was nearer Year 7. (Anna, interview, 2003, lines 184-188)

Although critical of academic standards, Anna is also concerned about a colleague who tries to make geography too difficult:

One of my colleagues here, is very keen to make everything seem hard, the harder it appears the better because then it is an important subject. I don't think so, but she blatantly obviously does, She would get them to do a chi-squared on anything. They showed me, they were doing a revision session,
and we were talking about chi-squared and they showed me what they had done and she had given them 50 columns and they had to measure all the orientation and then they had to ... and I said aargh and the simple one that you can see, where you have got the four sectors and a certain number facing and you go north east, north west, south west and south east and you just do it that way, and it shows you the chi-squared still proves that you get most corries in a north-easterly direction – you don’t have to do so many - they were lost in the calculation and I said it’s easy this is it ... (Anna, interview, 2003, lines 192-204)

Anna’s argument here is that geography does not need to be presented as a difficult subject but is accessible when it is taught well. This also affects how she teaches the subject:

But in my teaching I think it is quite clear, I would say that I definitely prefer to teach physical geography unless I’ve got a group of very interested (I’m talking at A ‘level now because it doesn’t matter lower down does it really) unless I’ve got a group of really interested and academic children it’s far more rewarding to teach the physical than the human because the human gets far too … (Anna, interview, 2003, lines 124-129)

Anna’s personal motives for teaching geography reflect what she wants her students to achieve:

To people to make them want to ask questions, to make them want to know about things, to make people want to go “wow”, to make people send me post cards from all over the world really. To have people send me a postcard that said, you know, climbed the top of this mountain and thought
about you, you know that sort of thing would be what I would want really.

Yes, obviously I want them to do well, good results, good GCSEs, good A’ levels. The number of people going on to do geography, I think has increased quite a bit recently. Quite a few of our current Year 13s are going to do geographical courses which is very rewarding. (Anna, interview, 2003, lines 282-292)

Anna has two areas of responsibility in the school: that of Head of Geography, but also as a pastoral Year Head. This shows her commitment to the school and to her students:

I took these Year 12s away this week and I taught lots of them when they were in Year 7, I’ve taught lots of their brothers and sisters and I know their parents, I mean, I am on first name terms with quite a few of their parents … and I get committed to a place and the children. I would very much like, and I’ve only come to realise this in relatively recently when I see people that I regard as incompetent being promoted, it annoys me that people who are incompetent and only interested in themselves are not actually interested in the children or doing their job. (Anna, interview, 2003, lines 355-362)

Her dedication to the school is further reflected when she spent a period of time abroad:

When we went to the States I dreamt about my school every night for six months – every night and some of them were really vivid dreams and I can still remember some of them – I was dreaming about what my colleagues were doing, the situation I was dreaming I hadn’t written my reports and then after six months – and I just think that as it has been so much a part of my
life and I wouldn’t want to be the sort of person who suddenly has nothing in that kind of way and I very much want to be in a situation where I am able to be of use to a school that I am familiar with and to also earn a bit of extra money.

*Teaching is not just a job to you is it?*

No, not at all. (Anna, interview, 2003, lines 391-402)

This emphasis on success is something that she considers with her own career development, which she contrasts to others and how they have developed their careers by taking on additional responsibilities:

my colleague ... she is a very different person to me, she makes notches on a stick, which is what sensible people do I suppose. ... I’m 52 next week which is getting old as I indicated just now about my colleague who notches things up I’ve never been like that and never been a notch up person.

(Anna, interview, 2003, lines 346-348)

The ideology triangle is a useful tool to show how Anna approaches teaching geography:

Oh this is hard, because if you said to me what is the role of a teacher I would have said that a teacher is a facilitator which puts me there, I think it is very important that you use an analytical approach, hypothesis testing. And I equally think that values and attitudes are very very important, so I think I would put myself slap bang in the middle and I don’t know where I am coming from and where I am going to But I think I am on a kind of .. you know one day I might be into number crunching and the next day I might be into how does this picture make you feel? And it would be one lesson I am
During this discussion she also provides a critique of other approaches to teaching geography:

I don't think I would want to go up to the top here I know there are some people who insist on the approach to lesson planning that every lesson has to be a question and that you can't plan unless it is a question. I don't think you can do that all the time I just don't think that every lesson can be a question. (Anna, interview, 2003, lines 418-420)

And what she thinks is important to geography:

Questioning and that's what this is going on to and it has to be all problem solving I don't go down that route where you have to do that all the time. I think that this, the values and attitudes, conflicts, damage, who makes the decisions. You know why the Americans won't sign up to global warming treaties properly and do their share when they make the biggest mess you know that. And do look at what is going on and you know when we take the Year 7s to Lulworth and go what is going on here and so I think ... Not really moving ... I suspect in my very early days I was more there being a child of the Quantitative Revolution and I mean I did more Spearman's ranks on things than other people when some people were still capes and bays and some people were probably – coming from that area – came from there – but that would be a long time ago – I think maybe. (Anna, interview, 2003, lines 433-445)
Anna finds it difficult to focus on any one particular approach to teaching geography, although she is critical of the enquiry approach. This is characteristic of her interview where she uses critique as a way of expressing her own position.
Figure 5.7 Anna's Ideology Triangle

The ideology triangle is about understanding spatial relations, patterns and processes. It involves making explicit approaches to implementing, interpreting, enacting, experiencing and problem-solving. It is used as a tool to enable case teachers to describe their approach to teaching geography. It is not meant as a definitive description of the range or variety of possible ideologies in geography teaching (see section 3.6).

Note: the ideology triangle has been used as a tool to enable the case teachers to describe their approach to teaching geography. It is not meant as a definitive description of the range or variety of possible ideologies in geography teaching (see section 3.6).
5.3.3 Other influences

Anna talks me through the construction of her 'cultures of influence' map. Her largest and most dominant influence is the geography culture which she created first. In doing this she reflects on how her personal culture and geography culture are entwined, highlighting their impact on geography education and school cultural understanding:

I think geography has to be a big square. The personal, my own life, is very much overlapping with geography. I have three children and one thing that I notice is that the children I teach who are the same age as my children are somehow special. So that the ones that are now 24 were the first Year 9s at this school when I came here in Year 9. We went through GCSEs together and we went through A levels together and we've gone through university and I still hear from some of them. A couple of them came to my 50th birthday party and they met [her son] for the first time and they had heard about him and if I speak to kids now they so there is a very close overlap between my family and the children I teach because geography is very much part of our family I suppose. I even did sixth form games and I did golf which is what I do if I don't teach. (Anna, interview, lines 455-467)

Previously in the interview, Anna states that she is committed to the school, and this is further reflected when she examines the influence of the school culture on her practice:

The school is part of this as well – I do I take part in things. I attend things that my year group are doing. I'll go and sit in their drama and bother about what they are doing. And the school is quite supportive of geography
because [the Head] likes you to take people on trips especially if there is some kudos on the trip so probably the school, certainly takes over my personal life I don’t think it is as big as the geography so it comes down that way. (Anna, interview, lines 468-474)

When reflecting on geography education culture, Anna discusses for the first time one of her current projects which is curriculum development and how she enjoys sharing ideas through the Staffordshire learning network Geography website:

Geography education – I think that is something that is growing because of things like SLN and interactive whiteboards and because of the links I’ve had with teacher training institutions force you to think about your own teaching and whether you are doing what you ought to be doing. So that’s probably bigger than school really – probably quite important because I get quite excited about different ideas and things (Anna, interview, lines 476-481)

Now, turning her attention to the educational culture, she reflects on its size, dominance and how it should be situated with the other cultures:

Education generally, I think that would probably be contained within education (School) but probably because of my links through teacher training institutions be stronger than I don’t always do starters and plenaries – I’ve been reading the Ofsted stuff on SLN and inspectors slate you if you don’t do a decent starter or plenary – and they have produced the lesson plan at school that we have to follow that lists the starter and plenary ... Other education comes within the geography education for me so it would be contained within that ... (Anna, interview, lines 483-493)
5.3.4 Classroom practice

Anna does not keep daily lesson plans, but refers to detailed Schemes of Work in the department handbook (see Appendix IV). I observed Anna teach three lessons.
Lesson One

The first lesson I observed was taught to a Year 11 class. The class was about to begin their coursework topic on global warming. There had been a dramatic snowfall in the area the night before, and Anna wanted to incorporate this into this lesson. On the way to the lesson, Anna talked to students, and was informal and relaxed. She had just returned from a fieldtrip and asked some students: “did you miss me?” whilst others approached her to ask how the fieldtrip went. She began the lesson by setting up her laptop and asking for jackets off.

She handed out the mystery starter which referred to the recent snow fall and how it had affected her mobile phone reception, whilst checking attendance and setting up the appropriate web-site. She introduced me and told them that they were her best group and that she loved them all. She introduced the mystery activity and explained that she was looking for a detailed answer. She also drew their attention to the moving satellite images that were being projected from the internet and gave them a time scale of five minutes to complete the mystery.

Some of the students started on the task straight away. Anna circulated around the room, supporting individuals in a friendly and relaxed manner. The lesson activity was based on her journey home. She had collected satellite information and weather data on the internet and structured it as a mystery on why she wasn’t able to get mobile phone reception. The students seemed animated and some were discussing the air pressure patterns shown in the moving image. When Anna drew this part of the lesson together she chose individuals to respond and directed them to which resource she wanted them to pass comment on. Anna then began to tell the students about her journey home and the movement of cold air and high pressure. Whilst she has explained the resources she referred to the work that they
Anna introduced them to the next lesson episode; a video on global warming, and asked them to take notes on the video. Whilst the students watched the video, Anna prepared the next part of the lesson. The next activity was to generate a list of terms, and she asked the students to ensure that they understood what terms meant. She explained the terms biotic and abiotic.

Her list included:

Causes
- Greenhouse effect v global warming
- Greenhouse gases
- Producers of greenhouse gases

Effects
- Several places
- Several different effects
- Small scale, large scale
- Long term, short term

Biotic, abiotic

Viewpoints
- Must care can't do much
- Don't care can do much
- Do care try to do
- Worry that the end of the world is nigh.

In her explanation she made a distinction between the greenhouse effect and global warming. In my notes, I remarked that her expectations were high and that her
explanation was in a transmission style. The lesson plenary involved the class returning to some of the aspects on the list. She asked the students to give an example of a place where global warming was being experienced, and one of the students offered Bangladesh as an answer. The student’s explanation had come specifically from the information covered in the video. The students found some of the follow-up questions difficult to answer.

Lesson two

The second lesson that I observed was an introductory lesson on farming in Japan to a Year 8 class. As the students start getting ready for the lesson, one called out and asked if she had a good trip, and she asked if they had a good history lesson yesterday. Again she introduced me and told them that they were the best Year 8 class, and that they were all very clever children who were the best behaved.

She started the lesson by asking them what they had been talking about. They responded that the previous lesson had been on classifications of industry. She followed this up by reminding them of work they had done in Year 8, and reminding them of a local farming case study. She then linked this to the lesson by informing them that they were staying with this theme but thinking about a different place.

She then played them a short video extract from the Japan 2000 series. The opening scenes of this series is a number of aerial shots of different parts of Japan showing a fly-over the landscapes accompanied by music. Anna hadn’t told them where the place was and I noted that all the students were mesmerised by the video. Once the video was over, Anna launched into what appeared to be an unplanned activity. She gave each student a piece of scrap paper to use as mini
whiteboards and asked them to write down where they thought the video clip was taken. At this point some of the students were finding it difficult to concentrate and Anna had to restate the class rules in order to get them back on task. Once they had all done this, she then asked each student to explain where they thought the video was taken and why. At this stage, the purpose of this part of the lesson appeared not to link with the rest of the lesson. The students responded by highlighting some of the landscape features from the video such as blue skies and blue seas, mountains. The students had clearly noticed a great deal about the video and this activity appeared to be testing their geographical and locational knowledge.

Anna then showed the next few minutes of the video which explained that the video was taken in Japan and the focus was on farming there. She then gave the students four minutes to write down all the things that people had said from their observations from the video because she emphasised that they were all true. She informed them that “This is your image of Japan – or rural Japan.”

Whilst they did this activity one of them asked if Japan was an island. Another asked what the fish farms were. She answered their questions knowledgeably. She then asked the students what they thought the video was about and played them a further section of the video that focussed on the countryside in Japan. After the video, she handed out a sheet of paper to the students and asked them to work in pairs to list the main points they remembered from the farming video. She gave them the target of ten things. Many of the students started the activity immediately. Once the students had completed this activity, she collated their lists on the board and then reminded them about their homework.
Lesson three

The third lesson I observed was a Year nine lesson focused on the structure of the rainforest. The plan for the start of this lesson was to play the start of the Living Planet DVD when the students entered the room. Unfortunately Anna was not ready in time and by the time the video was playing the students had already begun talking. This meant that the power of the opening scenes did not have the impact Anna had anticipated. The students appeared to find it difficult to focus asking “M’am what is he saying?”.

Anna informed the class that they would be focusing on the rainforest and reminded them of work previously covered on ecosystems and the definitions of key words linked to this topic such as communities, abiotic etc. She also reminded them of work they had previously completed on the equatorial climate in Singapore. She then informed them that they would be watching a video on what the rainforest was like. She started the video without informing students of the focus, and without indicating if they were expected to take notes.

Once the video clip was finished, Anna displayed an ecosystem diagram on the whiteboard. She asked the students questions about the diagram. She discussed with them the sunlight and trees, asking “do you run out into the sun?” and tried to make them consider the recent fieldtrip she had been on: “think of the people in Year 12 in Wales – some had lots of jumpers on – but were really happy because the sun was shining. So you can imagine what it is like”. She then linked this to the canopy of the rainforest by asking the following questions: “What were the features of emergent trees? They were very tall, and thin. What does the canopy do?”.

At this point, some of the students were not fully engaged. For example, she asked
why the rainforest was green and one student responded that it was due to
Greenpeace. She continued to discuss with them the structure of the rainforest,
conducting this part of the lesson as a class discussion focused on the whiteboard.
The students were then required to use a worksheet to fill in information about the
structure of the rainforest. The worksheet summarised the vocabulary that they
needed to know for the examination, and she worked through the sheet with the
class. The lesson ended with another section of the video for part of the next
lesson's topic and Anna gave them their homework before they left.

Anna did point out to me at the end of the day that it was coincidence that all the
lessons I observed had contained a video extract, and that she did not use a video
for every lesson.

5.3.5 'Expertise' and recommendation

After my initial appeal for recommendations of expert teachers, none of the female
teachers that I approached agreed to take part in the research. I therefore
approached other colleagues in ITE for further recommendations. It was from this
group that a colleague recommended Anna. Anna is the third expert teacher in this
stage of the data collection. Her recommendation comes from a PGCE tutor, but
not due to her work with PGCE students but because tutor had worked with her
whilst undertaking a maternity cover at the school. Her recommendation is
because:

The special qualities that Anna possesses that makes her practice good
might include: single mindedness, enthusiasm, dedication to the subject,
clear thinking, excellent planning skills, ability to work long hours without flagging.

The impact that her expertise has on those around her is more difficult to specify. In terms of pupils, I am sure it 'inspires' them (maybe too strong a word but I think that her expertise is one reason why pupils enjoy her lessons). In terms of colleagues on the staff, her expertise probably gains her respect.

Why has she become an expert? Perhaps some or all of the following: she has a very strong academic background; she has a strong personality; she enjoys teaching; she is a 'geographer'; she enjoys being a head of department. (referee email, 2003)

Anna herself discusses her 'expertise' which she feels lies very much in her academic geography credentials:

I think my subject knowledge is pretty good; I think my depth of understanding of the subject is pretty good. I am aware that other people don't have that background; even people with degrees in geography don't have that background or that understanding. I wouldn't say that it was the only thing that makes you into a good teacher but I think that some people can be very effective and not know a lot but be very effective because they have the charisma that they can actually hold the kids and therefore you can achieve a lot and I think for the kids to do well in your subject they do better if they have a confidence that any question they are going to ask you are going to be able to answer. The degree tends to help. (Anna, interview, 2003, lines 6-16)
Review

Anna values the self-esteem and status that she enjoys as a successful geographer. She also values the awe and wonder dimension of geography, and describes thinking geographically as important. In her teaching she describes valuing fieldwork as it enables her students to experience awe and wonder, and she is also keen for her students to experience academic success. Anna is also influenced by the school and personal cultures particularly as she sees them as connected through her children and her commitment to the school. Anna sees the educational culture (as expressed through examination specifications) as working against these values by “dumbing down” the quality of geography students learn.

Anna’s ‘expertise’ recommendation focused on her personal qualities and dedication. Anna herself feels that her subject knowledge also make her special.

5.4 Findings from the second cohort of case teachers

Chapter Four suggests that teachers have values which affect how they relate to geography and which affect how they teach the subject. The analysis of the three case teachers presented here supports that observation. Paul expressed strong values about place which was echoed in his understanding of geography and teaching. Dan valued geographical experiences that had helped him to see things in a different way, and Anna valued academic success in the subject and being able to understand the world around her. These themes are dominant in their discussion of the subject but they are not the only values expressed. All of the case teachers focused on their students and their academic success. To some extent, this may
have emerged from their own relationship with geography at school, as they all described experiencing academic success at school.

These values do not always sit comfortably together, Paul describes changing his teaching to centralise place as a concept. Dan describes the conflict he experiences between wanting to teach his students in a certain way whilst also being aware that he needs to ensure they get good examination results. Anna also describes how it was sometimes difficult for her to focus on academic success which she valued.

The next section returns to the three research themes and discusses what the data from all six case teachers reveals about those themes. Figure 5.9 shows how the research themes, the two cohorts of case teachers and the research questions are related.
Figure 5.9 Structure of research leading to Chapter 6

First cohort of case teachers:
- Steven
- Clive
- Mandy

Second cohort of case teachers:
- Paul
- Dan
- Anna

Relationship with Geography

Other Influences

Classroom Practice

Research Question:
How can subject knowledge influence 'expert' geography teachers' practice?

Research Question:
How can other influences affect 'expert' geography teachers' practice?

Teaching "Expertise"

Recommendations

Research Theme: Geography teachers' subject knowledge

Research Theme: Teaching "Expertise"

Research Theme: Other influences on teachers' practice
6 Chapter Six – Discussion

This chapter discusses the data in relation to the two research questions. The main part of the chapter is divided into two sections. The second research question: how do other influences affect ‘expert’ geography teachers’ practice? is addressed first as it provides the context for the case teachers’ practice. This context is described before examining the narrower detail of how can subject knowledge influence ‘expert’ geography teachers’ practice? (the first research question). The research does not seek to make generalisations about the whole population of ‘expert’ geography teachers, but to make observations and generalisations about the case teachers who have participated in this research. Synthesising the data enables a deeper understanding of the individual cases, and deepens and extends the understanding of how subject knowledge can be used by ‘expert’ geography teachers.

The chapter also addresses two other areas. It begins with a discussion of the data collection tools used, and concludes with some observations about the research theme of teacher ‘expertise’.

6.1 Data collection tools

This section discusses the three principal data collection tools used in the second cohort of cases: the use of narrative, the ‘cultures of influence’ maps and the ideology triangles. Each tool was used by the second cohort of case teachers to describe their relationship with geography and teaching. The discussion examines how successful these tools are and the issues that have arisen in the interpretation and analysis.
evaluation of the data collection methods form part of Chapter 3 (section 3.5.1). The discussion here is additional to this. The specific focus here is on how each teacher responded to the data collection tools using examples drawn from the data. In this way, we can illustrate the manner in which the data collection tools have contributed to the research findings.

6.1.1 Narrative

As outlined in Chapter 3, Elbaz (1990) critiqued research methods that divided teachers' knowledge into discrete components of theory and practice. She noted that teachers understand and describe their practice in a holistic way, through the use of narratives or 'stories'. In Environmental Education, this has been extended further into encouraging activists to discuss their Significant Life Experiences (SLEs) (Chawla, 1998; Chawla, 2001). SLEs enable participants to express themselves in a fairly unstructured narrative. Section 3.6.2 explains how SLEs have been used in this research. All the case teachers used narrative as a way of expressing their ideas and thoughts about geography and teaching geography (see discussion in section 3.6.2). It is useful to examine this in more detail, because the construction of the narrative can be illuminative about the values and beliefs that underpin the case teachers' motivation: the narrative can reveal more than just the recollection of an event. For example, in the extract below, Anna told a brief narrative about a conversation with her cousin:

I did the old S' level\textsuperscript{11} in those days, and we didn't do any preparation for it at school. Nobody was ever taught to do S' level. And I remember my cousin
who was three years older than me and did a degree in geography, came to visit me just as she was finishing her degree, and I was lying in the back garden, and she said "haven't you got your S 'Level next week" and I said "yes, but I don't know what I've got to do for that, I just have to think geographical thoughts haven't I?" And I went into it, and I got a distinction. So I suppose my brain must have always meant that I found doing geography very easy and therefore, to that extent you enjoy it. (Anna, interview, 2003, lines 29-38)

The construction of this narrative highlights several points worthy of note about Anna. Anna builds the status of her cousin as a geographer by mentioning her age and degree status, which she contrasts with a picture of herself as relaxed "lying in the back garden". This contrast is reinforced by the concern expressed by her cousin, and her own relaxed attitude towards her impending examination. This is further emphasised in her expression of how seemingly natural geographical study was for her "I just have to think geographical thoughts haven't I?", and how she was still able to attain the highest grade possible. The purpose of this story is to demonstrate that Anna perceived success in geography as a 'natural', almost latent, talent that she possesses. The use of a narrative enables her to express this meaningfully.

The narrative however also presents an interesting conundrum. In this story, Anna attempts to explain her perspective on learning geography, as she experienced it. What assumptions underpin her assertion that she was able to just think geographical thoughts in order to be successful in geography? Her narrative may suggest assumptions about learning: that success is based on innate ability. But it may also suggest that learning is an approach to thinking and that there is a way of thinking that

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11 S' level – known as the Special Level – was an additional public examination that could be taken for those expected to get excellent results at A' level.
is inherently geographical. It may be simply that she enjoyed the content of geography so much that it was something that she enjoyed thinking about and considering. In other words, the exact meaning of “thinking geographical thoughts” is not clear, but the use of this phrase hides a deeper meaning about her approach to learning geography at least as she encountered it at school.

Paul similarly uses narrative to enable him to express a difficult message. In the extract below, he describes a trip to Dungeness with his father:

And although my parents have always encouraged us, they don’t quite know why I am interested in it. Over half term, 3 weeks ago, I took my dad (my mum is not around any more) out to Dungeness. Because I love places like Dungeness, and it was quite a cold October day and the sun was shining. And I said, “it might be a bit bleak” and that’s the thing that he remembers about it: it’s a bit bleak. And he asked me absolutely clearly: “why are we going here” and my only reason was because I haven’t been there before and I think it’s great. He never understood that, he had a lovely day out with me, but he never understood why we went, because he thought it was a bleak place.

(Paul, interview, 2003, lines 127-136)

The use of this recollection enables Paul to express the nature of his regard for different places. He emphasises the bleakness of the place, and also his father’s inability to appreciate the place in the same way. He uses his father’s lack of interest to contrast his own response, which is that the place was “great”. Paul uses this narrative to show how his appreciation of place is more than an aesthetic appreciation. He wants to express how he appreciates different aspects of place from other people.

Dan also uses a short narrative to recollect a key memory:
I think I wasn't stretched which is one of the reasons why I messed about, and was naughty. I remember the first lesson at A' level geography and we had quite a boring teacher. He was a very nice man, he was a good teacher actually, but he wasn't very enthusiastic and didn't get you enthusiastic. And I remember sitting there thinking, "I've got to behave here, with all these girls and things. We are 16 now." And I started to listen a little bit and started answering questions a little bit, and I remember him saying to me, and again a key memory, I remember him saying "what a fantastic answer! That was, really really good". And he referred to it about 8 times in the lesson, and I was really glowing at the end, fantastic! "I am good at geography". And it was quite an influence really. I thought I can do this. And so I became quite self-motivated and settled down generally. (Dan, interview, 2003, lines 206-218)

Dan uses narrative throughout his interview when recording key moments or changes in his thinking. The use of a narrative here helps to recreate the situation for the listener through Dan's eyes, offering an insight into why this event was an influence for him. Dan recounts his feelings before and after the incident, and explains how the teacher's intervention contributed to his changing self-perception. As retold, it demonstrates a powerful memory of an event that had an impact on him and his self-awareness.

However, as with Anna's example, this quotation poses further questions. Dan describes his teacher as having been "good" on one hand, and on the other described him as "boring" and "unenthusiastic". This would appear to be a contradiction, but suggests something about Dan's assumptions about teaching. He also claims that he tries to use his personality in his teaching, but the above extract would seem to indicate that good teachers do not have to be engaging or even interesting.
Presumably, Dan's teacher was knowledgeable about his subject, but there is a question in Dan's mind over the extent to which teachers need to use their subject knowledge to engage and enthuse pupils. It is possible that Dan uses the term "good" here to indicate a popular conception of "good" teachers that they are experts in their field (as described by Moore, 2004).

Narratives have been a successful device to enable the case teachers to discuss influences on them. They have been used to describe incidents but also to help explain their influence and importance to the case teachers. However, narratives are also partial accounts and of course, are based on (presumably faulty) recollection. Whilst they enable us to perceive the world through the story-teller's eyes, they are useful only as recollections of the influence of an event and not as accurate accounts. As such, narratives can reveal the complexity of what teachers are trying to express. For the purpose of this research, the interpretation of meaning conveyed through the narratives, are as important as the face value of the narratives in themselves.

6.1.2 'Cultures of influence' maps

How the 'cultures of influence' maps are created and introduced to the teachers is discussed in section 3.5.3. For the first cohort of cases, the 'cultures of influence' maps were used as a way of categorising and organising the data so that the relationship between geography and teaching geography could be situated within the other influences on that teacher's practice. For the first cohort of cases the maps were drawn, firstly by me, and then also by the External Researcher. The 'cultures of influence' maps were drawn by the ER and by myself so that we could represent our 'reading' of the data. The case teachers were also given an opportunity to draw one, although this was only taken up by Steven.
In the second cohort of cases, the ‘cultures of influence’ maps became a data collection tool to enable the case teachers to discuss and describe how the ‘cultures of influence’ affect their practice. The teachers were shown a ‘cultures of influence’ map, and were asked to construct their own, explaining why they situated and scaled the influences in the ways that they had. The purpose of this was to enable the case teachers to explain the extent to which geography had affected their practice, and to compare its significance with other influences. It also provided an opportunity for the teachers to discuss the significance of the influences and to practise a form of metacognition. The ‘map’ represents scale and situation, to show influence and significance of the ‘cultures of influence’. In the analysis of these maps, the scale and situation of the geography culture and geography education culture were examined in each instance (see Figure 6.1).
Figure 6.1 Table summarising the key features of the ‘cultures of influence’ maps

<table>
<thead>
<tr>
<th>Map features</th>
<th>Steven</th>
<th>Clive</th>
<th>Mandy</th>
<th>Paul</th>
<th>Dan</th>
<th>Anna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most dominant culture</td>
<td>School</td>
<td>Geography</td>
<td>Personal</td>
<td>Geography</td>
<td>Education</td>
<td>Geography</td>
</tr>
<tr>
<td>Least dominant culture</td>
<td>Geography</td>
<td>Personal</td>
<td>Geography education</td>
<td>Personal</td>
<td>School</td>
<td>Educational</td>
</tr>
<tr>
<td>Scale of geography culture (in relation to other cultures)</td>
<td>Third of five</td>
<td>First of five</td>
<td>Second of five</td>
<td>First of five</td>
<td>Fourth of five</td>
<td>First of five</td>
</tr>
<tr>
<td>Scale of geography education culture (in relation to other cultures)</td>
<td>Last of five</td>
<td>Third of five</td>
<td>Last of five</td>
<td>Fourth of five</td>
<td>Second of five</td>
<td>Fourth of five</td>
</tr>
<tr>
<td>Situation of geography culture</td>
<td>Central and nested within educational culture and partly in school culture.</td>
<td>Dominant and taking up a large amount of personal culture and educational culture and overlapping geography education culture.</td>
<td>Quite large but mostly nested within personal culture and to some extent Educational culture.</td>
<td>At the centre, with school, and personal cultures contained within it.</td>
<td>At the centre but totally inside personal culture.</td>
<td>At the centre and dominant with educational and school and personal largely within it.</td>
</tr>
<tr>
<td>Situation of geography education culture</td>
<td>Small but central and with a large overlap with school culture.</td>
<td>Settled between school and educational cultures and not much overlap with geography.</td>
<td>At the centre of map, and largely covering educational and school cultures.</td>
<td>Quite important but mostly inside educational and geography cultures.</td>
<td>Large and with a big overlap with educational cultures and geography culture.</td>
<td>Sat mostly within geography culture and with educational culture nested within it.</td>
</tr>
</tbody>
</table>
Figure 6.1 shows how the 'cultures of influence' have affected the case teachers and to what extent they are more or less influential than the geography and geography education cultures. The geography and geography education cultures are not always the largest influence, but are nearly always (in the cases presented) situated centrally. This is significant, as a central situation suggests that geography and geography education are important or central influences but not necessarily the biggest influence on a teacher's practice. It is widely accepted that teachers value their subject as they have chosen to teach it (see Morgan & Lambert, 2005). However, the maps appear to indicate that since having made the decision to teach their subject, other influences assume more importance to their practice. This demonstrates the complex messiness of trying to understand human and social processes with multiple influences, but also would seem to suggest that continual engagement with the subject when teaching (described as intellectual engagement by Morgan and Lambert, 2005) is not a common feature with these case teachers. In other words, engagement with the subject has to jostle with several over priorities in the teachers' cultural context, and may sometimes be temporarily disregarded.

If this is the case, and the case teachers experience competing influences alongside the subject, then this raises questions about the importance of the subject in teaching, and to what extent it is necessary. The 'cultures of influence' maps suggest that the most significant influences on teachers' practice have been the school and educational cultures. This finding is in line with Watkins (2005) who has argued that recent education policy has been designed to put pressure on teachers. Recent government policies have focussed on pedagogical initiatives (Stobart & Stoll, 2005). The most recent policy to refer to subject content was the National Curriculum Orders of 2000.
This research indicates that these influences may have had an impact on how the case teachers have used their subject knowledge. This is discussed further in section 6.3.4.

6.1.3 Ideology triangles

The third data collection tool, used only with the second cohort of cases, was the ideology triangle. The ideology triangle is based on the concept of a triangle graph, for example, as used in the classification of soil texture (between three variables sand, silt and clay). Some of the drawbacks of using this data collection method are described in section 3.6.2. The triangle is used as a heuristic device. Conflicting ideological beliefs can be held simultaneously and of course, we cannot measure relative composition of ideological influence in the same way we can measure sand, clay or silt. A geography teacher's perspective is not made up of discrete percentages of beliefs unlike the texture of a soil. Also the triangle is restricted to only three ideological viewpoints. However, the triangle is used to enable the case teachers to discuss how they view themselves in relation to the contrasting ideologies presented. It provides an opportunity for the case teachers to discuss their views on these contrasting ideologies in a simple, visual way. The 'scaffolding' provided by the ideology triangle was helpful precisely because few teachers have the vocabulary or background to discuss ideologies in geography or education with much confidence (Kent, 2006).

The ideology triangles represent only three perspectives taken from different periods in geography's history (see Unwin, 1992, and section 3.6.2). The three traditions broadly represent development and influences in geography, at least
in the period leading to the establishment of a national curriculum (see section 2.1.2), and although this does not represent a complete picture they provide a simple system of polarities for teachers to respond to. It is possible that the users of this device might highlight that these other areas are omitted, or that they might try to 'fit' themselves into the limited alternatives offered. The actual result of the diagram is only useful to the data set when taken with the dialogue and description that the case teacher provided as to why they were situating themselves in this way. Figure 6.2 demonstrates these ideology triangles of the three cases for ease of comparison.

Figure 6.2 Ideology triangles drawn by Paul, Dan and Anna

Figure 6.2 shows that the three teachers identified different starting points: Anna identified herself with the quantitative/spatial science tradition (a component of her degree course). Dan started from a people and environment position and saw himself moving towards a more critical view of geography education. Paul
began from a more balanced position between a quantitative and people and environment approach. These case teachers perceive geography education in noticeably different ways.

Paul uses the ideology triangle to discuss how his development as a geography teacher has changed. He shows that he has valued a content-rich approach to geography (see Paul interview, lines 457-460). At first Paul refers to himself as a “fountain of knowledge” and then as a “guider” who still maintains an interest in facts. He also identifies his interests in conflict and issues (lines 469-471), but he claims to be moving towards a more post-modern approach as he recalls:

I wouldn't say read landscape as text, but use a whole range of geographical phenomena as text. (Paul, interview, lines 489-490)

Dan makes an initial judgement as to the purpose of the task:

It's tricky – I'm all three. I would like to move towards that. I do all three, but this is more about philosophy than what you do, isn't it really? (Dan interview, lines 547-548)

He then completed the rest of the triangle without further discussion. Anna, in contrast, used this as an opportunity to give a detailed account of her development (full discussion in lines 348-387) of which an extract is illustrated here:

Oh this is hard, because if you said to me what is the role of a teacher I would have said that a teacher is a facilitator which puts me there. I think it is very important that you use an analytical approach, hypothesis
testing. And I equally think that values and attitudes are very very important, so I think I would put myself slap bang in the middle. I don’t know where I am coming from and where I am going to. But I think I am on a kind of ... you know, one day I might be into number crunching, and the next day I might be into “how does this picture make you feel?” . And it would be one lesson I am doing this and the next lesson I am doing that, and I would go home at the end of the day and think hmm – or I have a headache and say open your textbook, and go home and think “oh God that was a crap lesson”. I really think yeah ... (Anna, interview, 2003, lines 405-416)

Anna could not identify with a single ideological position. She describes how her early geographical development was important, but she has also been influenced by, and is critically aware of, other developments in geography education. This awareness could be attributed to Anna’s metacognition of her own development, and also demonstrates the complexity of describing how a teacher understands his or her subject knowledge and how the case teachers could not be aligned with a single approach or persuasion, a finding supported by other research on ‘novice’ teachers (Barrett-Hacking, 1996; Martin, 2006).

The triangles have therefore been successful in the cases of Paul and Anna to enable them to discuss their development, in a way that the direct narrative was not able to. The triangles are also useful in emphasising the link between teachers’ subject knowledge and how they perceive teaching geography. However, their main contribution to the research is in illuminating the complexity of the link between subject knowledge and the teaching of geography. The triangles were about teaching geography but both Paul and Anna describe
similar trends to their own geographical knowledge development. This is discussed further in section 6.3.

Review

It is acknowledged that understanding the beliefs of others is a challenging task (Parajes, 1992; Fenstermacher, 1994). This research has used innovative data collection strategies heuristically to help the researcher and the case teachers to articulate and discuss the influences on their teaching. The combination of all the data collection techniques provides a rich data set for each of the case teachers that is fit for purpose in illuminating the research questions.

6.2 Other influences on the case teachers’ practice

This section examines the influences the case teachers identified as having affected their practice beyond their subject knowledge. As shown in Chapters 4 and 5 some case teachers found it easy to identify other influences; for example, Clive discusses his motivation for using ICT, and Anna describes a strong relationship with her school. Some other influences are more difficult to classify. For example, most of the case teachers mentioned travelling as an influence on their practice, but to what extent is travel part of their personal or geography cultures? As travel normally takes place with family and friends and in the teachers’ spare time it has been recorded as part of their personal culture, but its influence on their geographical understanding is also acknowledged. Other influences, such as key people, have also been recorded as part of their personal culture. In the case of Dan, where particular people have influenced his geographical understanding, this could be seen as part of the geography or geography education culture. Therefore, it is acknowledged that there are
crossovers and blurred boundaries between these ‘cultures of influence’. However, they are useful as a way of categorising the sources of other influences on teachers’ practice. This section describes the educational, school and personal cultures of influence in turn.

6.2.1 Influence of educational culture

This section describes how the educational culture influences the case teachers. None of the case teachers made specific reference to the culture itself, but where they discussed the National Curriculum, or government Strategies or regulatory bodies like Ofsted, this was all taken as evidence of the educational culture influencing them.

All of the case teachers taught in England, working with the National Curriculum and examination specifications. The data collection for the first cohort of case teachers was completed within a couple of months. There was then a time lag (of four years) before the data for the second cohort of case teachers were collected. Therefore it is reasonable to compare the educational climate between the case teachers within each cohort but not between them.

When Steven drew his own ‘cultures of influence’ map, a discrepancy arose between how he and I had defined the educational culture. When I constructed his ‘cultures of influence’ map, I considered his membership within a Humanities department to be part of the school culture. However, he used this as a reason for drawing a large educational culture in his own version of the map (see Figure 4.2). Steven considers the inclusion of geography within a humanities umbrella as being a widely accepted feature of the educational culture, whereas I had
assumed it was more a school-based decision, influenced by the local context. This difference of opinion exemplifies Rawling’s (2001) point that educational policies have to be interpreted and implemented at a local level, and therefore whilst the educational culture may be expressed through policies and legislation, what happens in schools may not be the same everywhere. On the other hand, school cultures maybe so strong that for teachers what happens in school may be presumed to be the norm in some ways.

Paul indicates that he approves of the way that Geography is expressed in the National Curriculum:

Well, the geography I teach comes from the National Curriculum, so it is not necessarily the geography that I want to teach. It happens to be the geography that I want to teach. (Paul, interview, 2003, lines 374-376, my emphasis)

He also argues that feedback from Ofsted inspections have been a positive influence on his practice, making him consider different aspects of his teaching and learning (see Paul interview, lines 364-371). Through these perspectives, it appears that Paul is not critical of the current educational culture. Whereas Anna sees the educational culture as something that she has to work around:

I don’t always do starters and plenaries. I’ve been reading the Ofsted stuff on SLN, and inspectors slate you if you don’t do a decent starter or plenary. They have produced the lesson plan at school that we have to follow that lists the starter and plenary. (Anna, interview, 2003, lines 485-487)
Dan also acknowledges government legislation, but does not give it overt attention:

I've made sure we cover the National Curriculum roughly. But with our Year 9 exam work, for example, I can't even remember what we are supposed to do on Japan, but we make sure that they know a few important features about Japan and also their literacy develops when they do Japan – that is the thing that we really work on. (Dan, interview, 2003, lines 436-441)

The educational culture is driven by the dominant ideologies of the current government. Rawling (2001) demonstrates how actors with sympathy with different ideological traditions were instrumental in the design of the Geography National Curriculum. She argues that the educational policy of the then Labour government is situated within a combination of Reconstructionist and Vocational ideological traditions (see Figure 2.5). The case teachers express the importance of this macro-context for getting good results and preparing students for the workplace. But how they do this depends on the extent to which they agree with the dominant ideological perspective. Therefore when they agree with it, they use it to justify their actions, and when they disagree, they discuss working 'around' the policy, In this respect, the educational culture influences the macro context of curriculum design, but the case teachers 'make' their local curriculum (for further explanation of this term see Brooks, 2006). Therefore the influence of this culture on their practice is affected by their overall values about teaching geography.
6.2.2 Influence of school culture

This section describes how the school culture influences the case teachers. All of the case teachers worked in different schools in different areas, and the school context affects their practice in different ways. For instance, Steven worked within a school curriculum that was highly prescriptive, and had adopted his own form of planning to take ownership of the department schemes of work. These personal plans were also highly prescriptive (see Appendix IV for examples). Steven, as a fairly junior member of the department, did not feel he was in a position to influence the department to a great extent, but had adopted the departmental approach to planning. This is emphasised in his own 'cultures of influence' map where he gives high status to the school culture. In contrast, Clive also identifies the school culture as a strong influence, but as the previous Head of Department and an AST, Clive has much more control over what was taught in the department. This is further emphasised when Clive discusses how he has tried to ensure that geography played a key role in the development of the Technology Status bid (Clive interview, lines 264-265). Therefore, Clive has been a significant influence on his school culture, through ensuring that geography has a high profile within the school and whole school developments.

In contrast, Anna and Mandy both attribute particular influences from the school culture on their practice. For Anna, the school has a significant emotional link, one that stems from her own family connections (Anna, interview, lines 379-384). This is also reflected in how Anna perceives her students as different from those who joined it from other institutions:

Particularly if you have got sixth formers who are not very bright and you do get some, mainly those who come into this school ... who have come
from another school and haven't had the background that ours have had. I don't know how they have got the grades but we get some who got As or Bs at GCSE, and the level of understanding is pathetic. They just don't know how they got that grade. They don't know anything. (Anna, interview, 2003, lines 178-184)

Anna expresses pride in her students and their achievements which echoes the values she holds in her own education (see section 5.3.1). Her response to the school culture therefore is in line with the overall values that she has expressed through her data.

Mandy uses examples from her family during her teaching because that is “so outside the kids' experience” (Mandy interview, line 522). Similarly, Mandy expresses values related to social justice and developing understanding of social and political issues which are reflected in her school and department aims. She links her own values with the school culture.

Therefore, the extent and influence of the school culture is as individual as the teachers themselves. Clive shows that the teachers can influence the school context as well as be influenced by it, suggesting a symbiotic relationship between the ‘cultures’ and the teachers. The extent to which the case teachers are influenced by their school culture would seem to depend on their own values and what they perceive as important. In the case of Anna and Mandy, an emphasis on the students in their value scheme would seem to echo that they rate their school culture as important. Steven sees the school culture as an important dimension of his career. Clive sees geography as a vehicle to express his own power and influence within the school.
6.2.3 Influence of personal culture

This section discusses how the personal cultures of the case teachers can affect their practice. The case teachers are influenced differently by their personal cultures. However, three areas of similarity are noted and described here: 'success', people and travel. It is acknowledged that there is some cross-over between these influences and the other 'cultures of influence' for example, the influence of travel can be understood as both coming from personal and geographical cultures, but is included herein.

6.2.4 ‘Success’

All of the case teachers recall enjoying studying geography but not necessarily at school. Anna is somewhat dismissive of the geography that she studied at school, recalling:

When I think about it, when I think about what school geography was like when I did it, I can't imagine why I chose to do it. Because, I mean, really, learning lists of imports and exports, and drawing maps of Africa with where they grew soya beans, it's enough to drive you to distraction. (Anna, interview, 2003, lines 19-23)

However, all the case teachers describe enjoying studying geography at some point. They offer various reasons as to why they enjoyed their early experiences of school geography (Figure 6.3).
Figure 6.3 Reasons why case teachers enjoyed geography at school

<table>
<thead>
<tr>
<th>Case Teachers</th>
<th>Reasons for enjoying geography at school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven</td>
<td>Good teacher</td>
</tr>
<tr>
<td></td>
<td>Best results</td>
</tr>
<tr>
<td>Clive</td>
<td>Experience of other places</td>
</tr>
<tr>
<td></td>
<td>Fascinating subject</td>
</tr>
<tr>
<td>Mandy</td>
<td>Found geography fascinating</td>
</tr>
<tr>
<td></td>
<td>Enjoyed style of assessment</td>
</tr>
<tr>
<td>Paul</td>
<td>Excitement of travel</td>
</tr>
<tr>
<td></td>
<td>Academic success</td>
</tr>
<tr>
<td>Dan</td>
<td>Academic challenge</td>
</tr>
<tr>
<td></td>
<td>Was ‘good’ at geography</td>
</tr>
<tr>
<td>Anna</td>
<td>Awe and wonder</td>
</tr>
<tr>
<td></td>
<td>Found geography easy</td>
</tr>
</tbody>
</table>

The reasons fall into two broad categories, some enjoyed the process of study of geography (expressed as “academic challenge” by Dan) and for some it was the content of geographical study (expressed as “finding geography fascinating” by Mandy). In either case, enjoying geography at school was also tied up with being “good” at geography. This was expressed by all of the case teachers who had each experienced some degree of academic success in their school studies.

This is explained here by Mandy:

And I decided that my strength was Geography and my interest was Geography. And I think that the interest and enjoyment stems back right through secondary school and probably back to primary school to where you have experienced success and where you have really been fascinated by it, and I did find the subject fascinating and I still do and to be able to carry on doing that and I think that’s what really did it. (Mandy, interview, 1999, lines 128-134)

This was often expressed in comparison to other subjects:
I have to be honest; it was the one that I had the greatest chance of doing a degree in, in the first place. In context of the other A levels and the results that I was going to get – geography was always going to be the better result. (Steven, interview, 1999, lines 29-32)

Being better at geography than other subjects, and in some instances better than anyone else (see Paul interview, lines 19-21), made the case teachers believe that they were “good” at geography. In some cases this is expressed as a ‘natural’ quality to their character. For instance, Anna’s described not having to work at geography at school but getting results through “thinking geographical thoughts” (see section 6.1.1).

Not all the case teachers describe being good at geography in such terms. Being successful at geography in school came as a surprise to Dan. He recalls how he felt:

I was really glowing at the end, fantastic, “I am good at geography” and it was quite an influence really, and I thought I can do this (Dan, interview, 2003, lines 215-217)

As we saw in section 6.1.1, this quotation indicates the impact of a key moment that changed Dan’s self-perception due to recognition by his teacher. Steven also identifies that he had been influenced by a charismatic geography teacher. For Mandy, the emphasis on coursework is one factor that encouraged her to pursue geographical study further.
In some cases the effect of being 'good' at geography is expressed explicitly in terms of the impact succeeding had on their self-esteem. Paul recounts how this made him feel:

... and then eventually I realised that I was good at geography in the whole intake. ... So I got a lot of self-esteem and status through that (Paul, interview, 2003, lines 20-22)

Anna makes the connection between self-confidence and being successful explicit and how it affects her lesson planning:

I mean I try to keep it simple so that other people have confidence. Sometimes with some boys that slightly backfires in as much as they like to think they are above such things and they like to do macho things ...

(Anna, interview, 2003, lines 208-210)

This analysis supports the unsurprising view that prior success is significant in the formation of a subject specialist teacher. Success provides a boost to the case teacher’s confidence to pursue geography study, and the motivation to continue to be successful. Experiencing early success at school enables these case teachers to develop confidence and an awareness of themselves as 'successful' in geography.

In terms of their practice, there was evidence, particularly from the lesson observations, that all the case teachers were aware of the importance of a learner’s self esteem and self image. Mandy’s lessons, for example, were characterised by space for individualised support. Similarly, the observation
notes from Dan’s lesson highlight how he focused on individuals and encouraged their individual contributions:

He encouraged them to work together and to share their expertise:

"James knows all the technical terms – so he can help you." (Dan, lesson observation, 2003)

He observed that one student had misunderstood evaporation and took her to the window to observe some melted snow and the effect it had had on the roof. (Dan, lesson observation, 2003)

Anna discusses how she tries to focus on what different students need based on their academic ability or previous school experience (see lines 167-191). She refers to taking a “bottom up” approach and using any text with learners as long as you can “lead them to the next level”, and that “it adds to their understanding”. Paul also pays special attention to individuals and is explicit in how he values their contributions in class. This is evident in his instructions to students during one of his lessons (section 5.1.4) where he tells them “I will not judge you, I will thank you, and I hope 11 people will briefly tell you what you could be doing”. He also makes positive comments about each groups’ presentations and in his other interactions with them.

The data analysis has shown that experiencing success is something that these teachers valued. Enabling children to experience success is a key element of their professional identity and behaviour.
6.2.5 People

All of the case teachers cite a range of people as having influenced their work and teaching. The influential people they identify can be grouped into four categories: family, colleagues, students, and inspirational people. Although, family, colleagues and students can all be 'inspirational people', this category represents individuals who have had a particular inspirational affect on the case teachers. A person can wield influence to do something in a particular way: either to direct their action in a particular direction (ie, towards a value or belief) or to deter their action away from a particular path. The effect of each influence is often expressed differently and, in the accounts that follow not all categories are mentioned by every case teacher.

Family influences the case teachers in a variety of ways. For example, Dan indicates that having a family meant that he worked fewer hours so that he could spend time with his children. Dan and Clive both indicate that family experiences had affected career decisions (ie, due to getting married or experiencing problems in their marriage). Such influences on their practice serve as useful reminders that teachers' life histories can affect their career (as acknowledged by Goodson & Hargreaves (1996)).

Some of the case teachers also indicate that there are more direct, overt 'geographical' links with their family. Paul met his wife at university and discussed at length how his geographical links were bonding ties with his family and friends. Early geographical experiences are also linked with family (by Paul, Dan and Anna), and in the case of Anna, who taught where her children go to school, there is a strong link with her children and her commitment to the school.
These are all examples of influences that have a positive, bonding effect with the teaching of geography.

Several case teachers also cite colleagues as having an influence on their behaviour, understanding or practice. Dan recalls useful advice:

I tend to be a bit of a perfectionist, or used to be. I am not any more because wiser older teachers have taught me to get out of school as soon as possible, and to get home and to see the kids, and to try not to work in the evenings if you can. And when things are important, do them well but when they are not, can they be left? And so that has kept me fresh I hope. (Dan, interview, 2003, lines 377-381)

For Paul, his colleagues and their ranging ‘expertise’ have also affected how he works and organises his department on a day-to-day basis (Paul, interview, lines 424-428). Anne, however, is critical of her colleagues and how they manage their careers, contrasting how she herself wishes to work:

When I see people that I regard as incompetent being promoted, it annoys me, that people who are incompetent and only interested in themselves, are not actually interested in the children or doing their job. (Anna, interview, 2003, lines 359-362)

Colleagues have therefore been both a positive or, as with Anna, a more negative influence that deters her from behaving in a particular way.

The case teachers also cite their students as another influence on their practice. For Mandy, for example, the children, their backgrounds, and their experience
growing up in this region, encourage her to develop experiences for them that open their eyes to a more multicultural and diverse world (Mandy interview, line 522). Dan discusses how he felt a conflict between giving the students what they need to pass exams and the kind of geography that he valued (Dan interview, lines 358-371). Dan indicates that whilst he wants to teach geography in a particular way, the pressure he feels to fulfil a responsibility for his students and their examination success tempers his preferred approach for teaching geography. For Anna, the children she teaches seemed to play a much more inspirational role, adding to her motivation to teach:

I enjoyed it. I like the kids. One of the best things about the job is … I mean, I took these Year 12s away this week and I taught lots of them when they were in Year 7, I’ve taught lots of their brothers and sisters and I know their parents: I mean, I am on first name terms with quite a few of their parents … and I get committed to a place and the children. (Anna, interview, 2003, lines 354-358)

The case teachers also describe key inspirational people as affecting their development. Steven refers to being influenced by a charismatic teacher at school. Dan’s narrative recalls highly influential encounters with two inspirational geographers (at university and at a field studies centre). This contact has affected how he thinks about geography by pushing him towards a particular geographical approach. Anna also clearly values being surrounded by Cambridge geographers during her undergraduate studies. She refers to feeling that she was “it” whilst studying at Cambridge, even though she described herself as “a fairly average Cambridge geographer” (lines 84-93, and section 5.3.1).
Paul remembers having been inspired in his early years by colleagues who helped him to begin his writing career (lines 338-345). For Paul, inspiration also came from colleagues who had travelled widely. This was particularly the case as a member of the Boys Brigade and at university, when he recalls being impressed by people with extensive travel experience (Paul interview, lines 186-201). Most of the case teachers describe influential people as having exerted a positive influence on their practice.

People have played an important role in influencing these geography teachers, both through their relationship with the teacher and the different perspectives they’ve described. Although similar groups of people have been identified as being influential, they haven’t had the same type of influence on each case teacher.

6.2.6 Travel

For geography teachers, experiences of different places and of travel are surely significant influences on their understanding of geography and their teaching. This is certainly true for Paul and Anna who describe how travel influenced their teaching, and how travelling is an important part of their lives. This is not the case for all the case teachers. Even when Dan reports that travel had not been an important influence, he recalls how a trip to Gambia had affected his geographical understanding (lines 230-234). Paul uses geographical terminology to emphasise the geographical value of the places he has visited (lines 65-73).
Fieldwork experiences were mentioned by four of the case teachers. Only Steven and Clive did not recall fieldtrips as influences or powerful memories. For Paul and Dan, the experience of being on a fieldtrip has enabled them to understand the world differently. For Paul this came through having experts share their knowledge about the place, particularly in the fieldtrips he experienced at university (lines 186-201).

Anna, Mandy, Steven and Paul are all keen travellers and enjoy visiting new places. These experiences of new places have a different range of effects on them. For instance, Paul uses his experience of Gambia as a direct resource of content for his book writing and his lessons (as seen in the lesson observations). Mandy also recalls using her own experience of the South Downs for this purpose in her lessons. In contrast, Dan and Paul reflect on how their interactions with different places have been a learning experience for them. Anna recalls walking along the beach, trying to work out the processes that had shaped it (lines 230-234). Travel has been a source of inspiration and relaxation for the case teachers and a way for them to escape their professional life. Paul describes his holidays as including a sense of isolation and being away from people and engaging with the physical landscape (lines 156-166).

Paul has the strongest relationship with place and for him it is the strongest influence on his teaching. Motivated by direct experience, Paul likes to use and recreate the experience in his classroom through questioning students about the places they have visited. In his interview he recounts asking his students about their experiences in the Canary Islands, and specifically asking one of his students about his recent experience in Florida (Paul interview, lines 390-402).
Whilst one would expect geography teachers to be interested in places and travel, what is significant is the extent to which travel has affected their teaching practice. Paul illustrates this in the strongest terms. But for all the case teachers, the experiencing of travel has some effect on their teaching of geography.

**Review**

The second research question asks: how can other influences affect expert geography teachers’ practice? Having categorised the ‘other’ influences into three ‘cultures of influences’, this section has argued that these cultures have influenced all the case teachers but in different ways. The different effects depend on what the case teachers value. It seems that the case teachers can ‘choose’ to some extent which influences they allow to affect their practice and how they respond to that influence.

This section has illustrated that educational, school and personal cultures can all have an influence, and indeed can have a powerful influence on the case teachers’ practice. This analysis also shows more specifically that these ‘other’ influences can affect how the case teachers understand and teach geography. This is significant as it demonstrates that geographical knowledge and understanding are not the only influences on how a teacher can teach their subject. Martin (2006) argues that primary teachers of geography tend to neglect their everyday geographical experience as useful subject knowledge, but this research also indicates that other influences can affect how teachers teach the subject.
6.3 Influence of geography and geography education

This section examines the influence of geography and geography education cultures. The first research question asks how can subject knowledge influence 'expert' geography teachers' practice? The geography and geography education cultures are discussed together so that similarities and differences between them can be highlighted and examined. In chapters 4 and 5 each case teacher's values expressed about the subject and teaching the subject are explored. Here those perspectives are brought together.

Figure 6.4 summarises and describes the link between the case teachers' perspectives on geography and their perspectives on teaching geography.
The case teachers each describe geography as having particular 'qualities' which they wish to share in their teaching. There are three ways in which the case teachers use their geographical experience:

- through using similar terminology when referring to academic and school geography,
- by reflecting on the purpose of geography for the students (e.g., utilitarian or vocational uses)
- by reflecting what they had personally gained from a geographical education.

This section explores each of these qualities in detail, but firstly highlights a prior concern with the data. The case teachers found it difficult to discuss, articulate

<table>
<thead>
<tr>
<th>Case Teacher</th>
<th>Undergraduate Geographical Experience – dominant geographical ideology (terms taken from Unwin, 1992)</th>
<th>Perspective on Geography</th>
<th>Link/Nature of link</th>
<th>Perspective on teaching geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven</td>
<td>Balance of approaches including Quantitative, Regional and System approaches</td>
<td>Should be balanced between human and physical</td>
<td>Use of same terminology Utilitarian/vocational</td>
<td>Should be balanced and support students' vocational development</td>
</tr>
<tr>
<td>Clive</td>
<td>Quantitative</td>
<td>Geography as a whole Part of his core experience</td>
<td>Use of the same terminology on the value of geographical study (indirect)</td>
<td>Awareness of the environment Global citizenship</td>
</tr>
<tr>
<td>Mandy</td>
<td>Radical/Welfare</td>
<td>Social justice Issues Environmental stewardship</td>
<td>Use of the same terminology of values Utilitarian/vocational</td>
<td>Vocational dimension Simulations Issues based, humanities curriculum</td>
</tr>
<tr>
<td>Paul</td>
<td>Regional</td>
<td>Places Direct experience Finding out about different places</td>
<td>Use of the same terminology Also sense of the purpose of geography in the wider world</td>
<td>Active citizenship Learning about places Locational knowledge</td>
</tr>
<tr>
<td>Dan</td>
<td>Post-modern</td>
<td>Seeing the world in a different way Issues Decision making</td>
<td>Use of the same terminology Sense of the purpose of geography for the individual</td>
<td>Vocational dimension Getting good grades Seeing things differently Learning about world issues</td>
</tr>
<tr>
<td>Anna</td>
<td>Quantitative</td>
<td>Awe and wonder Finding out about world Having a geographical mind</td>
<td>Use of the same terminology Sense of the value of geography for the individual (both herself and her students)</td>
<td>Getting good geographical education Awe and wonder Desire to travel</td>
</tr>
</tbody>
</table>
or analyse the ideology (or ideologies) that underpinned their approach to
geography or geography education. The External Researcher and I both initially
tried to categorise each teacher into ideological traditions but found this not to be
possible (see section 3.4.2). Geographical 'historians' have referred to a
selection of terms to describe different approaches or 'paradigms' in geography
and periods of time when these were fashionable (see section 2.1). Although
there is dispute over these terms, the geography teachers in this study were not
conversant with these different approaches to geography or geography
education (see also Kent, 2006). This study suggests that the case teachers are
not aware of the different philosophical and epistemological approaches to
geography. Teachers who were at university during particular 'revolutions' were
able to refer to these (for instance both Anna and Clive make reference to the
Quantitative Revolution, and Dan discusses post-modern approaches), but they
did not situate themselves within a broader discussion of approaches to
geography. The reasons for this, perhaps surprising, even worrying, finding
could form the basis of an entirely different research project. It may be due to
the nature of geography, a notoriously diverse and eclectic subject in higher
education, or an absence in undergraduate courses of philosophy of geography
modules. It lies beyond the scope of this study to comment. However, the
significance of this finding is difficult to overemphasise. Being aware of different
ideological traditions and the philosophical roots of geographical knowledge is
surely essential for a specialist geography teacher? Awareness of the
philosophy of geography provides awareness of the conceptual underpinnings
and the assumptions implicit in subject content.
6.3.1 Using the same terminology

Each of the case teachers used similar terminology in their description of how they understood geography and the school subject (see Figure 6.4). In the interviews, the case teachers discuss which aspects of geography appeals to them. In each case the teachers also used this terminology when talking about their own practice. This section will explore if this terminology has been adapted, or given different meanings, when it is used in the teaching context.

The use of the same terminology suggests that the case teachers are trying to reproduce their own experience. However, further analysis indicates that a process of synthesis has taken place, and that through reflection on what geography means for them, they are able to consider its potential contribution for others. For example, Anna indicates that she experienced “awe and wonder” in her early geographical experiences:

And enjoyment, as I was talking about before the awe and wonder thing, it is about going to places and looking and going “wow, why is that like that?”. I suppose that would be why I ended up in geography really

(Anna, interview, 2003, lines 38-41)

She uses this term again when she discusses what she would like studying geography to give to her students:

And of course, there is the famous awe and wonder thing: that they would want to go to somewhere hopefully, not just go over in an airplane
over the Grand Canyon but actually walk into it, walk down and breathe it in. So I think in so many different ways it affects your life ... (Anna, interview, 2003, lines 137-14)

Although she refers to "awe and wonder" in both of these extracts, the way the term is used has slightly different meanings. For her, the "awe and wonder" experience prompts a need to find out more. For her students, she indicates that it would encourage them to get involved with a place to enhance their experience. Although the same term is used, the value behind it is not exactly the same. It represents a quality of geography education that Anna considers valuable.

Paul enjoys visiting places and asking questions about it. This is also a strategy that he uses to get his students to reflect on places they visit (Paul, interview lines 397-403). In his own education, the study and experience of place has both an intellectual and experiential pull for him. However, when he uses place with his students he is making a stronger link, trying to get them to use their own experience of place as a bridge with the geographical concepts they are studying. In this instance, Paul is using his students' experience of place as a learning tool.

Geographical education has significance for Dan for "seeing things in a different way". He uses this phrase many times in his discussion about geography (see lines 328-333) and geography education. He attributes this in part to the influence of Denis Cosgrove during his undergraduate studies. He repeats the phrase, making a direct link to his own teaching:
Also I was thinking if I could bring in some of this Socratic dialogue thing that Denis Cosgrove wrote about, and used with his students in Venice, trying to challenge the way that the children think about the place in a completely different way. You know “what would happen if there were no cars here?”, for example. How would it be different? and challenge the assumptions that they would have. So I have ended up with a whole model/approach to fieldwork and I want to try and publish it. (Dan, interview, 2003, lines 535-543)

In this case, Dan is directly transferring ideas like the “Socratic dialogue” with the ways that he wants to teach. This is a more deliberate and direct transference showing that in this case, Dan has not just used the same terminology but is also directly transferring the ideas.

In each of the examples given above, the case teachers use similar terminology when discussing school and academic geography. The terminology represents a quality that they ascribe to geography education. However, when they use similar expressions for both their own geography and for teaching it, the meaning of the terminology can change, suggesting that their understanding of the quality can also change.

6.3.2 Usefulness of studying geography

Several case teachers also argue that through studying geography students will experience academic success. Dan expressed his desire to get his students’ good examination grades (lines 332-336). Dan also reflects on the value of a geographical education for vocational purposes:
But my education did not very much prepare me for work directly, but the things I gained most from education were things like an understanding of the world around me. (Dan, interview, 2003, lines 324-326)

Clive, Steven and Mandy discuss the vocational dimension of geography education, by emphasising how the skills could be transferable to the workplace. All of the case teachers understand this as an important part of teaching geography and the valuable contribution that geography can make to a child's education. As teachers of a school subject, it seems obvious that the case teachers would highlight the vocational value of the subject. However, the usefulness of geography is further emphasised by some of the case teachers. Clive, Mandy and Paul all referred to social educational goals such as global citizenship. By emphasising the practical usefulness of studying geography (either for the individual or for society) the case teachers are emphasising a further quality of geography education: that of its practical utility.

6.3.3 Personal pleasure

The case teachers also describe gaining personal pleasure from studying geography. For example, Anna enjoyed discussing pebble formations with her father-in-law:

And it was very interesting also to look at the beach sediment – depending on how interested you are. I don't think he was remotely interested in them, but I used to discuss at length with my father-in-law who was interested in anything sort of obsessive like that. You know,
you don’t want to go around a museum with him because you will be there for hours and hours. And he would discuss the pebble pattern on the beach with me at length. Because one day the pebbles would be right up as a storm beach and another day they would all be spread out—wicked and I suppose I grew up with that from when I was little. (Anna, interview, 2003, lines 202-209)

She uses the term “awe and wonder” reflecting a spiritual connection with the natural environment. Anna wants to share this with students and enjoys taking them on fieldtrips so that they can experience this feeling. She also describes feeling joy when former students send her postcards from their travels (lines 282-287).

The case teachers describe this personal pleasure as stemming from different sources. For some case teachers their pleasure from studying geography is situated within their experience of academic success through geography (see section 6.2.4). For Anna the engagement with the natural environment was a powerful influence. For many of the case teachers travel is an important part of their leisure time (see section 6.2.6). In each case they express how much they enjoy working with geography as illustrated through these extracts from Clive, Mandy and Paul:

I am a trained geographer, so this is the core of my academic experience and is what makes me tick. ... I was fascinated by what it was like to live in other countries - this was the attraction for me. (Clive interview, lines 16-17, 129-130)
I did find the subject fascinating and I still do and to be able to carry on doing that and I think that’s what really did it. (Mandy interview, lines 132-134)

When I went to Slough school, ... and I just loved geography... (Paul interview, lines 14-15)

Figure 6.4 highlights three ways that the case teachers transfer their values about academic geography to teaching geography. The first is the use of similar terminology to describe the importance of both ‘geographies’. The second is how geography can be useful for students, and the third is the personal pleasure that can be gained from studying the subject. Each of these three represent qualities that the case teachers ascribe to geography. One would expect geography teachers, particularly those considered ‘expert’, to be advocates for the subject. What is interesting about this observation is that each of these perspectives have been borne out of the case teachers’ own experience, and is something that they wish to share. They have not all chosen the same qualities (for instance, Mandy has focused on social justice, Anna on a more spiritual dimension) which would suggest that the qualities are not inherently geographical. However, these qualities have appealed to these case teachers through their own experience of geography education. Geography could be described as a ‘resource’ for these teachers to practice their values (Morgan & Lambert, 2005). In which case for these teachers, geography is not merely content but as Marsden describes:

not as a collection of facts but the state of the art conceptual frameworks of the subject. (Marsden, 1997, p 242)
Geography can be seen as a resource for them to teach in line with their educational or personal values. This raises the importance of the subject knowledge in teaching, both for the teachers' motivation and for the quality of what they do.

Section 6.1.2 argued that the results of the 'cultures of influence' maps showed that the case teachers experience competing influences that can become more significant than the subject in their teaching. The importance of these findings cannot be underestimated and are discussed further in the next section. The qualities ascribed to geography appeal to the case teachers because of their own values, which has enabled them to find dimensions of geography education that appeal to them and that they want to pass on. This highlights the importance of the case teachers' values in understanding their practice. But this finding highlights the problems with such a discovery. If teachers can temporarily disregard their subject, then they will also disregard the 'qualities' that inspired them to teach the subject. I would suggest that the implication of this is that teaching the subject would then lose its 'meaning' for the teachers, a worrying situation that would doubtless affect the quality of geography education.

6.3.4 Use of subject knowledge

The previous section discussed the qualities of geography that the case teachers emphasised. This section goes on to explore how the case teachers use their subject knowledge in their teaching. This section pays particular attention to the lessons observed and how the case teachers have used their subject knowledge. Three strategies common to all the case teachers are
discussed. Although data from all the case teachers’ lessons were used in the analysis, one lesson from each of the case teachers from the second cohort are explored here as a means for making focussed comparisons. Other lessons are used to make further illustrations. This section begins by summarising the three strategies used by the case teachers.

Moore (2004) suggests that ‘good’ teachers make decisions about how to teach as 'strategists': that they plan strategically and have a range of strategies that they choose from. The data analysis therefore sought to highlight the strategies used in the presenting of the subject, to enable students to understand the lesson content. Three different strategies are observed:

- making connections with other geographical knowledge or experiences
- tuning into the students' personal geographies
- using the teacher's own geographical experiences to help students make links with similar or related phenomena.

Each strategy enables students to make links or bridges with either prior learning, or their own experience, or through the use of a teacher’s own narrative. The term bridge has been used as a useful metaphor as it connects two dimensions that are not necessarily related. Each bridging strategy is used by each case teacher but not to the same extent. This section will describe how the strategies have been used in one lesson taught Dan, Paul and Anna, to show how they have combined the strategies together to enable their students to learning geography. It is not suggested that all three strategies need to be present in the lesson of an ‘expert’ geography teacher, and indeed in some cases they were not, but it would appear that a combination of strategies, can make for effective learning.
In Dan's first observed lesson (section 5.2.4) on volcanic eruptions, he made use of all three bridging techniques identified. He began by using a very specific lesson objective that made the link with previous learning explicit. In the lesson, this specific lesson objective serves two purposes, primarily it links the learning of this lesson with a previous case study but also it helps to review and emphasise the learning from that earlier study. Students reviewed what they had learnt and were also able to compare and contrast this new information and with that previously accrued knowledge. Roberts (2003) argues that bridging (or 'scaffolding') can offer a powerful way to build on learning as described through a constructivist approach.

As the lesson progressed, the students were required to use resources and stimuli as data to support their enquiry. This part of the lesson does not have any obvious bridging strategy within it, but Dan introduced one by recalling a personal story of his own (his recollection of the drowned girl) linking his personal experience to the lesson content. Using his own experience is a useful bridging strategy here because by recalling his response to a news story he is connecting with something the students may have experienced (ie, by reacting to a news story). However, he also built on this strategy by asking the students more questions that connected their previous learning with this new information.

In the description of the lesson, Dan's emphasis on preparing for the examination stands out. However, by using these strategies he also enabled his students to understand the event in other ways. This is pertinent as the case studies are themselves dated, but Dan used them in this lesson for comparison, which he argued were important for the examination. The age, location and the phenomena of the case studies, are 'distant' to the students, and the bridging
strategies helps to draw them near, whilst also enabling Dan to emphasise the examination requirements.

Paul's second lesson (see section 5.1.4) on developing projects in Gambia similarly shows skilled use of these strategies but in a different way. Unlike the previous lesson described, this lesson did not feature a great deal of bridging with previous learning. However, the subject content of this lesson is similarly distant from the students' own experience. Teaching about distant locations is a challenge in geography, particularly with students who have not travelled widely. To bridge this knowledge gap, Paul used the strategy of bridging with his own experiences. This strategy is manifest in two ways: initially, through the use of his textbook, but also in discussing his experiences of the aid projects. The use of this bridging technique, in the form of anecdotes and stories, enables the students to clearly visualise the aid projects and their impact as described in the textbook.

However, this vicarious experience is not as powerful as the students' own experience or engaging with their prior learning. Aware of this, Paul draws the students into the lesson by enabling them to make their own choices (thus connecting their personal perspectives with the issues) and to support and encourage each other. The combination of his own experience, and engaging students through pedagogy are both bridging strategies which enabled the students to engage with the lesson on a personal level.

Anna's third lesson on global warming (see section 5.3.4) is perhaps the least clear of the three presented here regarding bridging strategies. The lesson was more experiential in nature, and was less objective driven than the other two, possibly reflecting that it was a lesson to a younger non-examination class.
Anna showed sensitivity to the needs of her students and flexibility in her planning by working with the students' experiences. This was further stimulated by the video, which they were also required to link to their prior knowledge.

During the lesson, Anna made links with the students' previous learning and with their prior knowledge of farming and other places around the world. The video was introduced as a tool to introduce them to an unfamiliar place. The activities based around the video became the main bridging strategy. She did not use her own experience but focused on asking questions to enable the students to generate their own bridges with what they already knew and with the featured video.

Hillocks' (1999) work on English teachers suggests that how teachers conceive knowledge and how they use teaching strategies are linked. Highlighting the bridging strategies used by the case teachers would suggest that they are favouring a constructivist view of knowledge and teaching. It may be that the small number of teachers selected coincidentally shared this approach to learning, or that I have highlighted these features as part of my own bias. The remainder of this section suggests that the selection of these strategies are deliberate (though not necessarily conscious) as they tie in with the case teachers' values about teaching geography.

Dan held two strong but conflicting values: that of ensuring that his students attain academic success, and secondly that they are enabled to see things in a different way. However, through his data Dan places more emphasis on examination success than seeing things differently:
I try but I mean, more in KS3 than KS4 and A' level, because I keep finding myself becoming a bit of an exam factory to be honest. And I've become quite good at getting kids through exams and hopefully some of that 'seeing the world in a different way' is a by-product. (Dan, interview, 2003, lines 337-341)

This can also be seen in the lesson described above, where the emphasis was placed on examination preparation. There is evidence that he did seek to extend students' understanding (through questioning individuals) but this was not as strong a feature in the lesson observed. Dan has used the bridging strategies as a way for the students to connect with what the examiner wants in an overt way. This can be seen as a direct expression of Dan's description of himself as an exam factory: and demonstrates that he has strategically chosen to teach in a way that emphasises this value.

Paul's values are also evident in his lesson. Paul emphasised the experience of place. His students are unable to experience Gambia except vicariously through him. Therefore Paul used his experience of Gambia as a bridge to enable them to develop their own understanding.

Similarly Anna described her preferred teaching strategy as starting from where the students were and using accessible material to develop their knowledge. In the lesson described above, she uses the video in this way. It is the use of the bridging strategies that enables her to bring this video into their experience. In both of these cases, the teachers are using the bridging strategies to enable their students to access the content of the lesson, in a way that 'fits' with their own ideas and values about the subject.
This way of using their subject knowledge, as a bridge between students' knowledge and lesson content, is different to how PCK is understood. Section 2.2.3 reviewed research on PCK and critiqued understanding teachers' knowledge for teaching as a separate knowledge construct. The review highlighted the difficulty of describing how that knowledge develops (ie, whether it is transformative or integrative) and how it is different from other knowledges (such as content knowledge or pedagogical knowledge).

Whilst it is acknowledged that PCK is a useful and influential concept, this research suggests that using PCK doesn't fully describe the role of subject knowledge in teaching. This research describes the case teachers as using their geographical (or content) knowledge in a strategic way. PCK acknowledges that geographical knowledge has a wide constituency and can develop beyond academic or school experience, incorporating knowledge about places gained through travel and other experience. Emphasising teachers as using their knowledge strategically (with the three strategies identified) places a different emphasis on how teachers use their subject knowledge during lessons. Whilst PCK is a useful concept to describe what teachers do when teaching their subject, it does not help to understand how teachers use their subject 'in action'. Understanding how the case teachers relate what they are teaching to the subject as a whole does help us to understand this. This emphasis highlights the importance of the teachers' understanding of their own subject knowledge. Is there a way then of describing these strategic choices that does not conceptualise this phenomena as a discrete knowledge such as PCK?
6.3.5 Teaching as a form of scholarship?

This section suggests that understanding teaching as a form of scholarship, a concept borrowed from higher education, is a useful way of examining the case teachers’ use of subject knowledge. This section firstly explains the four areas of scholarship and then focuses on one dimension of the Scholarship of Teaching.

In 1990, Boyer presented four components of Scholarship which sought to describe the work of academics. This definition of scholarship has been influential in many universities, particularly in Australia (Burkill, 2002), and describes four areas of academic work:

- **Scholarship of Discovery** - research or discovery of knowledge;
- **Scholarship of Integration** - making connections across disciplines;
- **Scholarship of Application** - using knowledge or the results of research;
- **Scholarship of Teaching** – ensuring that knowledge is understood by others. (Boyer, 1990)

The scholarship of teaching has caused much discussion (Hutchings & Shulman, 1999; Kreber, 2002; Goss & Boyd, 2003) and is now commonly referred to as the scholarship of teaching and learning. It has been acknowledged in higher education that the act of teaching can transform scholars’ understanding of knowledge (Nicholls, 2000). Teachers in higher education, it is argued, need to see how individual lessons or lesson episodes are part of the ‘whole’ of the subject they teach. School teachers do not have the same emphasis on the creation or use of knowledge as academics. However, placing teaching within this frame, highlights how teaching matter can benefit from an examination of the function and situatedness of knowledge.
Understanding teaching as part of scholarly work creates an emphasis on how individual ‘parts’ contribute to the body of knowledge in this discipline, and how aspects of the subject are interconnected and related. This is similar to what Hutchings and Shulman describe as “going meta” (1999).

6.3.6 Synoptic capacity

This section explores the origin and meaning of the term "synoptic capacity". It argues that synoptic capacity is a useful term to describe how the case teachers in this research used their subject knowledge, and suggests that the term is a useful way of describing how teachers use their subject knowledge.

For Rice (1992), one of the key elements of the Scholarship of Teaching is what he terms “synoptic capacity”. Rice places synoptic capacity alongside “pedagogical content knowledge” and “what we know about learners", as part of what scholars need to know to be able to teach. Rice describes synoptic capacity as:

the ability to draw strands of a field together in a way that provides both coherence and meaning, to place what is known in context and opens the way for connections to be made between the knower and the known. (Rice, 1992 p 125)

Synoptic capacity therefore relies on the teacher’s cognisance of the building blocks of their subject: what is easy or difficult to learn and ways of understanding complex concepts. The teacher, aware of the range of needs of different learners, can make decisions about the best way for these learners to
develop their understanding of the subject. Richlin and Cox (1994) suggest that this is best understood as the ability to place knowledge in context and Australian Teaching Network (ATN, 2000) suggest that synoptic capacity refers to the “teacher’s ability to synthesise and contextualise content knowledge and to present it in ways that allow students to construct their own meanings from it”. Rice (1992) differentiates synoptic capacity from pedagogical content knowledge as: “the capacity to represent a subject in ways that transcend the split between intellectual substance and teaching process using metaphors, analogies and experiments.” (ibid, p 127). Therefore, Rice’s synoptic capacity implies a relationship between the teacher, the subject and the learner that is grounded in the teacher’s overall knowledge of their subject. My analysis suggests that the bridging strategies that the case teachers were observed using could usefully form part of this description.

The scholarship of teaching has been discussed in relation to the secondary school context (Pachler, Daly & Lambert, 2003; Daly, Pachler & Lambert, 2004). Their argument is that regarding teachers as scholars reinforces the relationship between teaching and research (Nicholls, 2000; Pachler, Daly & Lambert, 2003; Daly, Pachler & Lambert, 2004). Pachler, Daly and Lambert (2003) note that applying the scholarship of teaching to secondary education means teachers have to become learners (or re-learners) of both pedagogy and their subject area. However, I would argue that adoption of the scholarship of teaching and particularly synoptic capacity to teaching in the secondary context also means a fresh approach to understanding teachers’ subject knowledge. Dewey (1904) argued that organised subject matter was a prerequisite for effective teaching. Teachers must know the endpoint before they can plan effective lessons (McEwan & Bull, 1991). But teachers also have to take students’
misconceptions, preconceptions and prior learning into account (Gudmundsdottir, 1991). Acknowledging prior learning means that:

researchers of teaching will need models of subject matter that both acknowledge the unique knowledge between the different places subject matter knowledge exists. (Carlsen, 1991, p 119)

Therefore teachers' understanding of their subject has to enable them to present it so that learners can access it and use it. Carlsen (ibid) highlights the complexity of this task as disciplines are dynamic and subject to change, and teachers have to revise and continually update their understanding of subject knowledge. To add further complication, Carlsen also recognises the difficulty of considering students' prior understanding:

the process of matching student concepts to teaching strategies is more complex and content-dependent than a one-to-one mapping. We will require a model of subject-matter knowledge that is more powerful than those we have heretofore considered (Carlsen, 1999, p 127)

This research suggests that synoptic capacity is a useful way of conceiving how teachers use their subject-matter knowledge. This complex understanding of the structure of subject disciplines has already begun in some subject areas. With respect to history, Counsell (1998) refers to the Big Stories and Little Stories that help historians to construct a view of the causes and impacts of events at a variety of scales. She argues that a combination of Big and Little stories exemplify their significance for the learner. Zooming between what can be seen as two scales of understanding an event, enables learners to connect individual experience with events at a larger scale and it is these that contribute
to significant learning. It is, I would argue, an example from History of another bridging strategy. In terms of synoptic capacity, it is the ability to appreciate what the ‘big stories’ of a subject discipline are.

6.3.7 Using a ‘capacity’

In the field of educational leadership, Newmann et al (2000) explores a school’s capacity to adapt to change. Having highlighted key factors (such as teachers’ knowledge, skills and dispositions, professional community, program coherence, technical resources and principal leadership), they acknowledge that these factors alone are not sufficient to initiate effective change. Newmann et al argues that it is when these factors are combined that the school has the capacity to change. Similar thinking can be applied to teacher effectiveness research that describes features of practice such as the Hay McBer report (2000). Drawing a direct parallel, Newmann et al’s argument suggests that when teachers possess the qualities highlighted in the Hay McBer report then they would have the capacity to be effective teachers. However having the qualities alone does not presuppose that effectiveness will automatically occur.

Subject knowledge for teaching can be treated in a similar way. Teachers' knowledge is broad-based (Shulman, 1986; Fenstermacher, 1994; Clandinin & Connelly, 1995; Sternberg & Horvarth, 1995; Turner-Bisset, 1999). Influences on their practice is varied (section 2.3). But the case teachers have made decisions about the use of their subject knowledge which have enabled them to construct effective learning experiences, suggesting a synoptic capacity.
Reducing the scale further, in the lessons observed the case teachers were confident in their subject matter and clear as to why it was important to teach this topic. Their synoptic capacity enabled them to make choices about their subject matter that were informed by the ‘bigger picture’ of what is appropriate and necessary for this particular group of students to encourage deep learning.

6.3.8 Subject knowledge ‘in practice’

Section 6.3.4 observed how the case teachers had adopted different techniques of scaffolding learning and enabling students to bridge new knowledge. In order to do this, the case teachers need to understand what the students already knew and their range of experience. They also needed an awareness of the broader picture of geographical concepts and how their individual lesson fits into this broader structure. This synoptic capacity enabled the case teachers to scaffold students’ learning, selecting content that is appropriate to make sense of the broader concepts. However, there is no real consensus as to what this broader structure is (see section 2.1.3). The three lessons already showed how it was used in these cases. The following examples explore this further.

Steven describes planning lessons that take into account the baggage that students have (lines 159-160). His practice indicates that he did this through the use of analogies and stories that help them to put the geographical content into a context they could understand. For example, in the second lesson observed, Steven made reference to being bitten by mosquitoes on holiday in a lesson on climatic zones. In this instance, Steven was aware that many of his students would not have experienced tropical or sub-tropical places, but they may have experienced having been bitten by an insect in the summer. By using a story
from his own experience of being bitten by mosquitoes he enables the students
to make the link between their experience of being bitten and his story of
travelling to hot places. By calling upon his own experience and selecting
appropriate examples he was able to help his students understand unfamiliar
phenomena. It would appear that Steven has considered what his students
knew and chose an analogy to enable them to make sense of new information.
He has made a synoptic link between the content of this lesson and what they
need to know about geography and what they already do know (through their
current experience) and generated an appropriate bridge between them.

A similar strategy is used by Mandy. She describes two geographical issues
that she knew her students would not have experienced: that of soil erosion and
restricted mobility. In discussion of both of these issues, Mandy uses local
examples of in and around the school: soil erosion of areas around the school
field, and references to a teacher with restricted mobility. In each case, Mandy
used what the students already knew, and her broader understanding of the
subject to help them to connect with the content of this lesson.

Clive however approached using his subject knowledge in a different way. In
Clive’s account, he emphasises his role as a curriculum maker. In the first of
Clive’s lesson observations he asked the students to focus on the photographs
in a textbook spread on South Africa. These photographs were then used as a
stimulus to consider tourist attractions to the region. The textbook spread was
not about tourism in South Africa, however, the photographs were suitable for
the way that Clive used them. Clive made a strategic decision here regarding
the use of resources in his lessons through considering the suitability and
availability of appropriate images. The photographs he used were appropriate
for his lesson although not originally intended for this purpose. Clive used his
synoptic understanding of geography to enable him to make this choice, emphasising his synoptic capacity in his strategic decision making.

Paul used his experiences to help his students understand geographical phenomena (see section 5.1.4). Paul used questions in his lessons to enable his students to reflect on what they have done and what they have learnt. This appeared to have a dual purpose: one of individual reflection about their learning, but also as a process of sharing metacognition, so that others in the class could consider alternative strategies. Paul used his synoptic capacity to decide on which questions to ask and how his questions could constructively build on the learning of whole class.

With Dan, his use of geographical knowledge is most evident in how he plans. He knows what his students need for examination success, and he expresses this through very specific lesson objectives. Therefore, Dan enables his students to make their own links and connections by referring to previous learning and experiences. His classroom practice focuses on supporting his students in reaching these objectives.

**Review**

This section has argued that the three bridging strategies that the case teachers were observed using, make an important connection between students' prior knowledge and the lesson content. In order to select the right 'bridges' and to ensure that their students have access to the lesson content, the case teachers made choices about what analogies, examples and explanations to give. These choices were informed by their geographical knowledge. This section has acknowledged that the case teachers had different understandings and appreciations of geography, but this does not present a difficulty, as the case
teachers have used their synoptic capacity to help them to choose the right bridges for those particular classes. This research suggests then that synoptic capacity is an appropriate way to describe how teachers use their subject knowledge.

6.4 ‘Expertise’

This section explores the research theme that runs through both of the research questions: that of ‘expertise’. The section describes who recommended the case teachers as ‘experts’, and analyses the values evident in those recommendations. The recommendations are then compared to the teachers’ practice.

Permission was not explicitly sought for the inclusion of the detail for the ‘expert’ recommendation for the first cohort of cases. Therefore they will not be included in this discussion. However, who made the recommendation is of relevance, and is detailed in Figure 6.5.

<table>
<thead>
<tr>
<th>Case Teacher</th>
<th>Reference source</th>
<th>Reference source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven</td>
<td>Headteacher</td>
<td>LEA Advisor</td>
</tr>
<tr>
<td>Clive</td>
<td>Headteacher</td>
<td>AST assessor</td>
</tr>
<tr>
<td>Mandy</td>
<td>Headteacher</td>
<td>LEA Advisor</td>
</tr>
</tbody>
</table>

All of these referees represent power and authority in school communities. Heads, as school leaders, have access to a range of information about teachers’ practices and results. They are also widely aware of teachers’ reputations and
may even have observed teachers’ classroom practice. Heads will also have similar information about other teachers and are therefore able to draw normative comparisons across and within subject disciplines.

LEA advisors/inspectors have similar experience of teachers across LEA authorities, and may be subject specialists. Both Steven and Mandy had worked with their LEA Advisor in a developmental capacity, and Steven had been recently observed by his LEA Advisor as part of the department’s preparation for Ofsted.

The first cohort of case teachers were identified first through personal contact or recommendation, and subsequently references to satisfy the identified criteria were requested and achieved. Therefore, the people who recommended them had not identified them as ‘experts’, but were willing to support this assessment of them.

Clive’s recommendation came from his AST assessment. He was one of the first Geography ASTs and was identified to participate in the study for this reason. An AST teacher has to satisfy the AST criteria (see Appendix I). External Consultants make an assessment of their practice through analysis of a portfolio, interview, recommendations from colleagues and lesson observation of the applicant’s practice.

Therefore, it could be argued that AST status is a rigorous assessment of ‘expertise’ as it is criteria-referenced. However, a closer look at the assessment criteria suggests a high degree of subjectivity. The descriptions use the word “excellent”, but “excellent” is neither defined nor described. The assessor judges to what extent the candidate has demonstrated “excellence” during their
assessment period. This raises critical questions, as yet unanswered, about the assessment procedure:

- On what experience do the external consultants draw to inform these judgements?
- How do they decide on “excellence”?
- What values do they have that influence a judgement on what constitutes excellence in education?

It is worth at this point returning to the debate on ‘expertise’ highlighted in section 2.4. ‘Expertise’ itself is defined by the values held by those that are given the power to make the judgement, reflecting their priorities and beliefs about education. Clive’s practice could be viewed as traditional both in his approach to geography and to education. He could therefore be contrasted with Mandy who holds different beliefs about the purposes of both education and geography education and adopts a more progressive classroom practice. However, Clive’s perspective and practice have been given official recognition of ‘excellence’ by an authoritative source (AST assessment). But this official recognition does not mean that Clive’s approach is inherently better than Mandy’s or Steve’s, nor that they are of equal quality. What it might indicate is that Clive’s approach is recognised by an official body as being ‘excellent’ practice in geography education.

It would not be possible to compare Clive with the other teachers as they have not applied for AST status. However, after the data collection Mandy and Clive both gained posts of similar status in different schools (both took senior leadership positions in Specialists Schools of similar size). This recognition of their “expertise” is a local one – having been made by one school and one board of governors. Only the AST recognition has a national criterion-referenced status.
The AST criteria (Appendix I) for 'expertise' are part of the competent
craftsperson discourse identified by Moore (2004). Although focusing on the
Standards for QTS, Moore argues that this approach tries to universalise
educational criteria and assessment in a way that is unrealistic and
unreasonable. He cites five main issues with expressing teachers' practice in
this way:

- Universality – an assumption that everyone can be and should be the
  same
- Language – that the criteria is expressed vaguely
- Micro-macro problem – of expressing the whole through a series of
  minute details
- Closure – knowing when the criteria ends
- Maintaining the appearance of providing a good description but
  actually hiding many of the issues and assumptions.

Moore's criticism would suggest that definition of 'expertise' through these
criteria is not reliable. For the second cohort of cases, recommendations were
sought differently. As outlined in section 3.6.1, PGCE tutors were canvassed for
recommendations of 'expert' geography teachers. This group were chosen
because of their wide range of experience in observing geography lessons, their
access to a wide network of teachers, and although they may not have had
direct classroom experience of individual teachers, they are aware of the
feedback they give trainees and other aspects of their work that compliments
classroom practice. These tutors are people with national reputations, and could
be termed an elite group (Butt, 2004), and therefore how they define 'expertise'
adds to our understanding of the research questions. When these PGCE tutors
were approached (by email), 'expertise' was not defined for them.

Only one of the three case teachers from this cohort, Paul, was recommended
because of his teacher training participation and, even then, the referee also
highlighted his part in other professional activities (such as his book writing). Anna was recommended by a PGCE tutor who had worked directly with her in her department as a colleague and who felt she had an intimate understanding of her practice. Dan’s recommendation came from a PGCE tutor who was a school governor with special interest in geography. (However, Dan’s Headteacher also made a point of discussing and emphasising Dan’s ‘expertise’ with me during the data collection. She emphasised his excellent results, his work as a Head of Department and his good relationship with students.)

The referees for this cohort are active members of the academic community as geography teacher educators. It is interesting therefore to compare the criteria that they have highlighted as ‘expert’ to that officially defined through the AST assessment criteria. Both have national status and significant authority but in different areas. It is not possible to treat recommendations by Heads and LEA inspectors in this manner, because these are centred locally and it would be invalid to make generalisations from them. Figure 6.6 shows on what basis the academic recommendations were made.

**Figure 6.6 Summary of criteria used to define ‘expertise’ in second cohort of Case Teachers**

<table>
<thead>
<tr>
<th>Case Teacher</th>
<th>Summary of criteria used in recommendation of ‘expertise’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul</td>
<td>School textbook author</td>
</tr>
<tr>
<td></td>
<td>Experienced teacher</td>
</tr>
<tr>
<td></td>
<td>Mentor</td>
</tr>
<tr>
<td></td>
<td>Authority on the subject</td>
</tr>
<tr>
<td>Dan</td>
<td>BPRS – researcher</td>
</tr>
<tr>
<td></td>
<td>Professional activities</td>
</tr>
<tr>
<td></td>
<td>Students’ results</td>
</tr>
<tr>
<td></td>
<td>Mentor (for another institution)</td>
</tr>
<tr>
<td>Anna</td>
<td>Personal qualities</td>
</tr>
<tr>
<td></td>
<td>Academic background</td>
</tr>
</tbody>
</table>
Referring back to the dominant discourse identified by Moore, many of the HE institutions in England and Wales prefer a reflective practitioner model of initial teacher education (Moore, 2004). Does this suggest that the academics have highlighted skills and activities that are valued by the academic community (and expressed through their preferred discourse): participation in research, strength in subject knowledge and wider professional activities such as book writing and participation in initial teacher education? There is a different emphasis on the broacher professional skills recognised in the these recommendations than in the AST criteria. In fact, it is interesting to note that the qualities identified as scholarship (Boyer, 1990; Rice, 1992) of Discovery, Integration and Application are echoed here. Moore (2004) argues that the reflective practitioner discourse places emphasis on the metacognitive skills of reflecting on experience. He argues that this model is popular in HE institutions in England and Wales, as it is a more evaluative response, which places people centrally and recognises the messy complexity of classrooms and teachers' work.

The emphasis therefore on the recommendations of ‘expertise’ as stemming from wider professional activities (such as writing books or engaging in research) as seen in Figure 6.6 places the case teachers within Moore's definition of a reflective practitioner.

**Review**

The research questions ask how influences and subject knowledge affects the practice of ‘expert’ geography teachers. Before any statements are made with reference to this, two acknowledgements need to be made. Firstly, it is
important to acknowledge the limitations of the study, as six teachers are not representative of the whole population of 'expert' geography teachers.

Secondly, it is important to acknowledge that of those six case teachers, a range of practice and values were demonstrated, and each has been recommended as an 'expert' for different reasons.

The literature review argued that teacher 'expertise' is socially constructed and therefore the definition of 'expertise' is dependent on the person who does the defining, and is driven by their values. The findings of this research about 'expertise' can only be applied to the case teachers who participated in it. The case teachers' participation is due to others having recognised their practice as being sufficiently in line with their values for them to be considered 'expert'.

Examination of the case teachers' practice and motivations shows considerable variation between them. The case teachers' values affect how they respond to the 'cultures of influence', resulting in different practices and teaching styles.

The case teachers also describe conflicting values as they all want their students to be successful and attain examination success, whilst appreciating other values they hold for teaching geography (for example, Anna wants to focus on the spiritual dimension, for Mandy it is social justice, and for Dan it is personal development, and for Paul and Clive to understand environmental aspects of geography). The case teachers, as participants in the educational and school cultures are also aware of how they are being judged, and so it is not surprising that they temper their values in line with these expectations, and may explain why other influences can become more important in their practice (see section 6.1.2).
6.5 Review of findings

This chapter began by reviewing the data collection tools used, arguing that the unique tools have been useful as heuristic devices and as such enables the case teachers to describe the influences they experience and how those influences affect their practice.

The chapter then examined each of the influences in turn, highlighting the ways that each affects the case teachers. Although there are differences between the case teachers, they are influenced by similar groups or 'cultures of influence'. The research also notes that the case teachers are not influenced in the same way, suggesting a degree of selectivity or choice. The research suggests that this is dependent on whether these influences are in line with their values.

The chapter has also introduced the term 'synoptic capacity', suggesting that this is a useful term to describe how teachers can use their subject knowledge. In this research, the case teachers were observed using three strategies to bridge the lesson content with the students' experience or prior knowledge. The research suggests that understanding this process as part of the case teachers' synoptic capacity is a useful way of describing how teachers adapt and use their understanding of geography.

Finally, the chapter has argued that the recommendations of teacher 'expertise' used in this research reflect different discourses in education (after Moore, 2004). The research acknowledges that the case teachers operate within and between these discourses.
7 Chapter Seven – Implications and Considerations

This chapter discusses the significance of this research and the implications for policy makers and geography educators. Current concerns about the health of school geography (see section 2.1.2) and the decline in the numbers of students studying geography at GCSE and A’Level (QCA, 2005) indicate that a focus on how ‘expert’ geography teachers use their subject knowledge is probably necessary and timely. This chapter explores each research theme in turn, and then examines the overall significance of the research, stressing its importance for policy and practice. The chapter concludes by discussing the data collection, sampling and analysis, and making the case for why this research has made a distinctive and worthwhile contribution to our understanding of geography teachers’ practice.

7.1 Geography teachers’ subject knowledge

The term synoptic capacity helps to capture aspects of how ‘expert’ geography teachers use their subject knowledge. Analysis of the practice of the case teachers revealed three strategies used by the teachers to bridge the lesson content with students’ prior knowledge. A bridge requires two supports, and in this instance the case teachers were aware of what their students already knew, and used their ‘expert’ understanding of geography to present it in a way that was accessible to them.
The term synoptic capacity was initially used to define part of the scholarship of teaching in higher education (Rice, 1992; section 6.3.6). It has been adopted in this research because it captures how the case teachers relate their lesson content with their understanding of the subject and its conceptual framework. Previous research has examined how teachers in the early stages of their career have understood and used their geographical knowledge (Barrett-Hacking, 1996; Rynne & Lambert, 1996; Walford, 1996; Cheng, 2003; Cheng & Stimpson, 2004; Martin, 2005) but has not focused on teachers with more experience, that is 'expert' teachers. Research in the field of subject knowledge has been heavily influenced by the concept of PCK (Shulman, 1996) and consequently research in geography teachers (Cheng, 2003; Martin, 2006) has focused on the pedagogical dimensions of subject knowledge. I have argued in this research that how subject knowledge itself can influence teachers' actions in practice has been relatively ignored. Synoptic capacity places emphasis on teachers' subject knowledge per se as having integrity within their understanding of the subject discipline. Understood in this way, the idea of synoptic capacity is helpful in response to the first research question: how can subject knowledge influence 'expert' geography teachers' practice? What is also relevant in geography is the breadth of the subject and the range of ways the discipline as a whole is understood.

The research also illuminated how the case teachers viewed their subject. Interviews with the case teachers revealed that they valued their relationship with geography, and ascribed qualities to it that stemmed from their experience of studying and working with the subject. Some of these qualities, like experiencing success, were common to all case teachers. Other qualities, such as the contribution geography makes to global citizenship were more particular
to each case teacher. These qualities made the subject important to them, and inspired and motivated them to teach it.

These findings emphasise the importance of geography teachers' subject knowledge. Geographers often exhibit a range of ways of understanding the subject (see Walford, 1996). Previous research in this area has not been able to agree on the impact that has had on practice (Barrett-Hacking, 1996; Rynne & Lambert, 1997; Jewitt, 1998). Adoption of the term synoptic capacity accommodates these findings and the range of geography teachers' varied conceptions of the subject (Walford, 1996). What is relevant is not only how geography teachers understand their subject knowledge but how they can call upon their subject knowledge to develop students' understanding, ie, their capacity to use their synoptic understanding. Awareness of synoptic capacity could have significant impact on the education and development of geography teachers. The proposals for a concept-based curriculum (like the new Geography National Curriculum proposals (Gardner, Lambert & Swift, 2007)) will require geography teachers to rely even more on their synoptic capacity, as they make conceptual links and connections across geographical content.

7.2 Other influences on teachers' practice

A key dimension of this research has been its focus on the other influences on teachers' practice, that is, influences other than the subject or even subject pedagogy. Analysis of the 'cultures of influence' maps showed that the case teachers experienced competing influences on their practice and that the educational, school and personal cultures were sometimes more influential on the case teachers' practice than their own subject knowledge. This finding
illuminates the second research question: **how can other influences affect ‘expert’ geography teachers’ practice?**

This finding has two important implications. Firstly, subject knowledge is an important dimension in the preparation of quality learning experiences (Morgan & Lambert, 2005). Noting that geography teachers experience competing influences on their classroom practice, some of which can become more significant than their subject knowledge, could have implications for the quality of teaching. Secondly, the interviews with the case teachers showed that geography (and the qualities they ascribed to it) motivated and inspired them, which suggests that the subject is a vital part of these teachers’ practice and motivation. It would seem logical to conclude, therefore, that competing influences can have a negative impact on teachers’ motivations and consequently their practice.

The finding that wider influences can take precedence over the subject is an important contribution to our understanding of teaching practice. It literally puts the subject in its place. As such, this finding should act as a warning to both geography educators and policy makers to ensure that attention to the subject is appropriately balanced with other educational concerns, as argued by Marsden (1997). This is not to say that the subject is unimportant. Following Marsden, I would go even further to suggest that due to the recent emphasis on generic pedagogy as found in the Key Stage 3 Strategy (Stobart & Stoll, 2005), there is an urgent need to redress this balance in both CPD and education policy. This research also supports Biddulph and Adey’s (2003; 2004) call for teachers to be more explicit in the relevance of what they teach, but I would add that this could be beneficial for the teachers themselves as well as for their students.
7.3 Teacher ‘expertise’

This research is concerned with the practice of ‘expert’ geography teachers. The research has argued that ‘expertise’ is socially constructed, and the analysis of the recommendations of ‘expertise’ showed that different groups of people prioritise and recognise different criteria for ‘expertise’. The recommendations for each chosen case teacher as an ‘expert’ reflected different aspects of teachers’ professional practice, and show the complex landscape of values and influences that ‘expert’ geography teachers operate within, as well as the different strengths they individually possess. This finding is significant because most research on geography teachers has concentrated on teachers in the early stages of their development (Cheng, 2003; Martin, 2004).

This finding adds an extra dimension to the two previous findings detailed above. The case teachers had practice that was considered ‘expert’. Firstly, this would suggest that how they use their subject knowledge (described as “synoptically”) is a quality that other teachers can (and should) aspire towards. It places emphasis on the ‘capacity’ as something that can be developed and deployed.

Secondly, ‘expert’ geography teachers possibly struggling to maintain a focus on the subject due to other influences is especially interesting. Chapter 2 argued that as participants in the ‘cultures of influence’, the case teachers would have been familiar with the cultural codes operating in each of the cultures. Therefore, the case teachers would have been aware of the values by which they were being judged (which some case teachers expressed explicitly). If teachers are aware that the educational or school cultures does not value
geographical subject knowledge then it would make sense that they prioritise other aspects of their work. If these practitioners are influenced by other ‘cultures of influence’, then we can assume that other geography teachers are similarly influenced. It goes beyond the scope of this research to suggest the impact of this speculation, but it remains a stark warning to those concerned with the health of geography education.

### 7.4 Synthesis and wider implications

This research has illuminated a paradox: that the case teachers felt that geography was a key source of inspiration and quality in their practice, and yet the subject could be marginalised by other influences on their practice.

Teachers can be active agents in ‘making’ their practice and challenging the pressures that are exerted on them. Evidence from the case teachers showed that influences from the educational and school cultures can take precedence in teachers’ practice. Based on an assumption that teaching geography well is an important contribution to young peoples’ education (see section 2.1.2), it would seem that circumstances that influences teachers away from their subject can be detrimental to the quality of geography education, as it can have an impact on the quality of the classroom experience for both the student and the teacher.

However, this research has shown that, despite this finding, the ‘expert’ geography teachers involved in this research have been able to teach geography to a standard that has been recognised by others as ‘expert’. Synoptic capacity, I would argue, can help to explain how the ‘expert’ geography teachers in this research are able to negotiate the competing influences on their practice (which they acknowledge), along with the need to teach good quality
geography lessons. Synoptic capacity increases our understanding of how ‘expert’ geography teachers use their subject knowledge. It emphasises that teachers do not just use their subject knowledge to help them make pedagogical decisions (otherwise known as PCK). It focuses the attention on how teachers use their subject knowledge within a lesson. It acknowledges that teachers need to be aware of what their students know, but in addition to use their understanding of the subject to enable those students to develop their understanding of geography. This is achieved by using their subject knowledge creatively to make bridges with what their students already know. A reemphasis on this dimension of geography teachers’ practice, and further research into synoptic capacity could serve to empower other geography teachers so that they prioritise the subject.

As such, the research calls for a refocussing on the subject particularly in ITE and CPD to achieve the balance between “matter”, “method” and “mission” as Marsden (2005) suggested. The launch of the Action Plan for Geography\(^\text{12}\) in March 2006 represents an opportunity to achieve this. There is also scope for further research to work with teachers of geography to become more aware of the role the subject has on their teaching and especially to help them to develop their synoptic capacity. The strategies identified in this research could be a starting point for this development. Further research into synoptic capacity would be valuable along with further research in other subject areas to identify the features of synoptic capacity in different curriculum subjects.

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\(^{12}\) Action Plan for Geography is an initiative funded by the Department for Education and Skills, and led by the Geographical Association and the Royal Geographical Society (with the Institute of British Geographers).
The research findings also have implications for policy makers. The research has shown that the case teachers are influenced by other ‘cultures of influences’, and that these influences can become more significant in their practice than their subject knowledge. The research calls for policy to refocus on subject knowledge to support geography teachers in creating meaningful and effective learning experiences. This would support teachers to teach geography more effectively. Developing individual teacher’s synoptic capacity would encourage them to consider how their lessons relate to their understanding of the subject as a whole. They can then select appropriate teaching strategies so that they can make bridges between their understanding of the subject and that of their students. This will redress the current imbalance between pedagogy and emphasis on the subject in education initiatives.

7.5 Considerations

This chapter has argued that the findings of the research have valuable and far-reaching contributions to our understanding of geography teachers’ practice. However, it is important to acknowledge methodological considerations with respect to this research.

Throughout this thesis, the difficulty of researching into the values and experiences of another has been debated (Parajes, 1992; Fenstermacher, 1994 and see section 3.1). To understand the influences on the case teachers' practice, this research has used a variety of complementary data collection strategies that have enabled the case teachers to describe how they teach geography and to support those observations with documentary evidence and lesson observations. This research has used innovative data collection
strategies as heuristic devices to help the case teachers to articulate and discuss the influences on their teaching. The combination of all the data collection techniques provides a rich data set on each of the case teachers that is fit for purpose in illuminating data to answer the research questions.

The 'cultures of influence' maps have been used to describe the influences on the case teachers' practice. It is acknowledged that the boundaries of those cultures are not clear cut. As Figure 2.5 shows (through the use of dotted rather than solid lines), the boundaries between these cultures are not tightly defined. In some instances, such as when Steven and I debated the structure of his school's Humanities faculty, the boundaries between them can be blurred. It is also possible, as we have seen with all of the case teachers, that dominant ideas or values emerging from one culture can impact on how that teacher perceives the others. To facilitate the reader's understanding of this complex landscape of ideas, the cultures have been defined and the 'cultures of influence' maps have been useful to help exemplify the influence of those 'cultures', enabling an observer to 'discern' this complex professional setting.

One of the challenges in the research was to what extent the boundaries of each case study could be drawn (Brown & Dowling, 1998). The resolution of this breadth versus depth issue had implications for the number of participants and the amount of data collected for each. To reflect these decisions, the term 'case teachers' has been used throughout the research. This term reflects how the data collected, analysed and presented for the six participating teachers has to be limited in detail due to the constraints of time. Life experience is complex and a commensurate representation of how this affects individuals' professional practice is a challenge. In other words, in spite of the depth of treatment, the participants were thought not to be full blown 'case studies' as not all aspects of
their lives could be included in the research. The conclusions that can be drawn from the data analysis can only be relevant to the six case teachers featured in this research. The findings reported here focuses on these six teachers. However, the research design has been rigorous and the data analysis validated. Further research with other teachers which support these conclusions, would suggest that the findings have applicability for a wider population. Teachers, policy makers and geography educators should feel empowered to use the findings of this research as a way of developing and reflecting on how geography is taught, and refocusing on the important role that geography plays in teachers' decision making.
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Appendices
Appendix I – Standards for Advanced Skills Teachers

INTRODUCTORY PHASE
STANDARDS FOR ADVANCED SKILLS TEACHERS
While all those wishing to become ASTs will need to meet the standards specified below, they will need to be interpreted and applied appropriately in relation to teachers in different phases and with different specialism(s) and roles. The standards do not debar any teacher from being able to demonstrate the required expertise, including part-time or peripatetic staff.

1. Excellent results/outcomes
As a result of aspiring ASTs' teaching, pupils show consistent improvement in relation to prior and expected attainment; are highly motivated, enthusiastic and respond positively to challenge and high expectations; exhibit consistently high standards of discipline and behaviour; show a consistent track record of parental involvement and satisfaction.

2. Excellent subject and/or specialist knowledge
Aspiring ASTs must keep up to date in their subject and/or specialism(s); have a full understanding of connections and progression in the subject and use this in their teaching to ensure pupil make good progress; quickly understand pupils' perceptions and misconceptions from their questions and responses; understand ICT in the teaching of their subject or specialism(s).

3. Excellent ability to plan
Aspiring ASTs must prepare lessons and sequences of lessons with clear objectives to ensure successful learning by all pupils; set consistently high expectations for pupils in their class and homework; plan their teaching to ensure it builds on the current and previous achievement of pupils.

4. Excellent ability to teach, manage pupils and maintain discipline
Aspiring ASTs must understand and use the most effective teaching methods to achieve the teaching objectives in hand; display flair and creativity in engaging, enthusing and challenging groups of pupils; use questioning and explanation skilfully to secure maximum progress; develop pupils' literacy, numeracy and ICT skills as appropriate within their phase and context; are able to provide positive and targeted support for pupil who have special education needs, and are very able, are from ethnic minorities, lack confidence, have behaviour difficulties or are disaffected; maintain respect and discipline and are consistent and fair.

5. Excellent ability to assess and evaluate
Aspiring ASTs must use assessment as part of their teaching to diagnose pupils' needs, set realistic and challenging targets for improvement and plan future teaching; improve their teaching through evaluating their own practice in relation to pupils' progress, school targets and inspection evidence.

6. Excellent ability to advise and support other teachers
Aspiring ASTs must provide clear feedback, good support and sound advice to others; are able to provide examples, coaching and training to help others become more effective in their teaching; can help others to evaluate the impact of their teaching on raising pupils' achievements; are able to analyse teaching and understand how improvements can be made; have highly developed inter-personal skills which allow them to be effective in schools and situations other than their own; provide a role model for pupils and other staff through their personal and professional conduct; know how to plan and prioritise their own time and activity effectively; are highly respected and able to inspire others.

These standards will be kept under review during the introductory phase and will be revised in the light of experience and consultation.

(DfEE, Advanced Skills Teachers: Note by the DfEE, 1998)
Appendix II – Data Collection Methods

a) Permission letter sent to Headteachers

Dear Sir/Madam

PhD Research: How do expert geography teachers use their subject knowledge?

I am writing to request your permission to undertake some research in your school. The focus on my PhD is on how expert geography teachers use their subject knowledge. I have approached [Case Teachers’ name] and he has expressed an interest in taking part in the research.

Participation would involve visiting the school and interviewing [case teacher] and one of his colleagues, collecting lesson planning documentation and observing three lessons. Although the identity of the school and the teachers involved will be kept confidential, I do feel duty-bound to warn you that it may be possible to identify the school through contextual information in the final report. [The case teacher] will also be offered an opportunity to validate the data and participate in discussion of the data as part of the research process.

Please feel free to contact me if you require any further information about my research, or if you have any reservations about granting me permission to conduct the research in your school.

Yours sincerely

Clare Brooks
b) Interview questions with pilot case teacher

1. Why did you choose geography?
2. Describe your degree and reasons for degree choices
3. What has been your relationship with geography since? (i.e., related work, courses, research etc)
4. Reasons for becoming a geography teacher.
5. Describe career so far
6. How important do you believe it is to teach and learn geography?
7. How do you approach teaching geography? Why do you make these choices?
8. How do you choose which places/topics to study?
9. What is your favourite/least favourite topics to teach?
10. How do you prepare to teach topics you haven’t studied?
11. What do you want students to leave geography education with?
12. How do you keep up-to-date with developments?
13. How do you use their subject knowledge in planning? In teaching?
14. How do you assess if students have understood the work?
15. What do you do if they haven’t?
16. How do you use assessment information?
c) **Revised interview questions for first cohort of case teachers**

**As a Geographer**
1. Why choose geography?
2. Describe degree and reasons for degree choices
3. What has been relationship with geography since (ie, work? Courses, research?)
4. Who is your favourite geographer or what aspect of geography interests you at the moment?
5. Reasons for becoming a geography teacher.
6. Describe career so far.

**As a Geography Teacher**
7. How important is it to teach and learn geography?
8. How do you approach the teaching of geography? Why do you make these choices?

**Planning and Assessment**
9. How do you choose which places to study?
10. What’s your favourite/least favourite topics to teach and why? What is your favourite resource?
11. What was the best set of lessons that you have taught recently and why?
12. What do you prepare to teach topics you haven’t studied?
13. What do you want students to leave geography education with?
14. How do you keep up-to-date with developments? What have you read recently?
15. How do you integrate topicality into your lessons?
16. How do you assess if students have understood the work? What do you do if they haven’t?
17. How do you use assessment information?
18. How do you feel you use your subject knowledge in planning? In teaching?
d) Interview questions for second cohort of case teachers

1. Why Geography?
2. Experience of geography at school
3. Geography at university
4. Other geographical experiences
5. Why teach geography?
6. Why is it important for students?
7. Preferred approach to teaching geography
8. Significant Life Experiences
9. What keeps you fresh?
10. Ideology Triangle
11. Cultures map
12. Where does your expertise lie?
13. Plans for future development
e) Documentation collected

Collect any relevant documentation relating to subject knowledge; including:

- Department aims
- Policy on National Curriculum/Syllabus interpretation/progression
- Copies of schemes of work (dept and, if different, individual)
- Examples of lesson plans, particularly of lessons are being observed and the lessons preceding those being observed
- Examples of students work particularly relating to lessons/schemes of work targeted
- Assessment records. How is evidence of progression recorded? How does this inform future planning?

Take copies of this documentation

1. Highlight evidence of subject knowledge/understanding/skills and values.
2. Annotate evidence of progression
   - Subject knowledge
   - How learners learn
   - Pedagogical content knowledge
f) **Lesson observation sheet**

Aim: how does the case study teacher use their subject knowledge?

<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Date:</th>
<th>Period/timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class:</td>
<td>Gender mix:</td>
<td>Size:</td>
</tr>
</tbody>
</table>

Lesson Aims (as identified in the lesson plan):

Brief outline of lesson activities:

<table>
<thead>
<tr>
<th>Geographical Concepts</th>
<th>Geographical Skills</th>
<th>Other Know/Under/Skill</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Teacher action</th>
<th>Teaching Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Evidence of Progression (in geographical K/U/S/V)

How does the teacher use their subject knowledge? Big Questions/Little Questions.
g) Interview with line manager/member of department

Aim: to discover ethos of department and information relevant to case study teacher's environment

1. Describe how the department plans and discusses what aspects of geography is to be taught.
   • On what basis are these decisions made?
   • What role does the HoD and other members of the department play?
   • What role does the case study teacher play?
   • Who monitors that individuals cover the required breadth and depth?

2. What are the priorities for the identifying what geography is taught and how it is taught (ie, thematic, issue, place)?
   What places are used? How was this decided?
   How is it monitored? How is it updated?

3. Briefly describe the case study teachers' role and responsibilities within the department.

4. What are the case study teachers main strengths:
   as a teacher?
   as a geographer?

5. What areas do they need to further develop?
   as a teacher?
   as a geographer?

6. Where, in your opinion, does this teacher's particular expertise lie?

7. What extra curricular activities have they been involved in? and what has been their role?

8. What professional development or geography related development have they been involved in?

9. How do they use their subject knowledge within the team?

10. Discuss the relationship between subject knowledge and geography teaching?
h) Interview with students (pilot)

Aim: to discuss how they have responded to the lesson observed, their view of how case study teacher teaches geography, to follow up any interesting events or anomalies.

1. Tell me about the geography lesson that I was in:
   - What was it about?
   - What did you enjoy?
   - How does it fit in with what you have done before?
   - Is it typical of geography lessons? How?
   - Geography specific questions relating to the lesson.

2. How does the case study teacher compare to the other geography teachers?
   - Interest/motivation (yours and teachers)
   - Teaching/learning strategies/activities
   - Attitude to geography/work
   - Attitude to students
   - Being able to understand the work
   - Challenging work

3. How does the case study teacher make sure that you understand the work? What happens when you don't understand?

4. What are your favourite bits about geography and your geography lessons? Why?

5. What are your least favourite bits?

What do you think of your case study teacher?
I believe that geography is about understanding spatial relations, patterns and processes. I value a logical, scientific approach, using analysis, law seeking, hypothesis testing and problem solving. I believe that if we find out more about the world then we can discover what places are like.

I believe that geography is about developing a multi-layered understanding of the world. I believe that geographical study is about being critical and reading landscape as text. Geographers appreciate differences between spaces, places and people. This involves recognising that there are many realities and representations of place and space. Everybody is a geographer, because we all function in the world.

I believe that geography is about understanding the relationships and interactions between people and the environment. I believe that the analysis of quantitative data is important, but I also think we should consider people's values and attitudes. I think geography can help us to understand conflicts over land use and be able to make informed decisions.
Appendix III  Interview transcripts

Notes: Interviewer in italics
      Respondent in plain text.

j) Steven

First of all, at college, why did you choose Geography?
What was your initial interest in geography?

Because it was definitely the subject that I enjoyed at A’level.

What else did you do at A’level?
Biology and Art. It was also related, in the sense that it was the one that I
was most confident in, but it was definitely interest value that dominated it
all.

What particular aspects of it interested you?
Predominately physical, but I think that was very much because the main
gEOGRAPHY teacher we had at A’level was physical, so he displayed a real
interest in that.

What was it about it that motivated/interested you?
An appreciation of what was happening, and more why it was happening.

That kind of “explaining” thing?
Yeah, explaining and understanding.

Was that why you choose it at degree level?
All of those things, yeah. I have to be honest; it was the one that I had
the greatest chance of doing a degree in, in the first place. In context of
the other A’levels and the results that I was going to get – geography was
always going to be the better result.

So why did you choose to go to PNL?
Estimated grades weren’t phenomenal and PNL weren’t expecting
phenomenal grades. It was certainly one of the ones that gave me an
offer at an early stage, and it accommodated the deferred year
eventually. I deferred for a year, worked for 7 months to get some money
and then travelled.

Where did you work?
Local bar.

And where did you travel?
Thailand, Australia, New Zealand, Singapore.

Why did you choose those places?
48 At the time it was opening up to back packers. It is definitely dominated by backpackers now, but at the time it was just starting. And it was an era, I knew some people who had emigrated out there.

50 So you had friends out there?

54 Summarise the story so far: – what did you think of the degree, the choices you made etc?

57 On reflection, I certainly remember thinking at the time, and my view hasn’t changed, that the course was generally set up quite well, in the sense of the foundation year. Different people had different backgrounds, they had all done A’level geography but they had a different grounding in it. It was a year where everyone consolidated their knowledge. That was particularly useful. You also had core skills being developed. You were exposed to quite a few elements. And then it was particularly useful that you had the element of choice in the second year and third year. It was a positive direction, I think.

67 What choices did you make?

69 I remember being very conscious of doing a cross-section. Human, physical and regional. Why? Because by the time I got into the second year I was thinking about where my degree would go. And by that stage I was thinking of teaching, and I considered a broader spectrum: one, it would suit me anyway, but also I considered that it would suit a teaching environment better. So I picked London Studies, Population unit, geography of Africa, [geography] of Caribbean, remote sensing, and Economic geography of the Third World, which was heavy going: not a strong point and not a strong memory, I must admit.

79 Which bits did you enjoy most?

80 There weren’t many bits I didn’t enjoy. The bits that I didn’t enjoy was the heavy, economics-business side because it is not explaining a process, its not explaining a human reaction. It’s going on the evidence side of proving something which isn’t the thing that stimulates me in geography. So I enjoyed the population and retail studies. And I enjoyed immensely getting a greater appreciation of the physical stuff we did, whether that was the geomorphology or environmental systems, or ecology.

88 The degree that I did was very biased towards human and economic. At A’level the motivation was physical but you made a conscious effort to keep it more balanced and yet you still enjoyed it – you didn’t actively dislike elements of it?

94 No the units that I did dislike were the economic because it was about proving an hypothesis. I can accept the reason behind it and I can accept that it has a role to play, but for me its not a major role. For me, it’s understanding the processes, understanding motivations, understanding reactions, so the units that encompassed that were far more enjoyable.
So is that what geography is for you?

Yes – and I think that that’s what its main role is or needs to be.

Since you did your degree have you done anything else related to geography?

In the context of teaching?

No, anything.

Post-degree, I took a year out and worked on an estate, which was forestry work and things like that: estate management. I also did six months of travel – not employment based. Again that exposed me to things that I had learnt on Africa, North America and the Caribbean which provided a real life context to base my ideas on. I worked for a mining company in Scotland which from a teaching point of view, was an interesting context because you got to see why people think what they do – getting to see the other side of the argument. It’s far too easy to give the view of the conservationists, the environmentalists viewpoint. It’s quite an easy one that kids empathise with, but I think it needs to be a balanced argument and having that experience has exposed me to that. A reminder that it needs to be portrayed even if its something that you don’t necessarily agree with. It still needs to be an item that’s put forward. Work experience outside of teaching has exposed me to all facets of life. And it has certainly been an eye-opener and an introduction.

Did you seek those areas of work due to the situation you were in or because they were related to geography in some way?

Subconsciously a bit of both, because I sought employment in the area I was in with connection with families etc. But at the same time I wasn’t interested in doing work just for money – like bar work or security work. And there was the opportunity, so it certainly wasn’t something I was going to turn down. Because I could see an interest element but also an intrigue element as well, because it would be something that I could relate to and use in the teaching environment.

What’s your relationship with geography now? What’s your favourite aspect of geography or favourite geographer?

It’s not so much particular geographers that I’ll explore, or particular topics – I still prefer to teach the environmental elements. But that’s because it typically has a physical process that needs to be explained but it has a human response or involvement that needs to be put in context. So it’s involving both elements which arguably is the direction in which geography is supposed to go in.

That’s the areas that you particularly like to teach is that also the areas that you particularly like to read about?

Yes, most articles that I will read about, or take time to read about, are either general environmental issues or things that are specifically related to certain syllabus content. Wider than that, I very rarely have the time.

Why did you in your second year decide to become a geography teacher and not humanities or social science?
Because it was the thing that interested me it was the thing that inspired me beyond... It was a thing that I still wanted to learn more about. I certainly don't believe that doing a degree, you don't know anything other than being exposed to a few things, and there's a hell of a lot more to learn. I mean one of the key things we appreciate is that geography has certainly been evolving and has been very distinct for periods: in which it seems to be going in different directions. So it's very definitely an ongoing thing. So its something that I certainly perceive that I retain an interest in and I retain desire to keep on learning about.

You did your PGCE at Nottingham - tutor was Mary Biddulph and Tony Fisher and then post PGCE

I applied for 2 jobs, I had a preference to stay within Nottinghamshire basically because [his wife] was still working in Nottingham – going outside would be a greater hassle. The first job that I applied for, someone else from the course also applied for and two others. It was a reasonable school; I would happily have taken the job if it had been offered. It was offered to the other person that I did the course with. The interview was reasonable. The feedback was useful. I applied for the second job that came up, which was the job that I got.

And since then?

I'm in my 5th year at the same school, and I'm still keen to develop the geography side of my teaching. And the way that I teach, especially with the sort of depth of knowledge that I have in order to deliver well in the classroom. But also the parts of the syllabus that I particularly get involved with on the A'level side. I've also taken the opportunity to broaden my pastoral role. Digressing a little bit, but one of the things that I believe in as a teacher, and not just as a geography teacher, is that a kid comes into the classroom and that kid comes in with a lot of baggage, and you can't just teach that person as a separate entity without the baggage – you've got to take into consideration the baggage. So the pastoral side is something that has interested me a lot and something that I have got involved in, but that doesn't mean that I don't value geography – I increasingly value geography.

Deputy head of house now. How long?

Two and half years. And I'm enjoying it

Career aspirations?

I'm very much at a crossroads. I would like to be a Head of Year or the equivalent of a Head of House, which I can see greater number of opportunities presenting themselves in the short term. But also sort of Head of Department. Although in certain areas, I don't feel I have the breadth of knowledge, subject specific, that would be useful to support staff for example.

Interesting that although you took great pains at University to get a balance of geography you feel that that is flawed now.
Well the subject is always moving on isn't it? A measure of what we were exposed to at our degree level is arguably what we should expose pupils to even at A'level, and so I think that the depth of knowledge is only something that has increased.

Moving on from you as a geographer to a geography teacher, Why teach geography, what's the point?

I think that there is an awful lot of value in the vast majority of subjects that kids are taught compulsorily. However, I think geography is a subject that puts virtually everything into context, a real life context. It is a subject that gives an explanation of what's going on, why its going on, and what people may feel, or respond to as a consequence.

Why is that important for kids to learn about that?

I think that otherwise they will just grow up knowing a couple of processes, knowing a couple of equations or phrases and not having any real understanding of where they are, or the context of where they are.

How do you approach teaching geography? What's your philosophy? How is it best taught?

I think the kids need a balance: the physical processes, and human elements for human responses etc. There are very definitely strong environmental issues to deal with especially the attitudes and the conflicts. Ultimately I think the geography is more balanced a subject now that what it has been before, and I think that is a very healthy one because its not just one dominant process: they all interrelate. However, I think some things need to be separated into separate entities especially when you are talking about Key Stage 3 and Key Stage 4, because obviously some things are tremendously complicated. And interrelationships and interactions are not something that are easily grasped. I mean they can be and can easily be developed I think there is an awful lot that can be taught regardless of ability and age.

What approach do you prefer?

All of them because there are merits to all of them, aren't there?

The way that I am certainly in favour of doing it, is the way that we have set it up currently. We teach on a regional basis but within that we look at certain thematic issues. Certain things we teach purely as: “this is the process”, “this is what people may do as a consequence of that process”. I think the way geography has gone is that it has advanced, rather than a single regional approach, it is a more balanced approach now – the healthiest we are in. I think we need to mix all of them. They all have proved to have limitations and are not the only thing on offer. I think that if we take the best of all of them and put them together. Then we have a very nice package.

Is your goal to teach a particular part of the syllabus or national curricula or a topic for this term, how do you choose what to teach?

Within our department we have recently revamped Key Stage 3 and KS4. And within both of those, within the department, we have sat down and
we have decided what is the key focus within a term. Is it a thematic
study? An issue? What do we need as a balance for Year 7 right through
to 11? And from that point of view we have decided to have some units
which are very resource based, local based, thematic based. Then we
will go through the whole of the Key Stage 3 programme and things that
are relevant to that particular approach or that particular topic and then
find the teaching strategies and resources subsequent to that.

With KS4 it is a slightly different matter because it is very heavily syllabus
led (MEG, A) with four elements and it's all "People and... " So that's
much more a prescriptive thing about finding the resources and case
studies that are most suitable. The most suitable for what we have, and
the subject knowledge that you have. We take the coursework that we
have decided to do. Instead of doing two small pieces for the context,
and the kids that we've got, we made the decision to go for one larger
piece of coursework to do that at the end of Y10. In the context of Year
10 and the sequence of the syllabus, we've picked a case study to suit
that. It's a different approach at Key Stage 4.

But very much a departmental choice?

Yes

Looking at it from a spatial context, what influences the decisions that are
made about which places you study, in Key Stage 3 you have to study a
developed and developing country
The influences in our particular school, predominantly come from
previous places that we have studied, because certainly the department
will have been involved in that for a long time before, so the resources
and subject knowledge already there. Even though, some of the
resources are very much out of date. So we perceived as a department
that it would be easier to update some of the details and use resources of
the same place, rather than try to seek a whole new batch. So in reality I
wasn't really involved in deciding which localities to study, because it
seemed the easiest option.

What do you enjoy teaching most? What is your favourite topic?
There aren't many that I don't enjoy, In fact I wouldn't say that there are
any that I don't enjoy. Which one do I the most? Possibly the ones that I
was most involved in designing

Is that because you designed them?
It's because I did and I am intrigued to see how well they work. Year 7
Rivers and flooding, Year 8 regional unit on Brazil, Year 9
tourism/regional unit on Italy. But I thoroughly enjoy virtually every
element. I mean we do an element on natural disasters and again it
stimulates the kids –they get excited by a lot of it, It's very definitely
dramatic.

Is it their response to a unit – is that how you get the most enjoyment?
It's an element of enjoyment. It certainly wonderful when they get excited or interested by it all. But even the units that you wouldn't rate as being exciting, if they get a primary understanding having done the unit, then that's exciting.

What is your favourite resource?

(long pause) I'm bordering over which I use most of, and which I find most beneficial. Textbooks are okay but they mostly need to be adapted or used as an introduction. Videos can be excellent but can become dated quite quickly on an issue. The one, if it works well, is the actual pupil knowledge.

Talk me through an excellent set of lessons that you've taught recently.

At this time of year, with year 11 coming up to the exams, my whole style has changed to not-so-much learning something new. Although with the pressure of time, it has been new stuff that I've been introducing, but the style has very much been a "let's summarise, lets come together, lets generate something fresh, something quick". So we have been generating key notes. And over the last 3 or 4 lessons it has been high pace, high interaction. The kids have been motivated, they've been switched on, they've made very good decisions, and they've interpreted stuff. So it's definitely been good preparation for the exam and it's certainly covered everything that they need to do: one on subject content, one on utilising resources, one on the issue of time and time management. From a class point of view they have been bouncing ideas off each other, they've been recording things in a precise systematic way. That's been just in the immediate memory.

If you're going into a situation, when you are about to teach something you have never studied, how do you prepare yourself for that?

Variety of textbooks. If you can't get your head around it, there's not hope for them to get even close - you have to understand before you can deliver: in order to impart the knowledge or in order to get pupils involved in learning. At the least you need to provide a structure and an approach through the material. So the first port of call is to try and get an understanding. Second port of call, would be to try to get some sort of structure, some sort of sequence to progress through. And to decide which material it is you are going to be using, and which to avoid, and then to take it through to decide on what's the most suitable teaching style: whether it's pupil research, you imparting the knowledge, directing, you know, headings, whatever text questions, class based discussion, whatever format. And that's very definitely an approach that I have been forced to take because there are certain things that I never studied at A'level or degree. I'm not saying that is the best route to take, not at all, but relative to the lack of knowledge that I had at the time, certainly the one I feel I have covered respectively.

Clare talks about teaching History – approach as a learner rather than as a teacher – agrees – definitely both for the A'level and the KS3 history
Give me an example... KS3 history trying to teach the Civil war. I didn't know anything about it and there are rather a few tricky causes involved and a number of sequences of events. You need to understand the process. They need to understand what has happened before – I had no idea what happened before. So the approach I took with them, was the approach that I took with myself, which was to understand the actual end event, to say who was involved and everything else, and then to look for the answers. Why did we get to this stage? And go looking for information on that.

So you organised the teaching around the way that you had organised your own learning.

Yes, yes. In the sense that by the time you had gone through doing an A'level and doing a degree, the skills that you having in looking for: (information and editing data, looking for questions and posing questions), is quite a methodical, logical way and so I don't see any harm in imposing that sort of system, that sort of structure, and using it to generate a pathway through a topic.

Do you teach history as a geographer?

I teach history as a geographer purely from the point of view that I don't have the breadth of knowledge to start relating this part of the syllabus to another part or to supporting this particular event, topic or name with a length of stories. I don't have the breadth of knowledge.

What do you hope your students have left you with? What is your value added?

I would hope that they would leave having enjoyed the subject, even if it's not their passion, appreciating that it can be someone else's passion. I would hope that they would leave with a desire to still find out more. With an ability to find out how something else works, or to appreciate why people reacted in a certain way, to an event that is yet to happen. To appreciate the fact that an issue isn't purely black and white that there are several issues there to the story, there are several reasons for why things can happen. And I would hope that they would try to offer an explanation to an awful lot of things that crop up. If they have a passion for geography, or to find out more and more about it, that's the ultimate job.

Do a lot go on?

A few each year. It makes you feel proud!

How do you keep up to date?

I take on board a subscription to National Geographic, which is very broad-based. I'm not saying that it is a teaching resource but it keeps me informed. Geography Review is a subscription that's offered to the kids (at A'level), which I'll edit and use specific examples that are relevant to my part of the syllabus – so, I use it as a teaching resource. Typically, I don't often use it as a lesson material but as another level to use within a case study to answering an essay.
GeoFile resources: which I will use as lesson materials.

But the thing that I am trying to get across to the kids is that (as you will see tomorrow) I have a geography news board. It looks a mess, from newspaper cuttings added during the year. The message being that this is geography it is a topical subject and is in the news all the time. But I'll never put anything on the board if I haven't read it and sometimes it will be a photocopy because I am using it.

I'm not a member of the GA. The approach on my teaching practice was to take the kids on a monthly basis to university but it is not an easy journey being too long in the evenings and some of the lectures were not interesting, so it's a high risk of being a demotivator.

(Clare talks about TG) Tape ends

How do you integrate topicality into your lessons?

Lessons are done on an rotational basis: 6 week block of History and Geography, which means that there are 3 topics in a year which does not give you enough time to digress. For example, we keep on using Mount St Helens.

But we can integrate new things, e.g., using Kosovo as an example of a population migration topic.

Kobe is used as an earthquake because you can see good examples of both primary and secondary effects.

How do you assess if students have understood the work?

If they can answer the questions that you are posing.

Examining their written answers – summation at the end of the lesson.

With Y11, recap to see how much they can recall.

I make a decision at what stage they are at – and if it necessary to go back and go over it? Do we have the time? Maybe have a one-to-one session with them, or I may make a note to pick up on it later, when they may have developed other skills so that it is easier.

How do you use assessment information?

At the beginning of the year you get the assessment level that they were given at the end of the last year with additional information – this has evidence to pass on with additional comments and any SEN information.

This I have summarised in my register with Reading Age, Spelling Age, IEP etc

In KS3, they have a summary of the levels so that they can get on to the next level – what they need to do.

Self-assessment - they need to be more familiar with the criteria. And there is an End of Unit review which is a move towards target setting. In the Brazil unit, we have used the level descriptors and said where they fit in and we are building this across the whole key stage.

How do you use SK?

Need to have an appreciation of 1) the difficulty of content and 2) a clear understanding of where pupils are coming from. I attempt to get pupils to understand, involve them in the process, and find out where their perceptions are coming from. Sometimes this is instinctive but it is most
successful when it has been thought-through and different avenues are thought of.
1) Clive

Why do you choose to do Geography?

I took quite a complicated route because initially I didn't, initially I thought I wanted to study architecture at university. My father was an architect and I wanted to be an architect but I lacked the creativity. I am not sufficiently arty enough to be an architect and I couldn't do it - although I had good A'Level grades I didn't have what they wanted and I realized I made a bad choice and I then looked around at other things and because I enjoyed Geography, I enjoyed other subjects as well but Geography of all the subjects I studied was the one that I most enjoyed. I enjoyed traveling and I enjoyed other aspects of it. I focused on that.

What was it about Geography that you liked?

What at school? I think that it was probably looking at other places - I always had a fascination for how people lived their lives which is probably why I also enjoyed History as another dimension to the same issue. I was fascinated by what it was like to live in other countries - this was the attraction for me.

Talk me through your degree.

It was a traditional London type of degree. A BSc degree. I did a major chunk of geology as a ... what is it called? An ancillary subject, for two years. It was very broad based, I mean, one of the strengths of the old London degree was that you trained as a geographer, as a physical geographer, as a human geographer. As I developed I became incredibly interested in the physical environment, My final options were geomorphology and bio-geography.

Was there much cross-over between the human and the physical? Or were they kept quite discreet?

Oh they were kept very, very discreet. There was no cross-over at the time. And you had human geography, you had geomorphology and met [meterology] and clime [climatology], cartography, you had urban geography all as discreet subjects. Although you had Haggett talking about geography as an integrated subject-we only paid lip service to that – it was still very highly compartmentalized. You didn't look at the environment as a whole. Clearly that was one of the failings of the course. This was classical geography.

Apart from choosing geology were you given a great deal of choice?

No, you could choose geology or anthropology.

How about within the units that you studied?

Oh, geography you did. Yes. I mean you could specialize and you tended to specialize either as physical or human geographers-depending on your interest. You could progressively develop, at first you did everything, until the third year where you had options.
Depending on your options did you get a BA or BSC?
No, it was curious you could have either, you usually elected what you
wanted. A friend of mine got a BA on the identical course to me.

And so, since your degree what has been your relationship with
geography since?
I obviously did a PGCE

Did you do that straight away?
Yes, at the Institute of Education. I then went on to do a Masters at the
time, an MSc that was based at the Polytechnic of North London - which
was looking to establish itself with the development of geomorphology
and biogeography. And I became very interested in pollen and ecology.

Was that with Jean Emberlin?
Yes, I know Jean very well, she married Dick Bryant.

I did my degree at North London
Yes, you know they split up?
I didn’t know them personally .... So that was your Masters and you did
that part-time. When did you do that?
That was way back in the 70’s – ’77, ’78. I then did some research with
Dick Bryant. We looked at the Lake District and we looked at the pollen
sites and dating them and we made some reasonable contribution to
various conferences and some publications. And we also did some work
in Norway - it was area of permafrost and I started a PhD - and I got a
year through it too. My first marriage broke up and it got very difficult. I
disbanded it which was not the best thing to do in hindsight.

So your masters and your PhD was very much in geography and not
geography education.
Yes, as a geomorphologist - it was pure academic research.

Why did you decide to do that?
Sheer interest.

So, self funded?
Actually, my Masters got support from my ex-employer - London Borough
of Lambeth who paid for it and I got 3 months off. In those days they
encouraged you to.
I am now doing an MA in Education at the OU so I’ve basically swopped
and I’m 2 years into that.

What’s your focus with that?
Curriculum - development not mapping.

Do you have a particular favorite geographer?
At the moment, I’m much more interested in geography education than
geography - development of thinking skills, along the line of Leat’s work
and also ICT which has been a long term interest of mine for the last 15 years.

And how does that then relate to the geography aspect of what you do? Well totally - I am doing it as a geographer. I am not interested in it as my own interest over the theory of education. I am particularly interested as a geographer in applying Leat's work and others', as well as taking the idea that the multiple intelligence's of Howard Gardners' ideas for instance. There is a huge area really that we are slowly entering and that's the focus of my interest really. As a geographer, and as a geography teacher more than as an educationalist.

So do you see yourself primarily, as a geographer who's teaching or as a teacher whose main interest is in geography? No, I think I have moved from being mainly a geographer who teaches to being primarily an educationalist who's a teacher and that may shift after 30 years.

Has that been a recent development for you? A slow development. I'm primarily a teacher.

Explain your reasons for being a geography teacher as opposed to Humanities, social scientist or physical scientist? I've taught all of those areas but I am essentially a geographer - that's my core experience ... that's me.

Why geographer? Is it because your degree was in geography? Yes, and obviously my academic strength lies there. I love History but I am an amateur. I've got A'Level History but I have no undergraduate training in history. Through my undergraduate studies, I've become more and more of a scientist - I'm fascinated by ecology but I am not a trained biologist. I am a trained geographer, so this is the core of my academic experience and is what makes me tick. I still see myself as a geographer as well as being a teacher. Primarily I am a teacher but I am also a geographer.

You obviously still get excited by the subject. Oh, Yes, Yes.

Do you read about geography? Is it an aspect of your private life at all? Yes it is. I mean I have a lot of things in my private life, obviously. I am very passionate about birds and bird-watching. I also have a three year old daughter who dominates most of my life. But I do read, and I read around the subject.

OK, can you take me through your career since your degree. OK, I started teaching in Barking and Dagenham as a teacher of geography. In my second year I started teaching geology and became a sponsor for geology on an old Scale 2 which is quite a jump. And then the school decided to go into an integrated curriculum in a big way which
was originally quite avant garde. Geography was linked with Science on an Environmental Studies programme and I was put in charge of that. That was late, mid 1970's, 1978. I ran that for 2 years doing a combination of lower school science and geography and then in 1980 I moved here, as a Head of Year. And then, the Head of Geography left I took over Geography in 1991, and geology as well. And then last year, 1998, I became Head of Humanities and Geography, and this year I became an AST.

Why did you go into the AST? What prompted that decision? (Um, I wish this was off the record.) There was so many pressures put on me by the school. The school perceived that they would like ASTs. We had an Ofsted Inspection and I'm not being arrogant but I obviously got a very good report. And I got very good grades, which was very flattering, and the Head felt that this was a direction that I could usefully move down. I liked the idea - it's a change to have time off to reflect and develop as a geographer and as a geography teacher, to develop my own interests in ICT and geography, thinking skills. It's a chance to rid yourself of the managerial component and to earn some more money as well, which is quite nice - an increase in salary.

And quite a unique opportunity in teaching. Yes, yes, it's a way of progressing my career without going down the route towards Headteacher.

That's not something you are interested in? No.

Is this something you would like to carry on doing for a long time? I would like to, yes. This is a 4-term appointment and I'd like to take it beyond this. Most of the initial funding was just for 4 terms - it was very hard to get a permanent appointment, at the agreed level of pay. But after the four-term appointment? I will revert to being Head of Humanities Faculty. And if the opportunity arose, you would like to carry on with the AST? Yes, well, I've never actively .... You are enjoying the AST work? Yes, yes.

What does it entail at the moment? Well, it is fast-evolving. I am already involved in mentoring and supporting teachers in the authority who are having problems. That's across Inner Croyden. I'm having to be delivering some courses with the London advisor on the use of ICT and on the development of thinking skills as part of the day release. And I'm going to primary schools and doing work with the advisor on thinking skills and I've been going in and developing units with teachers on thinking skills and hopefully, trying to bridge the gap between Key Stage 2 and 3.
Sounds incredibly exciting.

It is, yes. It puts you at the forefront of everything that's going on.

I'm also in charge of the video-editing project which I am very excited about. I could talk for hours about it. I'm becoming a real anorak.

Moving to the teaching aspect of your work, how important do you believe it to teach and learn geography?

I believe it is an essential part of a child's education.

Why?

I think that it leads to effective global citizenship - it sounds very pompous but I think, that if children are going to play an active role to modify the society in which we live, they need to understand and know their geography. We're teaching them about the processes which shape the land, and the state of the world as it is. I am firmly committed in issue-based geography and they are confronted with the issues and I would like to think that through that we are helping them advance global citizenship and to become better citizens, more aggressive citizens, more inquiring citizens.

It is an ambitious aim.

Yes it is, but I think we should be driven by ambitious aims.

How do you approach the teaching of the geography. how do you choose which geography you wish to teach?

Well, obviously we are constrained by the National Curriculum, and that is a major constraint - we've worked through it and we've adapted it to meet our needs as far as we can. It is the key driving force behind the curriculum. Through that we interpret the issues that we want to explore, and the places that we want to deal with.

How do you decide which issues you want to explore?

We work as a team. We've developed our programs of study as a team over the last 10 years.

Does that mean that issues are in the curriculum are certain interests of people on the team?

Yes, its not just a question of whether it interests us, obviously we have to look at the broad picture as a geography as a whole. We must deal with the core, with the whole geography.

What one envisages is a meeting situation where one says what about settlement, and someone else says “Let's do the Docklands”.

Absolutely, we utilise our local resources. We take Year 9 to Spitalfields and look at urban redevelopment. We then take them down to Docklands and - we are driven by our own interest as a department, yes, but we are
also conscious of the fact, that we have to also look at the subject as a whole.

You’re the first person that hasn’t mentioned resources.

We are pretty well resourced.

If you have an area but no resources, do you just buy them?

We have the World Wide Web. We have a fairly comprehensive range of resources. If someone has a particularly isoteric interest that might be hard to be pandered to. But over the last 10 years I’ve been around (I’ve been around 19) we’ve built up a fair range of resources. Um, we could always do with more. I mean we have had a cut in capitation, so we may not be quite so adventurous in the future but I refuse to be limited by resources. If I think something is important then we go for it, you seek the resource. Particularly with ICT, it’s too easy to say we only have one computer and that’s that - we’ve acquired what we’ve got over a period of time. The latest thing which is this video-editing suite, we are saying, "look, we want a share of this money, we want to be involved in the technology bid. Why shouldn’t geographers be involved?"

How do you choose which places to study?

Partly through interest and partly through... Well there were the constraints of the National Curriculum but now they have been relaxed with Curriculum 2000. Now it’s towards certain areas. We selected Brazil strictly because S****t got a Masters in Latin American studies. We always selected Brazil before that, but through his interest we are building up our focuses. We do a fair amount of geomorph[ology] and at 11-16 a fair amount of bio[-geography] - that’s my interest.

What are your favourite topics to teach?

That’s almost impossible - I love doing weather with Year 7. We do a project about the variation of wind and temperature on the outside. We use the data logger and put that onto a chart, map it and they love it. It is a very successful unit. I am fascinated by the weather but this unit is great fun. Hopefully there is nothing in the curriculum that I find a dreadful bore, there shouldn’t be. Sometimes if you have done something too often, that’s when it’s time to change.

Is that one of the things that motivates you to change things - when you think “Oh No”.

That’s when you need something else, you need to be kept on your toes.

Which is currently your favorite resource?

That’s an extremely good question. I would have to say, perhaps the internet, World Wide web - I suppose has good use - I’m not sure how effective it is. We use different resources for each topic as appropriate so this is my favourite - very clearly I’m excited by the use of ICT and I suppose in some ways it’s my favourite resource. But I still enjoy and look forward to maps. And I still like the traditional skills of the geographer as well. We use textbooks. I’ll use a textbook today. I insist
on textbooks being used in a sensitive manner, in a thoughtful way as a
resource and not as a "sit down, copy that out, answer those questions":
as a replacement for the teacher. I love books. I have books - it's a very
hard question.

Clare talks about the Q.
I could talk about Brazil 2000 which is absolutely magnificent. I take that
as an example of current good practice, as there are a lots of different
things you could pick out.

The best set of lessons that you taught recently?
What have I been particularly pleased with? Well, I was very pleased
with the work we did in Norfolk last week which you'll see something of
today.

Why?
It was new. In previous years, in fact for the last 15 years we used to go
Ramsey for our residential fieldwork and this year we switched to Norfolk.
So it was an exciting place and we have had to work out a new set of
projects for the children to do. The rivers project worked particularly well.
Judge for yourself, you'll see it later.

You obviously enjoy the curriculum development aspects of your job.
A vital part of the job, isn't it. It is essential. I have been doing this now of
27 years, and unless you constantly change to new things, you very
easily become staid.

Obviously, it is what is maintaining your excitement.
Yes, after all geography is a subject which doesn't hang about for very
long.

So with for instance the Norfolk work, how do you prepare to teach a topic
that you are unfamiliar with?
I was very lucky. I know Norfolk very well and I visit it 2 or 3 times a year.
So in a sense, I was already there. Normally we visit the area. In fact,
that's what I did, visit the area, and get a couple of resources.

And then presumably it's collaborative and you work together. (He nods).
If you are teaching about a topic that you can't easily go it, how would you
approach it?
That's the start of the work on tourism in South Africa - then we, as a
team, sit down and talk about how we are going to approach this. We
prepare pilot work in the first year. We set about acquiring resources. I'm
being pretty cavalier about resources. Clearly we have to select topics
where there are available resources, reasonable to obtain, which is a
problem sometimes.

The next question, I think you have answered already: what do you want
students to leave geography education with?
I want them to enjoy geography. I want to look back and say that was a good experience. And I want them to be able to think as a geographer but not necessarily to realize that they are thinking like geographers, but to have the awareness of their environment and to be able to make a contribution to the shaping of the environment - sounds very pompous doesn’t it?

How do you keep up-to-date with developments?

I am a member of the GA. I watch television. I read. I work with other teachers if I can, and particularly through Heads of Department meetings with the advisor, and as an AST: that’s opened up more opportunities. We also have other subject co-tutor meetings. We have people on PGCE courses. We have a dialogue with the Institute and I go on Inset courses - which is the least satisfactory of them all.

How do you integrate topicality into your lessons?

Almost spontaneously really. If there has been a great big earthquake, you mention it even if you are not doing plate tectonics. We started doing a board with news but we failed on that one .... It’s very important. I try to bring that into the lesson on South Africa today - it’s important that children have seen that geography is about the world, how it is and how it’s changing. I’m very conscious of the need to be aware of the news.

That has definitely been a feature of what I’ve seen today, the dynamic nature - you make that explicit. That’s what children then begin to find interesting.

How do you assess that students have understood, and what do you do with them if they haven’t?

Your skill in questioning children in the lesson - as I’m circulating I get a very good idea. The task I gave them today, having to summarize changes in the country I made sure that I looked at the charts as they were working. I detected 2 children, one who had hardly started and one who had very limited answers. Obviously we mark work and this takes quite a long time to do, but I suspect something that we take very seriously. We use standardized assessment tests during the course of the year, linked to the National Curriculum levels.

Designed in-house?

Yes and we don’t use ones with just one scale. And we have annual exams and those are probably it.

And what do you do then with that information?

We are picking it up ... you should use it to adjust the tempo of the lesson, the level of the lesson which should be a constant adjustment - how I pitch it. If they are all understanding it, you up the level until you get to the point where they are not understanding it and then there should be constant modification. It also should be targeted towards individual children who have clear difficulties. In extreme cases you adjust the set, but in most cases they just need additional support. I am very keen on
this idea of setting targets in geography and this is an issue that we are
going to develop next year, so each child will have their own targets to
work towards - this is the sort of feedback to foster.

*When you say you up the level of the lessons, can you give me an*
*example of how you would do that?*
*You introduce increasingly geographical terminology. You use more*
sophisticated concepts.

*What is a more sophisticated concept?*
*Why do people go to South Africa? - Go as a holiday maybe? That group*
*were actually producing quite a sophisticated profile of the sort of*
holidaymaker who would be drawn to South Africa and what they were
going for. Whereas a less able child would not have picked it up in that
kind of way. I wouldn’t approach it like that. I would have used the
photographs to identify an attractive place and shiny beaches perhaps
wildlife, or a more simplistic view. You can bring in more. You can move
into ideas of aiding development, infrastructural developments and,
moving onto the dimension of cultural impact. That’s probably what
mean by increasing the level of sophistication. It’s really pushing children
to achieve the very best that they can, keeping the constant pressure of
achievement.

*In order for you to be able to do that you have to have an absolute*
*understanding of the situation.*
*Yes, it’s never as perfect as that obviously - the ideal situation yes, you*
do.
*Because from the pictures that I gave them this morning, they can see*
*that it’s sunny and very beautiful.*

*What you were able to do by using what you know is push them to*
towards getting the answers that you got out of them.
*They were working at GCSE level, higher A/B standard. They are*
perfectly capable of doing that - top set of Year 9 should be able to do
that. I think that as teachers we far too often impose artificial constraints
on what we think children should do - they should be the ones that set up
the constraints. They should be driving me as the teacher. It’s not very
comfortable because in a sense you are handing over the control of the
lesson in a way. I’m a control freak.

*Clare explains research - how do you use your subject knowledge?*
*Well, it’s an essential component - it’s my geographical knowledge that*
*underpins, well it’s not just my geographic knowledge: my knowledge of*
education, children and child psychology and development - the whole
caboodle. It is me as a geographer and my knowledge of geography that*
derpins this. I don’t really know how to expand on that.
*If you’ve got a situation of students, pedagogy and subject knowledge -*
*when planning the lesson – then the decision is made by all three. Is*
your knowledge of one, more or less significant that the other 2?
It is more significant. It is the essence of the whole thing. How I deliver it is controlled by my understanding of pedagogy and psychology - but it is essentially about geography. It is my geographic knowledge that controls it and creating not just knowledge but also the skills in geography. In a sense it's not just knowledge but the whole package of being a geographer.

END OF INTERVIEW
I) Mandy

Why did you do a Geography degree? Tell me about your degree.

I did a Humanities degree because of the range of choices that you could do with it, and because you didn’t have to specialise at the beginning. You could do tasters in the first year and then you specialised. I was going to do geography and theology. But I wasn’t sure that I wanted to do theology, so that’s why I went for the Brighton one in the end.

What other topics were in your first year?

Philosophy of history, Phil[osophy] of science, English and media, religion, geography.

And when did you start specialising?

Second year, the North South divide (which was Britain and global), Environment and Spatial Inequality and Development (which was global and also British) and then in the final year you specialised further. I did an environmental course which was moving away from philosophy of environment and was more to do with environmental issues, and spatial inequality. I specialised in third world development.

What did you make those choices?

Because they interested me the most and were the easiest for me.

What was it about them that you found interesting?

It was issues based really, and they were issues that had a historical context but were ongoing issues. What you were doing could actually make a difference in the future. As you pursued the studies, where-ever you took afterwards, (because everyone with a Humanities degree you would have to do a conversion to get a professional qualification if you like), and so it was having that basis there. I knew that I wanted to go into something that you were going to continue and make a mark with.

So when you chose that course, did you choose it because you had a philanthropic, I want to make a difference, feeling then, or did it come later?

Yeah, I think I did. You had to put down which your original options were going to be when you applied and mine were slightly different. Because I initially looked at the environment and the development ones but alongside the religion ones, and I thought that I might end up doing phil[osophy] of religion as one of the other two. A lot of the influence was geography at A’level which was the subject that I got the most into. And also part of that was at the expense of my other A’levels (Sociology and English Lit).

So you enjoyed studying the Geography much more that the other two?

Yes and I got a better grade in it.
What made you choose the Brighton course?

The modules, proximity to London, and the methods of assessment.

There was very little terminal exam. It was second year exams. Over the 3 years we did 42 essays and we had to submit a certain number of them, which you then selected from. All the seminars were assessed whether you were a participant or a contributor. The dissertation also had an oral exam attached, which was graded and then finals. So there were a lot of different chances to get marks.

Why did you like that?

Because I cope better with those methods rather than terminal exam – I was stronger at ongoing assessment.

Is that something that has influenced you as you have gone through your education?

Yes and for what I choose for the kids to do.

Right, is that because you weren’t very good at exams?

I was really good at them up to a certain point. Which was? I think up to A’level. I lose interest and I’m not so good at going back over a long period of time, and like O’levels which I found really easy, but A’levels, I was getting bogged down. The English I did okay at. The English was the first year that they experimented with an A’level where you could take texts into the exam. I did a coursework A’level but there was no coursework with the geography.

Is that one of the reasons that made you choose the English as well?

No, I just really, really, enjoyed poetry.

You mentioned that you like the issues based geography because it had a historical context that and the kind of social aspect of it. Is that why you didn’t go for a purely geography based degree?

Yes and at the time, the other courses that I had been accepted on (I was accepted at all but one institution that I applied for) and I held two offers. One at polytechnic (Brighton) and one at university (Manchester), which was the geography/theology joined. I knew that my strength was in human geography. There was a lot of physical geography that I didn’t really like and there were aspects of it that I never enjoyed like meteorology, and the coastal thing. I didn’t enjoy doing things like glaciation. What I then did was look carefully at what the courses consisted of and I knew that I needed to play to my strengths because at that stage I knew that I needed to go through in order to get the qualification. Some of it is about knowing what you are better at and there could have been other courses that I could have gone for and maybe not have been so successful. So I knew that I would be successful at that.

So why did you choose for the Brighton and not the Manchester one?
One was that I wasn’t sure about the theology and I wasn’t sure if I wanted to continue doing that and keep that going for 3 years. I decided that I wanted to move away from physical geography.

Since your degree: did you go straight into a PGCE. Yes

When did you decide that you wanted to become a teacher? I considered applying for a B.Ed before I decided that I wanted to do a degree, just in case I decided that that wasn’t what I wanted to do at the end of the day. So it was in the background at the whole time. It was when I was in my final year, I got all the stuff together and I was between two minds: PGCE and my other option was an Environment Impact Assessment course at Stirling. It was at the point where Environmental Impact Assessment was being brought in by the EU as a requirement for new building and the qualification would have been an all-time qualification where you were going out doing the LAs and then reporting back on behalf of Local Authorities, government or businesses. And then I decided to go for the PGCE because I felt that that would be more me in terms of what I would want to do in terms of life. It would bring me greater happiness and fulfillment than the other one because although with the other one I would be able to go out and make sure that things were being done as they ought to be done as I perceived it at the time. I did realise that I would have to work for companies and be political and I thought I can’t do that.

What was your PGCE subject? Secondary Geography

Why did you choose Geography? Humanities wasn’t offered anywhere, and I was told that I could opt for Geography, History, or English and I decided that my strength was Geography and my interest was Geography. I think that the interest and enjoyment stems back right through secondary school and probably back to primary school to where you have experienced success and where you have really been fascinated by it. And I did find the subject fascinating and I still do, and to be able to carry on doing that, and I think that’s what really did it.

OK, What kind of geography related stuff have you done since? Only inset courses to do with teaching geography and delivering it and things earlier on to do with the GA, meetings etc. I stopped doing that after 2 or 3 years of teaching, because I had moved more into Humanities.

Who is your favourite geographer? (Laughs) Bits and bobs interest me – but it is more education that interests me than geography. My focus has moved into education and away from the subject. Modelling and computer related things I’m getting into and again, keeping on top of issues and more, things concerned with
Jubilee 2000 and the movement to do with debt and global inequality. On the other hand, local issues, to do with the area that I'm teaching. So erosion of the South Downs or the impact of cliff collapse in Eastbourne as a town.

And is that because those things are specifically related to what you are teaching?
Yes.

So when you see something about say the erosion of the South Downs do you look at in terms of how you would use it in a classroom?
Yes

Since you became a teacher, can you run me through your career?
In my first year, in a Humanities department I taught GCSE Geography and GCSE History and KS3 Humanities – modular course
Second year: Geography, History and Humanities GCSE at the same school
Third year, it went down to Geography and Humanities at the same school.
Then I changed school and became head of geography, and taught KS3 Humanities, KS4 Modular humanities.
The same in my fifth year, and then in the last 2 years, KS3 Humanities and KS4 Integrated Humanities.

So you moved to a school where you were Head of Geography but not teaching a GCSE Geography course, was that a deliberate move?
At the end of my second year I started looking to move to my schools that taught straight geography, because I though that that was the way that the career should move, for security with the job and things like that. Because there are so few places that do Humanities courses and perhaps I would need to have more distinct geography to stand a chance of getting other jobs. And then as time went on, I knew that I was more committed to Humanities, so I started looking out for what was available and there never is very much. And then the job came up and it was almost by fluke that I decided to apply for it. It was a last minute thing because I faxed through the application form and went along for interview, and that was when I really found out that there was no distinct geography, History, RE offered at the school, and it was a modular course. So I went to the school to teach the modular course but to take responsibility for the geography modules, and geography papers at KS4 and for the KS3 geography. And then as time went on part of my appointment was to actually assist the development of humanities really and make it more integrated.

Why have you become more committed to humanities and moving away from the geography?
Because I think it is more relevant to students and I think that it is more realistic really – you don’t need to make those distinctions at the lower
level. Students have enough understanding of the key areas to be able to take the study up at a higher level and to study it at a higher level. I do think it is more relevant.

So if they've done GCSE Integrated Hums they can go on to do A'level Geography? Does it give them sufficient grounding?

Yes

Have you built this into schemes of work?

We have built it in such a way that it is almost as though a taste of a lot of things and when we discuss A'level courses with them... At our school most kids will go on to do GNVQ in travel and tourism and very few will go on to do A'levels. And also in the area that we are, travel and tourism will pull more because it is the area that they are going to get jobs in. When we prepare them for college applications we take into account all the humanities and social science subjects and do an overview of all of them so that none of them are outside of their ability. I think a high C/B candidate is more likely to be able to cope with the courses. A lot of ours do AS World Development as an extra subject.

And do they find that they can cope with A' or AS levels?

The feedback that we have had in the past, yes

Do you then think that the distinct subject specialism of geography itself is also irrelevant and unfashionable?

No. I think that a lot of the skills they develop that are related to geography that are KS3 skills are very relevant to their lives. E.g. Mapping skills, graphicacy skills. I don't think that beyond that they need the intricacies of the old O'Level and early GCSE courses offered. I think that the decision making activities that are required at GCSE and A'level actually relate quite closely to some of the methodologies that you have in Humanities.

Rather than the development of the subject – rather than geography moving out, you see the development of geography in more of a humanities direction than the other way around?

Yes I think that it strengthens its position of geography and History and RE. And I think, all students will study some aspect of geography throughout their school career with us, and in many places they will do no geography or no humanities subjects. So I sometimes think that people cut their noses off to spite their face when they argue strongly for distinct geography because it is gradually being worn away over the years. They actually get a lot more than they do in other places, by doing it that way.

Do they get enough?

I think they are getting enough. I find it hard to fight subject corners because I really believe in kids having the opportunity to have every different kind of learning opportunity and using every different form of thinking including aesthetic development and creative development. I'm really committed to breadth and balance. I don't think we will go back to a
position where all students will have the opportunity to study History and
Geography at KS4, and having that opportunity is far better. I would love
it if we could offer options along-side the Humanities, of the single subject
disciplines for kids who feel that they have a particular strength or interest
in one of those areas. But that’s unrealistic, because you are then also
looking at, where are you going to take that time from and I don’t think
there is any subject that I could say cut it from.

Moving on, how important do you believe it is to teach and learn
geography?
There are so many different types and there are different reasons for all
different types. It is important so that they can understand and appreciate
the world that they are living in. It is important so that they can be
sympathetic, and that they can make positive decisions, as adults and
citizens on issues that effects them. One area that the kids are always
most interested in is to do with the environment, and environmental
issues because they have a direct impact on them and it is also an area
in which they can take direct action. That’s important to them. Also
because of the pure fascination of things like earthquakes and volcanoes,
changing natural landforms. There is just innate awe in all people and so
the opportunity to explore and discover things about that.
It’s the type of thing that adults… there’s been a series on recently that
everyone is talking about. There will always be this fascination with the
earth and how it works and I think that it goes back to the humanities
thing where it puts peoples’ lives into perspective. Because they realise
what they are in relation to everything else. Also there is a role there for if
there might be a kid who does well in life and who pursues something that
might require a geographical background, and is going to have an impact
on development and technology. If it rouses interest in someone to
pursue geology and then they go and use that for something, or if it’s
going to rouse an interest in water and wastage and they go and work in
that field.

How do you approach teaching geography?
Choose what to teach? National Curriculum. We choose the order that
we teach geography is largely been dictated by History because the
history has to be taught chronologically. In the beginning we teach core
skills the first term and then we move into more specific areas. The skills
are taught in the first term with mainly local studies and then we took it
that we wanted it to spiral through the curriculum, so we mapped it out
that there would be an opportunity to revisit skills through the course.
With places, we decided in a range of ways really. The background
knowledge of the staff in the faculty, the expertise, the resources that
were available and then the resources that have since been published.
We do a huge India study, and that has been influenced by the fact that in
RE we do Hindu and Buddhism, and in History we study Mongol Empire
and the British Empire to the present day and that was kept when we
made some changes as our main developing world example.

But do you basically teach it in a modular way?
Yes,

How does that work? 6 weeks geography, 6 weeks History?

It varies the whole way through. The geography is the only subject that has its right allocation over the 3 years, the history is over and the RE is slightly under. The only thing that is totally separate is some of the physical geography because we wouldn't make any false marriages, so we actually had a environmental management/human impact course based on coasts so that's a free standing module at the end of Year 9.

The rest of it: what we did is we analysed the 3 curriculums. We worked out that there would be 38 weeks in each year including loss of time for SATs exams, Inset days, days out etc, we then worked out the order of modules, we didn't make a definite decision about how many weeks each module would be at that stage just what the module titles would be and then we went through and broke that down to the Geography, History and RE and worked out what we would want to cover within that and looked at approximately how many lessons would be required for that. Then we went away and wrote that and went back and audited whether or not it fitted into the time or went over or under.

How is it monitored and reviewed?

There is about to be a review through next academic year when a new historian is appointed. It will be set up the Head of History, and Head of RE working together. What we've each gone away and done separately is an audit for our subject so I've got grids that list all of the National Curriculum down one side, the year groups and then the places and then through that gone through where in every scheme of work. Which, for me has thrown up that there is a hole in the amount of population study that is done. So to a certain degree I have done the Geography one and that when we sit down to review them all together I will be able to see how they fit together and the schemes of work will come up for review with the whole faculty. And also it is not specialists writing the schemes so all of that is annotated and alterations made.

It is annotated by specialists?

By me.

Do you meet regularly to discuss S of W?

We sit together most lunchtimes so a lot of it gets done informally.

Is that how you support non-specialists?

Yes and through bits of inset from time to time. For the geography it's not an issue because there is only one absolute non-specialist. It's in the other areas that we need specialists.

So does that mean that people don't really know what they are doing?

Sometimes.

At KS3 and KS4?
KS4 is really different. What we have at KS4 is someone who is going to start teaching it again having had a break from teaching GCSE. So he's quite nervous about it and I think, assumed that they weren't going to be teaching it again. We have one geographer who insists that he hasn't got a clue what he is doing but manages to get the best results. Really he does know exactly what he is doing but doesn't feel confident about it or he feels okay about it but preferred it when he was teaching straight geography because he liked to spend most of his time outside. Because he wanted right and wrong answers which he feels that geography offers. He tries to write student's coursework for them even now, and put them up on the wall on bits of paper around the room and they just have to fill in the missing word and he felt that he could do that with geography which he can't so much with humanities. He has a beard and wears patches.

What's your favourite topic to teach?

(long pause) I love doing development. Um, I enjoy weather and opposite to what I said about being stronger on human, I really enjoy doing all the work on coasts.

Why?

Interesting. Because they can be quite methodical and for the coast work it is methodical and the students get a response from it. For the development I am really passionate about it and its something that I've got a commitment to anyway. And, for the weather, I just enjoy it, I just like it.

What's your favourite resource?

(long pause) I like using anything that touchy or feely.

Example?

I like doing things like cutting up oranges and I like making models, because kids get really excited. As you get more out of them as they realise that they are achieving. They tend to reach higher levels of understand without realising that they are learning. I love doing fieldwork but we don't get that many opportunities because we find it hard – like the coastal work next week. It's a charge of 3.50 to go on the boat or free if you don't go on the boat and so the majority of kids don't go on the boat and it's down to the cost. So the fieldwork is school based most of the time. Hands on stuff? Yeah, bits and bobs, it varies from year to year and lots of going down to local areas and going down the streets and even out on the school field. To understand soil erosion, even though we are on the base of the Downs it's not possible to get them out for a lesson and it's not a day trip, and so we study soil erosion by walking around the school field.

Talk me through a good set of lessons that you've taught recently.

(Long pause) Umm! I've always enjoyed teaching industrial location. Why? Because of the reality of it and all the different ways that you can go and use computers to do certain aspects, and bring kids in to do
calculations on the computer, the games that are available, you can play. It's strange, because again it's quite a concrete thing; kids really respond to it and seem to understand that.

It's quite tangible isn't it?

Yeah They do understand it and they do appreciate all the factors of location and they can come up with it themselves and they can take it and run with it. I really love actually (referring to your last question) I really love simulations and I use lots of pre-packed ones: trading games, the trainer one, paper bag and cotton pair of jeans because what comes out of those is far more than you even anticipate as a teacher is going to come out – you can’t cover all of it and it changes every time you do it as well depending on the children who are doing it. It doesn’t get boring or stale.

How do you prepare to teach a topic that you’ve never studied?

Um, first I’ll go to kids’ books that we’ll be using, and go through the kids books and gather any videos because I like that immediate learning that you can have and after that I look at adult things and I’ve started using the internet.

How do you keep up-to-date with developments?

In geography or geography education?

In geography?

Only through the newspapers and occasionally GA journals. Why? They are too big, intrusive. And the Internet obviously. And my holidays.

And geography education?

Lots of different ways on that – partly through documentation that’s coming into school of late: the curriculum changes and developments. I’ve been using the internet a lot and going into the departments, through the general advisor because our subject advisor is crap. And through the Teaching Geography thing from the GA and more with the Humanities Association and the panels we are being asked to represent or go on and be representative. And trainees from university.

How do you integrate topicality into your lessons?

Well, we seem to amass a ridiculous number of videos - about 300 at the moment because our faculty is obsessive about cutting things out. [END OF TAPE] … and cut out held onto ready for when we come onto that module. But we do actually find that a lot of the things that we’re doing especially geography.

INTERRUPTION

We use radio programmes as well. It's either saved or used instantly depending on what it is. This weekend Page 14 of the Guardian there was a thing about South Downs.

How do you assess if students have understood the work that you’ve given them and what do you do if they haven’t?
Okay, it varies ... ongoing, just with little things that are going on in the classroom, Question and Answer sessions from the general and regular marking of their books. Longer term we've got at least one assessment per module which is assessed on National Curriculum criteria so they have record sheets that the kids have to fill it in every time they do an assessment of what level they get and they have target levels that they have negotiated between them and the teacher, and whether they are making their progress through those. We also try to do quite a lot of revisiting because we find with the nature of kids that we've got that they do, even with skills that you assume are skills that once you learn you keep, such as 6 figure grid references, they do lose them which is why we do the spiral thing. They do go quite quickly as well, but they can do it in a lesson, they can do it when you are preparing them for an exam, but when you sometimes give them a piece of work that asks them to do it, as an aspect of a thing they are doing, for example, if they are Year 7 their first revisit after doing basic map skills is the work on settlement. They are being asked to use grid references to look up places to investigate aspects of student villages and towns and for some of them you have to take it back a step and go over that again and others are just flying through and so although it's a tools to the actual end that you want them to do. It's assessing that as you go.

I think with some of the things, I think I'm more concerned that the skills are there than the content is maintained. So that they can't remember something to do with Japan specifically, I'm less worried than if they can't use the skills to go rediscover it.

So the important thing is actually knowing how to find out rather than actually retaining that information?

I think so. I think that there are certain things that you always retain - I think that even as an adult you do it as well. I know that there are certain things that every time I teach them I have to reread because I can't remember like with the History - I have never ever been able to retain dates to do with the history that I've taught for 3 years. There are certain things that I've been teaching I still don't know the dates - and that probably comes through in your teaching. It's like your own preferred teaching style is generally your preferred learning style. To me those facts are unimportant unless you've got a purpose for having them.

Explain theory - talk me through how you do that?

Always relay things back to the most basic level of their own experience the knowledge what which goes back to things like - let's go and look at the soil erosion on the school field - why is it in this area? Why is it all the way down the sides of the tennis court there is soil erosion and identifying it as a major route or something. So I relate it to their local area as far as I can because I have never lived in their local area or by getting them to relate it to their local area which I tend to use strong kids in the class to do by posing the right kind of questions: "have you got anywhere that has ..." Today we were doing settlement and they told me the names of villages in their local area and we looked at where the people in those villages would go to buy different order goods without saying to them that
we are looking at different order goods – and we talked about: if I gave
you fifty quid to go and buy some clothes, where would you go, if I gave
you 30 quid to buy some CDs where would you go, if I gave you a quid
told you to get me a pint of milk and a newspaper where would you
go. If I said you can redecorate the bedroom here’s two grand, where
would you go and did it more from that perspective than the – “we have
things called higher order goods and lower order”.

So taking it very much from the concrete experience and leading to the
abstract concept.
And often, they can give you the concept on the way.

What you are describing sounds very much like progression: taking to
basic common denominator and adding factors to it to make it more
complicated - would you say that that is kind of what you do as well?
Hmm, yeah.

When you are planning a scheme of work is that something you build in
consciously?
No, I think that’s down to individuality. Teachers are different and have
different flairs for things like that. People speak anecdotally to each other
and pick up on each other’s anecdotes. I teach a lot of the Humanities
course through talking about me and my family. And talk about
socialisation in terms of difference between me and my sisters and M***
and where my parents come from1 - what does it make me? And S****
and P*** as well. What’s their cultures background and what is their
predominant culture? Because that is so outside the kids’ experience at
school.

But because it is a personal story to do with you, they listen and engage
in it. And they want to know the next bit. And they retain that - because
when you talk about it again. And it’s the same with most teachers, that
the anecdotes that they throw in is what makes it for the kids and I think
when you advise someone about how to approach doing something, you
talk about this is one way of doing it, say, this is where you go to get this,
and the other. But I think that where it comes down to the other little bits
that’s got to be quite individual so you can say to someone: do this, as a
non-specialist try doing this, but you’ve actually got to say to them: use
your own anecdotes.

Now what interests me - understand of 3 generations - and concept of
what you are trying to get across - for a non-specialist in geography this is
quite hard - I find it hard to do with History, even I don’t have full
knowledge.
Yeah, I think the more so the first time you go to teach something. I think
you then pick and choose for the next time you teach it: it could be similar
for teaching a particular topic within geography that you don’t have very

1 Mandy is from a dual heritage background. Her parents are first-generation migrants:
her mother from Ireland, and her father from Greek Cyprus.
much knowledge of. The first time you teach it, you teach it in quite a
guarded step-by-step way, quite methodically and that you actually alter
the way that you approach it the second time you teach it which is why I
think it is important not to change things too quickly.
I have to think about how I get into it.
I teach very very guardedly when it's something new - so for me History,
because it is my weakest area. I have more flair and finesse with things I
know. Yeah geography and humanities the most strongest, closely
followed by the RE, and then History at a distance.
END OF INTERVIEW
m) Paul

Why did you choose to study geography originally and what were the reasons why you decided to opt for geography?

My Aunts worked at Horlicks in Slough. Two Aunts ran the postal department consecutively. And they had all the stamps and these stamps came in in their hundreds and my mum helped me sort them out where they came from. This would be when I was 4 or 5. And then as I went through primary school, I had a really good stamp collection and I knew so much about where places were. And that went right on until I was about 16, with different aunts running the postal department, and my stamp collection, and because of that I became interested in place.

When I went to Slough Grammar school, which is not that far away from Swindon, (I've ended up back here), and I just loved geography. There is a man called R** P**** there, and I came top in geography in both the exams in Year 7. And I suddenly realised I was good at something: I was good at geography. I continued to be top in geography all the time in that form, and then eventually I realised that I was the best at geography in the whole intake. I was always in the top 3 in geography in the whole intake in Slough school. So I got a lot of self-esteem and status through that.

I went on and did O'level Geography and History and not the sciences and I went on to do A'level geography history and economics. I was a bit lazy at History but I loved the geography and economics and I got a place at University College London. And it was absolutely excellent in the sixties, Professor Derby, Bill Mead. It was in the sixties when people were really interested in the subject. All I remember from university is the geography. I went to Morocco with the University College Exploration Society, (I was the secretary of that society) and I went to Finland with the help of Bill Mead. Lots of my friends went into geography lecturing around the country. J*** T******* went off to USA and I kept in touch with them a little weeny bit but not that much.

And I have gone into school teaching and I suppose I was a geography teacher. That's what I saw myself as for a long time until after my first job. I went to H****** school in Swindon and then I became a teacher. And I started other work then like running CSE exams and running summer programmes with children that had to come back. And then when I came here, I became head of faculty at the age of 29. And from that moment on I wasn't just a geography teacher, I was a manager, facilitator and a tutor. And I suppose over the next 30 years, I began to see myself far more as a teacher and a tutor. And I've argued with D**** W****** our Head, that on the performance management and threshold we shouldn't just be judged on being a geography teacher.I ought to be judged on my role, my children in my tutor group, and the pastoral and PHSE programme. I've always taught PHSE quite well and I've done a lot of
49 enrichment courses. I've done sex education in school, and at the moment I do compulsory religious studies, Weddings and Ceremonies modules, and disasters modules. I've always done that with 16 year olds. But your original motivation was Place. What was it about it about Place that really interested you?

I suppose, originally, ignorance of place because we didn't travel much. I traveled around England. My father worked on the railways and we had a free pass, and I didn't go out of England until I was 18. That excitement of going out of England, having travelled a lot within it, having known quite a bit compared to other children having free rail travel. And then I just traveled around the world and I have been to lots and lots of interesting places.

So was it the excitement of the unknown or the desire to get to know No I think I knew quite a bit. It wasn't just the unknown, it was the excitement of travel and looking at the variety of life. And I wouldn't say it was particularly physical. I think it was physical and human: it's people and landscape. Some places though, if you ask me about my travel I've done and what I have brought back into the classroom, it would be very physical. You know, I have been to Iceland three times, and I think in Iceland I have always brought back the physical. And I've been to America recently and Lassen National Park and Yosemite, more recently and it's the landscapes, the physical, that I have brought back. But in my experiences in the Gambia, it has never been physical, it has only been development issues.

Do you think that as your career has changed and how you have changed from a geography teacher to a teacher, do you think your development as a geographer has changed?

Yes I have become a lot more interested in development issues and I've got a couple of those in for you today.

Is that because ...

It's not in there deliberately, it's there because .. well I might as well manipulate it so that the punchline comes today as opposed to start something off today.

Is that because those issues have generally become more topical in geography or as you have traveled more you have become aware of development issues?

Yes it isn't just because of geography it is because of other interests. I have worked with the Marlborough Brandt Group, called MBG, and they set up a link with the Gambia in 1982. So I have worked with Marlborough, with my wife S**, who was a geographer at University College as well.

That's fuelled that interest ...

That's fuelled that interest, yes.
So when you did your degree in London, presumably there were modules and choices you could make, what guided your choices there?

I certainly remember doing economic and social geography. Not the physical geography, although I think that’s how I worked at school. I wasn’t a particularly good mathematician. I hadn’t studied the sciences. And I think I was put off by some of the geomorphology and systems diagrams etc. So it was easier for me to do the economic, and I’ve done A’Level economics and I did sub-sid[ury] economics at University College. It was easier because I had an economic background.

It very much ties in with the geography.

Yes it ties very much in, that’s true. Both of my children have gone on to do A’Level geography and A’level economics - which is fascinating really. They have added English and French with it, but both of them... And I’ve have looked back and thought, “why did they do economics and geography” and I can see why they did geography but why did they both go off to do economics? And [one son] has gone off and done economics and politics at uni and [other son] did Economics and French at uni- very fascinating. We are basically a very poor family at practical things, even now. We have analysed this and we are all hopeless at changing taps and things. All of us discussed that quite recently. But we can all come up with a socio-economic pattern!

So you have discussed your aunts and stamps as being influential, what were your other greatest influences?

I think the fieldwork at University in Finland and Morocco, and also some of the simple visits around south east England with experts who were showing us the chalk landscapes and Green Sands and Ash down forest. Just simple things around me, that I didn’t know about. And my parents didn’t know about. And although my parents have always encouraged us, they don’t quite know why I am interested in it. Over half term, 3 weeks ago, I took my dad (my mum is not around any more) out to Dungeness. Because I love places like Dungeness, and it was quite a cold October day and the sun was shining. And I said, “it might be a bit bleak” and that’s the thing that he remembers about it: it’s a bit bleak. And he asked me absolutely clearly: “why are we going here” and my only reason was because I haven’t been there before and I think it’s great. He never understood that, he had a lovely day out with me, but he never understood why we went, because he thought it was a bleak place.

That’s funny isn’t it - makes me wonder if there is a geography gene?

Yes I almost wonder that

There must be something different about that desire to understand

Yes my wife and I have often talked about that and we do... when we go away with other people, we find it quite tense sometimes. Because on holidays or on weekends away, they don’t always want to do what we want to do. Because we need to get down to the beach, and we need to go to the end of Hurse Castle Spit and see if there are birds nesting there. And they all want to have a drink or walk the other way towards
civilisation. That's gone on for years and years, and when I am with my other geography friends it's absolutely fine. My good friend Chris, who is head of B*** H*** school in Northeast Scotland, whenever I go to see him, we go off to visit an old spit or go up some corrie and we never have to ask why we are doing that, we just do it. Can you pinpoint the desire to do it, can you pinpoint why you enjoy doing this?

Isolation. Being in places where no-body else is. And one of the reasons might be that, when you are a teacher, and in a profession with so many people all day ... there is that, and going off to see somewhere that is a bit more wild. So when we went to California we went to Lassen National Park, we didn't meet many people. We trekked away, backpacking. And when we meet people, that's fine, but you are not with those people all the time. But that's the dilemma, the dichotomy really. I'm very interested in people as well, so I'm quite happy to sit down in a national park and talk to Americans about their lifestyle and all these things. But I've enjoyed my walking without anybody during the day. That makes a lot of sense to me, yes.

In Environmental Education, there is a school of thought, on significant life experiences and they argue that if you are an environmental education activist that is because something that has happened to you at developmental stages of your life. Does that ring any bells with you, did something turn you on to geography and geography teaching? Not particularly that I have ever thought through. But I think that you appreciate that back in the 50s and 60s people were in things like the Boys Brigade, Scouts and Guides. I was in the Boys Brigade. Some of those camps that I went on were absolutely amazing. You know, we went to Hayley Island on the Isle of Wight, and I went to an international camp at Blairmont in Scotland when I was 18. And I climbed a little mountain with John Hunt. He is the Everest man. And it is those little things that I remember. Now that you've got my memory pressed, it was a Glen Elmond, never been back but I know that now. And climbing a mountain and talking with John Hunt about what Everest was like. That must have been fantastic. Yes and that was before I went to Uni. So when I got to Uni I met people from other places in Britain who had also done those sorts of things. I met J* N****** who had just got back from Tokyo with a gold medal for High Diving. She was in our group. And I thought, wow this is so different to Slough meeting J***** with a gold medal! She wore her gold medal to the first geography lecture, which wasn't the first one, she was still receiving it, she was late to the course. And we talked to her about Japan and Tokyo. There were lots of people who had done different things there and they have gone off to do different things. J*** F******, he wasn't an amazingly good at geography at University College London, but we have met him since, and he has produced a programme on the North Pole for the BBC. And he stood on the North Pole and I thought: that's
amazing to think that John wanted to do that, so he produced a
programme on the North Pole, and we congratulated him on his
programme and he has done that because he is a geographer. That's the
joy of it all

Does it make you want to go and do things like that?
Oh yes, we are angsting over New Zealand next summer. Both of my
sons have been to New Zealand. Warning is that you miss your own
summer if you go to New Zealand and you like your sunshine don't you?
Are you willing to go off for 3 or 4 weeks and miss your August sun? We
could go to Australia, but no, we are going to New Zealand South Island
and hiring a camper van, because we can go off then in our own little
world. We will meet people and we will be very sociable, but we will be
able to see glaciers and penguins.

Talking to you, it sounds like your travel time is very important.
Well I suppose it is not as important as my book writing and my teaching.
It's a break from it, and sometimes I suppose you could say it is my
career. I have worked hard in order to spend it on travel. And I've got
better travel than I have carpets and curtains. But then a lot of my
geography friends do as well. My geography friends do have carpets and
curtains and all that hi-fi stuff but they've got good stories and
photographs. Yes, that's the sort of life you get locked into.

There is another avenue that I'm interested in which is the side of
geography residuals. Which is what you were left with as a result of your
school geography and university geography? Over-riding ideas, values ..
can you pinpoint any geography residuals?
The most amazing is my memory because it was factual: of the facts in
geography. We learnt the most amazing places. I'm not very good on TV
quizzes but I am amazing on some things, and I just know a lot, and
because I know a lot my memory is still good if I need it to be. So I'm
doing this ITT job in school and I started Monday, but already I can
remember the things that I've been told and I haven't got many things
written down. Because I don't have much time to write it down, and I can
remember all this stuff about ITT: all the people, where they have come
from, what their assignments are, when their assignments need to be
handed in. And I'm able to do all that and pack it away somewhere, and
all that came from learning in history and geography. Marvelous factual
base and training in memory, and it is still there. I'm not saying things are
perfect, I forget things, and I might forget someone's name today, but that
is different, that is another issue.

The students were telling me that were very impressed because they
have a quiz every week and you always know all the answers.
I don't quite know all the answers. Yes, I don't tell them I know the
answers, but I do know most of the answers, yes. Which country did king
Cloisters come from?, and I think it was Belgium, but they shouted out
Belgium before me - it's just a general quiz. But I didn't know where
Prince Charles had been last week. I think he had been to India and
Oman, I didn’t know that and neither did they so there are some questions some weeks that we don’t know. A lot of them come from the news, but a lot of them are about place - they don’t know that - but a lot of them are about place. And even pop singing questions are sometimes about place: where were Steps performing last week? oh good I saw a picture of them in Berlin or something.

So we are back to place thing
Well yes.
So there is a skills dimension to the geography you did in your early years.
There was, there was research emphasis on fieldwork skills, yes. I enjoyed it in Morocco fieldwork yes, looking at the hinterland of the souks in Morocco. I traveled all around on my own in a taxi mapping souks, coming back to where I was staying, with others who were going off looking at dry valleys and coming back in the evenings talking about geography.

Happy memories
Happy memories yes, all very good.

Moving now from you as a geographer and talking about you as a geography teacher - why did you decide to do that?
There is no history of that type of profession in my family. And once I knew I was good at something, and could perform as well as anybody else, I thought university would be good. University was advertised quite a lot in the sixties, and there were grants to go to university. So my mum and dad knew I could afford it. But I could only just afford it and I was on that bandwagon, with those few from the grammar school that achieved to do it, but it had to be geography. Well, I could have been good at other things, but I wasn’t very good at other things necessarily.

Did you know when you started your degree that you wanted to be a geography teacher?
Yes, Just before I went I was talking to my mum and we looked at a teacher’s salary chart and could get 1085 pounds, which was a lot of money then, and was getting up to what my dad was earning. And the same has happened with my son. My son earnt more than me on his first day at work. So the same happened thirty years later.

So why did you want to become a teacher?
I enjoyed the experience at school, definitely enjoyed the experience of university. My friends went into university lecturing and they are still there. And I just didn’t do that and I was asked: “do you want to do an MA”, because that is what you did, you just stayed on. “Are you going to do an MA Paul?” “No I’m not, I’m going to Cambridge to do a PGCE.” So I just went off to Cambridge and had a good year doing that. Rex Walford was there.
Tell me about your PGCE

PGCE at Cambridge was just very interesting indeed. Because I read books that I never realised were around, those blue penguin sociology books: all sorts of things about Summerhill, all sorts of things that were absolutely new to me. And I was very impressed with it. And I was very interested in the sociology and socio-economic background of education. One of my assignments was on comprehensive schools in New Towns, and how every neighbourhood unit could have a comprehensive school. I was very interested in that because it was brand new to me, and I think even to my tutor, that concept, that comprehensives could have very tight hinterlands. And I really enjoyed that, that type of geography of education. And you weren't looked after very well at Cambridge as a teacher. We look after people to the extent that we have to decide when to leave the room here. We don't leave the room enough because we are always looking out for them but there ... Mr P****** was leaving Widdesdon Boys School to do an MA for a term so Widdesdon Boys School said to Cambridge do you have a PGCE student that could fit in so I took his job. He was only there two days, and then he came back for two days. It was a great help to me because it boosted your morale and your self esteem! I just went there and taught his timetable, well bits, well most of his timetable, with very little, almost no help. There was a lot of money around and they had a whole shelf with all sample copies of textbook copies from all the publishers. I've never achieved that in my career, and we have just about got a few books. And they could pick on things and have everything he wanted. I stayed there for the whole of that winter term, and when he came back he said “well thanks very much and you can go now”. So I went off and then I was called into Cambridge and given an absolute telling off for leaving the teaching practice early. And my only defence was Mr P***** said I could go, he said I'd done a good job. He said don't talk to me, you people from red-brick universities. And I said excuse me, I came from London, and he said I'm sorry, very sorry, Paul, I'm very sorry indeed. I will always remember that because he made a mistake, because he regarded University College London as pretty acceptable. Because at Cambridge, if you were not from Cambridge you were from somewhere else, but if you were from London that was fine. C**** was from Newcastle and there was prejudice there. That was interesting education.

So when you started teaching, you were a geography teacher - what did you mean by that?

Well, that is what I did, I didn't do other subjects. I didn't do religious education, I just did geography and I worked with D***** at ****** School. D***** had written Mediterranean Lands and Geography of Italy, and he spoke Italian and he was a role model, and he was just a wonderful geographer of the old school. He knew loads of things. He didn't just know about Italy, he knew about the whole world and I taught alongside D****, and I don't see D**** very often now, he is 86, but I have communicated with him once this year.
Describing yourself as a geography teacher, puts the emphasis to me on the subject not the pedagogy - is that how you saw it at the time?

Yes, very much so. Very early on, I presume they picked that up at my schools, I started to do other things and I ran the General Studies programme in the sixth form and got a scale point very early on. And that began to help me branch out. I was working with 0*** as a factual geography teacher, slightly wrong to say factual geography teacher but relative to what I do now factual, and then I ran a general studies programme. And I ran a programme called Worth a Visit and we went off visiting places like Cramlington New Town with the sixth form. We went to Beamish Open Air Museum before it started, discussing the whole set-up there. I ran this as modules, just like I run the sex education and marriage modules here, I'm still doing it. Of course, you get a lot of kick-back from some kids who don't like it, but those who do, love it.

Because the emphasis was more on geography than pedagogy, would you say that how you taught was very different than how you teach now?

Yes, it was about teaching, and more and more we have started thinking about learning now. Even in the last ten years, I remember the first Ofsted here. They were bothered about me and my teaching, and the last Ofsted here were very much bothered about learning. But we weren't all sure of that and so we were very much teaching the lesson. They said lovely lesson, where is the learning? And we were confused. And the next Ofsted to come we won't be confused at all, and we will focus on the learning and we won't worry about our teaching.

Do you think that has an impact on the geography you teach?

Well the geography I teach comes from the National Curriculum, so it is not necessarily the geography that I want to teach. It happens to be the geography that I want to teach. But the type of geography I teach, I take examples from where I want, so from within the geography national curriculum framework or from within the GCSE syllabus I do what I need. So you will see that are doing Gambia today because it is in my book, because I have been to the Gambia. I tend to bring me into the lessons. And I have always seen my book writing as being a two-way process: planning for my lessons. I have got all my books from the classroom at the same time. So they have come from the classroom and they go back into the classroom.

So still very much influenced by you as a geographer?

(Nods)

Why do you think it is important for young people to learn geography?

I just honestly believe that if they have some sense of place, they will be good citizens and they will understand where they are in the world. Because the lack of sense of place grieves me sometimes. Because they go off to a place, and I say "Oh the Canary islands, that's just off Africa", and they'll shout at me: "no it isn't - it's in Spain!". Oh I'll get the Atlas out, "here's Africa. Here's Morocco, and we go all around..." - the ignorance about place is so amazing. Richard, who you will meet today, has just
come back from Florida. For the last 5 minutes, I quizzed him about the
Florida holiday and all my questions were about where, what was the
airport like, where was the hotel, what was the landscape like, why did it
rain? And all those sorts of things, and he was quite good actually, he
realised that there was still convectional rain around because it was still
warm and it was going to get dry. He is quite good but there were a
couple in the class who were wondering what the questions were about.

So that is still very important for young people today to know about these
things?
Oh very important.

Things have gone full circle because place has become very fashionable
again, but there has definitely been a phase when place was taken out of
geography
There was and that worried me a little bit and I was pleased to see it
come back in the national curriculum, and we've gone big on place here
(J***** will chat to you about this). We do our GCSE through three
places: Italy, Nigeria and Japan. If you want to doper, we do it of there.
If we need to plot a climate graph, we do a climate graph of there.
Before that when we working out the GCSE we used to have case studies
from all around the world. Now we have just three places where we take
our case studies. Nigeria is not very good for a lot of place studies so we
go along the line of picking up the Gambia. But we like it more than
Nigeria. But we explain that Gambia is like Nigeria.

Do you think that gives the students a very good understanding ...
Yes J***** was at the OCR meeting in Exeter two Friday's ago, and she
smiled when she came in, she said they liked the fact that we are doing
three places. The Chief Examiner told her we were spot on there, and he
would like to influence other people to do that. Otherwise you are all over
the place. We have things like a Nigeria booklet, and that booklet will go
to 10 pages there and there are another 10 pages coming up and we
staple it up.
It is case studies within case studies and this is several terms' work. So if
we are doing development indicators, then we do it with Nigeria and the
UK, and for homework they've just done this with Italy and UK.

If you had to describe yourself as a geography teacher - how would you
do that?
It's hard that. I've heard E**** B***** at B******* tell a student what I am.
And she said, well read some of his books and you will see that he is a
social and economic geographer. And I just don't seem to write very well
on physical geography - so N*** does a lot of that on weather, and then
J*** E***** has done more on physical. So I don't tend to get into physical
geography myself, probably I'm not that good at it I suppose. And then we
don't need so much of it these days with our 11-16 set up. Political
geography is a lot simpler, but they don't need it. I don't think so, our
children don't have so much of it.
I think that has been another general trend hasn't it more towards the cultures/social
But funnily enough our course was all physical and we have been criticised to get a bit of landscape into our landforms. You can't just have landforms. We have totally physical coursework, having said that. So we go collecting pebbles, measuring pebbles, and correlating pebble size with length, we do all those sorts of things. I can show you some of those.

Ideology triangle.
This is the extreme end of spatial relations patterns and processes.
Yes, I was a fountain of knowledge thirty years ago, I'm a guider now. I do like facts in a way, but I move back more towards that now funnily enough.
Yes I like this bit
Um how do you fill it in?
I know yes
It's very complicated because it is a bit here and bit there, so around there? (middle)
I'd like to come more this way
The ideal?
Yes I want them to understand conflict over issues, this is the year Nine lessons this morning. I am an issues person and I have just written an issues book, which you'll see later coming out. And I'm doing a workshop on issues at the Wiltshire Head of Geography depts conference in January. Someone rang me up and said "what are you going to talk about", which is not the right way to run a conference. And I said "on issues", and she said "all right". I knew her though, but we haven't done very well on inset and geog department conference, and so there are a few people, and we are trying to claw that back
Slightly moving there might bring me down here because I do like this idea about guiders. I do like things about values and attitudes and conflict, but that isn't to say there is a conflict but a conflict of interest. And I wouldn't have put "land use", I would have put a whole range of issues.
More geographical conflicts than say political?
Oh yes
I would like to be - I've gone through hypothesis testing and problem solving. I think you'll find these coming back in, they will all be here I'll be down here somewhere.
I wouldn't say read landscape as text, but use a whole range of geographical phenomena as text.
Helping students to understand..
The world yes, and we tend to have an approach here where we spiral out the scale a little bit. We do tend to look at Stratton, then Swindon, and then move away to France in Year 8, and then Brazil in year 9. It works well we do expand ourselves. For the coursework we come back
to Swindon, for 5 years. But they have reduced coursework because it is a can of worms. They have reduced coursework down to 20% so we have cut out the local coursework and now we only go to the beach. We only go to the beach because of the foot and mouth disease for our dry valleys, otherwise we would still be doing our dry valleys, which was very successful. We just weren't allowed to see them one year so we developed the beach and the beach has been better. We can get to the beach in an hour and three quarters here. We take everybody. It is either an entitlement or it isn't.

I really don't want you to think that I have moved away from geography (with other responsibilities). Geography still chimes with me.

Has the geography helped you do the management responsibilities? Sometimes people say that I can see around things. If you have a good spatial mind, and then you can see where the gaps are in the timetable and the gaps in that room timetables are quite difficult like that.

Any desire to go into leadership? No, I always do different things. I do get involved in more whole school stuff, but I volunteer to do that. Like with the Federation, there wasn't enough of us to do the jobs, so I wrote to the head and said that I would like to take over something, whole school. My priorities are looking after all the students, and that's how it worked out. He asked “How shall we pay you?” I said, “well pay me in time”.

Other jobs don't get paid, they arrive. The school brochure arrives.

END OF INTERVIEW
n) Dan

Why did you decide to do geography?
Do you mean geography degree rather than teaching?
Degree.

I was enthused by the A’level teachers that I had. And I enjoyed the
subject matter at A’level. Going back even further actually, I, um, I didn’t
really work very hard. I didn’t work at all for my O’levels and geography
was one of the few they would even allowed me take. And so it was only
at A level that I got interested. But also we did the Schools Council project
16-19, and it was very much issues based and I really enjoyed that. It
really got me into it and so there were no questions as to what I would do
at University. And from then on, that was what got me into geography

So what was it about the geography that you did at A’level that sparked
that interest?
Um. I think that it was very much based on case studies which I was
interested in. It wasn’t theoretical too much. It was a nice synthesis of
human and physical, and all sorts of things brought them all together
which I have always enjoyed; that is characteristic of the 16-19 course
really. The issues based thing was crucial really and it really got me
going actually. All the time we would be looking at: “should the bypass be
built here” and that kind of thing. And we did a DME² and we went on
fieldwork as well, which for everyone was a factor you know. And so we
looked at: “should they build a Pontins at the top of the cliff at Weymouth”
and things like that, and arguments for and against, and I really, really
liked that. In fact, for quite a long time through my degree course, it was
that issues based in planning that actually I thought was my main interest.
And it lead me to choose planning options and things like that. Actually I
regretted that in the end, but it was that initial thing about those decision
making issues that really got me going I think.

So just trying to unpack that a little bit, was it the process or the topics
that you were studying that interested you?
I think it was a bit of both, probably more the process actually. I liked the
intellectual challenge of that kind of thing. It was that element of
challenge, of problem solving, that we are supposed to include to
encourage in boys, aren’t we? And it encouraged me. I did like the fact
that it was issues which were political issues. Like “should we cut the
rainforest down?”. The London Docklands was one thing that really got
going actually with the political thing. It was in 1984, and it was just
starting up, and we went to London Docklands for a day. And I was really
enthused by this Thatcherite sort of monstrosity that was developing. And
it has since improved, and all this people who were missing out on the
redevelopment that was going on and that kind of thing. Seeing graffiti
with “LDDC out” and that kind of thing. And that was the subject matter
that interested me as well.

² DME: Decision Making Exercise
That must have been quite a powerful experience for you
It was, it definitely was.

Did you grow up in London
Yeah, I grew up in Upminster, near the end of the tube line, in East London. Yeah, so it was easy to get to and that kind of thing. That has always kept me going all the way through. And I have always been interested in the issues and the slightly political side of things, and something to get your teeth into. And it was that, I suppose actually leading onto another thing actually – there was pretty much a human bias on the 16-19 course. So we did do a topic on biogeography, and I worked out that if I didn’t do any work on it at all that I wouldn’t have to choose that in the exam. And I didn’t do any work on it and I didn’t like it, and I wasn’t interested. And in fact I did the same thing at university and focused on the human side.

So tell me about your degree then: where did you go and why did you go there?
I went to Loughborough, and er, and I went there because I wanted to go there for sport. Because I was good athlete at the time and I went there despite the course actually. I thought the course at Reading was better. I selected human geography there. But at Loughborough the attraction was the sport. And I went in spite the department because it was so small, and I didn’t really fancy that and it didn’t sound very attractive. But um, I was looking at the wrong sort of things, I was looking at: do you have to do a physical geography option in year 2 and things like that. As it turned out, it was the best place for me to go for the geography because they were interested in cultural geography and Denis Cosgrove was there. And he there was a real influence on me and so were one or two others there, and that became my real enthusiasm at University. And the planning stuff I got real sick of and really bored, because when you get into the details of it, it does get a bit dry, or I found it to be anyway. Um so, that was why I chose Loughborough really.

So what was it that turned you on about the cultures geography stuff?
Interesting that. It drew together some other interests of mine. I had done RE and English A’ Level and I remember a very key moment, when I did a lecture and a seminar following it, done by Denis Cosgrove which was about post-modernism. And we were talking about language and its’ meaning and stuff like that and I just loved it. You know, of all the academic experience, learning experiences, that I have had that would stand out as being, you know, the thing that really got me going. Because it was challenging and it was different I think. And I had a very conservative upbringing with my family in suburban London, and I was looking generally as a person to stretch out and to get interested in different things that I had grown up with. I wore different clothes, and I watched different films, and it was a whole different way of learning and a whole different approach to the world, you know, deconstructing the iconography of things and that kind of thing. And all those phrases, which
again really grabbed my enthusiasm, and I think that partly the personality of Denis Cosgrove (and his head would be swelling if he was here), and he partly played on it a little bit as well. He played on it and he was slightly brash, and he was one of these people who is an enigma really. Quite a fascinating sort of bloke, but [[I can't quite get grips with what he is talking about sometimes. But he, there was something about him that really enthused me. I had a big regret that I didn't take his third year course on Landscape and Culture which I would have loved. But I only went to a few of his lectures in the general course, but that was the sort of thing that got me going there I think.

So, when you chose Modules within your degree?

I went down the planning route, and I realised too late what my interests were. So even in the third year, I went down the planning route. Partly because I didn't do all that well in the second year which was worth 40%. And so I had to go for the safe option to make sure that I could get a 2:1 which I did in the end. So I went for industrial geography which was safe, and you know, all right, and planning geography which was really boring, and in fact was counter productive because I got so bored with it, I didn't do very well, I don't think. I went for African Studies as well, which was taught by Morag Bell who was again one of these people with a different take on life and a different approach. And she really enthused me and got me interested. Her stuff was all about South Africa and Apartheid and that was great: issues based, and political, and really interesting. And I remember standing outside the door of Denis Cosgrove's office when we were choosing options. And I didn't know much about his Landscape and Culture course and I thought should I just knock on the door and ask him. He is quite an intimidating bloke to a young student. And I was looking at the subject matter on his list of what they do and I thought "Venetian painting" and things like that and I thought "I dunno, should I knock?". And I didn't knock which is a real regret, real regret, because I would have loved that course. And I would have done well in it as well, I think - so it was a conservative option really, yeah.

After completing your degree, you did a Masters?

Yeah I went To Leeds to do an MA in Human geography

Was that straight after your degree?

It was. And yeah the reason was, I think, I had had a taste of how much I enjoyed cultural geography and I wanted to pursue it a little more. And also I didn't want to commit to a PhD. I didn't think I would quite get the required performance in my exams to get on a PhD and it seemed like quite a good half way house. I think the idea was to do an MA and then to do a PhD afterwards. I did talk to Denis Cosgrove about that actually, and he said do an MA and you'll get on a PhD course and go from there. Um, and Leeds happened to offer this human geography. I had a fantastic time, but it was very very different in its approach. I don't know if you know the department at Leeds, but they are very much into computers and models and things like that. They were at the time anyway. And so I did a Latin American studies course which was quite good, and Nature
and Philosophy of Geography which was quite useful. And I did a
dissertation on John Ruskin and Environmental thought, which luckily I
found this guy, Martin Purvis, who is a historical geographer who was
willing to supervise it even though it wasn't his area. And I really did it
myself, and he was very very helpful. So that was great, I really enjoyed
doing that.

So if I have got this right then, so you did school not that bothered till 16,
did your A'levels and it was quite issues quite political with a small p, and
then at Uni you got into the whole cultural thing, but you were already on
a path. But when you went to Leeds was it what you were expecting,
were you able to pursue the cultural?

Well, I could do a dissertation on whatever I wanted. And so the
dissertation was third of the assessment but took up much more than half
my time. And when I had a viva at the end it was all they talked about
which was quite lucky really. The Latin American stuff was all right but it
was much more interesting at the start when they were talking about
colonialism and things like that. But when it got up to economic issues I
wasn't interested again. But I was allowed to do whatever I liked and I
went back to Denis Cosgrove's articles on Ruskin and he had done a
thing on his romantic view of nature early in this life and the
environmental thought associated with that. And I took it and did a follow
up if you like, and looked at his later life and his environmental thought
then and the influences on him. And it went really, really well, and I really
enjoyed it.

Why didn't you stay at Loughborough?

They didn't offer a taught MA and I don't think I would have got an MA by
research. But I didn't ask, I didn't really ask around for that actually and
maybe that was naivety. I'm pleased I didn't because Leeds is good; I
enjoyed it much more in many ways.

So you were intending to go down quite an academic geography route,
what happened then?

Yeah. I ran out of money, got a bit broke, not by today's students'
standards but I had an overdraft of some size to pay off, and I think that
was it really. I wasn't quite sure what to do. I didn't have any direction
and really wasn't convinced about doing a PhD. I also got married
straight after finishing, and so pragmatic needs kicked in. We went to live
in London, so I needed a bit of money. And so I jumped for teaching in an
independent school which said no PGCE required. And so I thought I
would do this for a year, pay off my debts, and then maybe do a PhD. So
I got a job at H***** school in S*****ton, and that's how I got into
teaching.

Before we go onto that, take me back to your school days, what were
your memories of geography at school?

Very much pre- and post-16 really. Pre-16 was very dry really and really
boring. I didn't have the best teachers and they didn't do things very well.
I remember doing things like a mathematical geography unit for example:
longitude and latitude for weeks. I messed about a lot with my mates and
got into a lot of trouble, and basically didn’t work at all. And post-16,
covered a lot I suppose. We did really good trips, really interesting
issues, and for a large part really, good teaching. They thoroughly
covered everything: wasn’t too much in terms of content, but more in
terms of issues that I really appreciated. There was more bias towards
human geography. And I enjoyed, right from the start, the intellectual
challenge, which I had never had. I think I wasn’t stretched which is one
of the reasons why I messed about, and was naughty. I remember the
first lesson at A’ level geography and we had quite a boring teacher. He
was a very nice man, he was a good teacher actually, but he wasn’t very
enthusiastic and didn’t get you enthusiastic. And I remember sitting there
thinking, “I’ve got to behave here, with all these girls and things. We are
16 now.” And I started to listen a little bit and started answering questions
a little bit, and I remember him saying to me, and again a key memory, I
remember him saying “what a fantastic answer! That was, really really
glowing at the end, fantastic! “I am good at geography”. And it was quite
an influence really. I thought I can do this. And so I became quite self-
motivated and settled down generally. So it was a completely different
experience post 16. I used to look forward to the lessons. I used to
love it, the lessons. And Mr D***** especially used to really get me going,
really enthusiastic and was funny – it was great.

Are there any other geographical experiences that you recall?
Not for me. I’ve traveled a lot around England and Wales a bit and so I
suppose that has been a minor influence. We went to Dartmoor with
mum and dad lots of times. And we went by train everywhere and I still
enjoy going to see West Ham. I got to see West Ham matches with the
train, and so I’d go to different places. I went to Wigan the other day, it
was interesting to go there, and we won. That kind of thing has made me
interested in places a bit more. And um, I went to Gambia on a fieldtrip
with Loughborough and that had quite an impact on me - just seeing
somewhere that is so different, made me reflect more on England and
what that is like. And again, I became more interested in places and so
they were influences but not as major as the academic side of it really.

So if you had to describe yourself as a geographer now, what label would
you give yourself?
As a geographer? Well my main interest is in fieldwork and for the
academic side of things I am very interested in the qualitative ways of
doing fieldwork. I suppose it is drawing on the cultures geography interest
and background, but taking it into the fieldwork area. Finding different
ways of doing things and looking at the world in a different way, again
with a slightly post-modern approach, if you like. And that would be my
main drive and interest really. The actual cultural geography side of
things I have completely left behind. I finished the John Ruskin thing and
I wrote it up with a view to publishing it and then ran out of time really. I
started teaching and never got that done and haven’t picked it up since
really.
Why did you get into teaching geography then?

Well, this job that I mentioned earlier, seemed to be an opportunity to carry on with my interest in geography and maybe pay off a few debts. I didn't go into it all that seriously really, and I realised when I started the job that when you do accept a job at a school, it is a bit more serious than that. Which is a bit bad, and I didn't let them down at all. I stayed there 7 years and I wasn't really that keen on teaching for the first 5 years. I found it very hard at first, having had no training, and getting very little support from the school (that's someone else I am criticising now). So I did struggle and I even looked for one or two other possible ways out with a couple of lecturers one in Nottingham and one in UCL with a view to doing a PhD either part-time or full-time. But it didn't quite work out financially – I kept having children. I looked into transport planning as well and it didn't quite grab me enough. But I gradually found that I was getting better and better at teaching, and enjoying it more and more as I was going on. I found that I liked teaching, but I didn't like the school or the independent sector. So it was a gradual process again – everything happens slowly for me I think!

But you did do a PGCE?

Yeah I realised that actually, both because I was enjoying it increasingly and finding I found that I was reasonably good at it, and also for pragmatic reasons. This was now my career and I had a mortgage to pay in London, and a family, and so on. I had to stay in teaching, at least for a while. I realised that I didn't want to stay in the independent sector because I wasn't happy for a number of reasons. So I explored the ways out. A Licensed Teacher scheme was not being used by anyone I don't think. And the Open University didn't do distance learning for geography, but I just happened to discover that South Bank did. So I jumped at it. It was a chance to do a PGCE over 2 years and actually as I finished it, I got this job here, so that was my ticket out of the independent sector really.

How did you find doing a distance PGCE course?

It wasn't particularly good actually, there was a whole load of components to the course, and the best part, ironically I suppose, was when we went to have sessions together at Westminster College at Oxford. We had four days there, and then two days there, and they were very interesting and very useful. A lot of it was filling in booklets and things like that. I did it all at the end at the last minute and it was a waste of time virtually. That was my fault, partly, but also it was very hard to motivate myself. And as I said it was largely my fault that I didn't get the benefit of them but it wasn't monitored at all. But the thing that was by far the most useful was the dissertation which was my first foray into qualitative fieldwork and again, I made something good myself really. It was limited, but it was interesting, I think. I did some work on the London Docklands and two different approaches to fieldwork, and I compared them. I did reading on qualitative fieldwork techniques and on research design, and that kind of thing, and that was really useful. And in terms of time, it was not too bad. I
did a lot of it on the train, on the way to work and last minute, on the weekend, at the end, to get it done and it wasn't too bad.

On a course like that is there a lot of subject specific input or is it generic pedagogy?

No, half the booklets were geography, and half were general. In terms of the lectures that we had during the course, most were general and some were geography. The geography ones were dire. There were only three of us there, and three quite strong personalities, and the person who ran it couldn't really handle one guy in particular. And so they handed us out worksheets and things – so anyway, it wasn't a great deal of use really. It was a bit of a mix really, although the dissertation was something specific. And we had other stuff, like a meeting with a mentor once a week, and he watched me teaching occasionally and that kind of thing.

Not a hugely successful experience for you then?

No but a major factor was I had been teaching for five years and so I treated it very differently and I took from it what I wanted. There were gaps in my knowledge inevitably, and they were filled. I wanted to fill them and I made sure I did. and I thought I will do that I will get this out of the way as soon as I can. And there was stuff that I wasn’t going to do just for the sake of it. In a sense, in some ways, it was quite a good time to do a course, not the best time to do a PGCE, but it was a good time to do some sort of training like that. It would have been nice to have chosen a certain number of units and just do them, but obviously they’ve got to cover everything on a PGCE but that is effectively what I did really: focused on what I needed to.

So what makes you such a good geog teacher then?

Yeah, you are thinking that you’ve turned up to the wrong place aren’t you? Hopefully the lessons today won’t be a big disappointment! Um, see what you think. I think I have got academic ability and the way that my brain works does help I think, at times. So I think I have got quite a clear way of thinking and so when it comes down to breaking up difficult ideas at A’Level for example, and making them straightforward and simple and logical and bringing ideas together, I hope that I can do that clearly in my own brain and so teach it clearly and I think that has been a strength.

Does that come intuitively?

Yes, We have all strengths and weaknesses and often we are not aware of them and I think that is a strength that I have to be aware of, I think. And I think it is a natural strength really, to make up for some of the weaknesses really.

I think that my personality, hopefully, is a strength – this is where you don’t want me to be modest here, do you? – it won’t help will it? In the classroom I can project my personality quite a lot. I use humour a lot and use a fairly personal touch. And I think, liking the children, and I like being amongst children helps as well. And I think that gets them going a little
bit, and keeps them interested and they like geography, and they quite like my lesson as a result. That is the way that I get discipline because I am not a strong disciplinarian in terms of really having a go at kids. Certainly if you weigh up strengths and weaknesses, probably the biggest part of my weaknesses is getting control with the classes. But I can do it because of the way that I try to avoid problems by planning reasonably well and projecting personality, and things like that, even if I'm not very fearsome so that is another strength.

Certainly an Ofsted inspector said to me recently that I know what is important and I work on that. I hadn’t really thought of that before but I think it is probably true and I try to... I recognise for example that if you are going to do well at GCSE, they have to be able to write 10 lines really well, getting in examples and developing their points. And I just really really flog that and I have loads of ways of doing that. I work on that a lot and that is one example. The same with coursework: I realised that coursework for the children was all over the place. And I worked on a big weakness and worked on that weakness very directly using various strategies to sort that out. So there is identifying the important things and, partly as well, I don’t work as hard as a lot of people. Because if things are not that important I leave them, and I’ve learnt that very very slowly, but I have learnt the importance the working as little as you can, so you are fresh.

To get maximum results?
Yeah, it’s like the grand prix driver that is supposed to win the race in the slowest possible time, because if you go racing ahead your car might break up. And I think I have learnt very very slowly, because it is not in my nature really. I tend to be a bit of a perfectionist, or used to be. I am not anymore because wiser older teachers have taught me to get out of school as soon as possible, and to get home and to see the kids, and to try not to work in the evenings if you can. And when things are important, do them well but when they are not, can they be left? And so that has kept me fresh I hope.

Why do you think that it is important for students to learn geography at school?
I think it is important to know about the world they live in, and very often I find that I am teaching something and I think, “I am glad they are learning this, I am glad that they are becoming aware of this” and I think it is important – like for example trade, and why some countries are rich and some are poor. That is a very useful tool. And it does teach them some skills as well. And I know that I am saying all the things that you are supposed to say, but it is true. It is true: there are certainly skills like the research process, that my Year 13s are going through at the moment for their coursework, and all the aspects of it are so useful for lots of lines of work.

Do you think that geography is a subject that is worth studying?
Yeah, I think that it is very, very worth it. It depends on who you are and what your interests are, but I think that it is a shame if you are just doing things preparing them for work all the time. I think that we would end up a very shallow society. I think of my education. I wouldn’t be a very good example because I am teaching. But my education was not very much preparing me for work directly, but the things I gained most from education were things like an understanding of the world around me. Things that I know about, the apartheid system and what happened there for example, and I feel that I am a better person for that. Also this approach that cultural geography gives, on looking at the world in a different way and with a different slant on things, and it has influenced me all the time and the way that I look at things all the time. Like my parents’ house, you know. I look at that and I look at in a different way. And all sorts of things, not from being trained for any way of working, but because it is training you to think and to look at the world in a different way and geography can do that kind of thing.

So is that something you try to get your students to do? To look at the world in a different way?

I try but I mean, more in KS3 than KS4 and A’level, because I keep finding myself becoming a bit of an exam factory to be honest. And I’ve become quite good at getting kids through exams and hopefully some of that ‘seeing the world in a different way’ is a by-product.

How do you feel about that?

I think that it is a shame. But I’m not pretending that there is a solution: they’ve got to get some kind of recognition of what they have done in the end. They have got to have some kind of exam. If there is an exam that we have got to get them through, I’ll get them through as well as I can because I feel a responsibility to them. And so that has got to be my priority. Also I get judged on it as well, very much. And it’s very helpful to me all the time, in many ways, that I have got good results. I think there is lots more flexibility at key stage 3 now to start doing other stuff. And so I am if there were more time I would vary what I do even more. But we try and do more fieldwork, try to introduce more things like the trade game. Thinking about trade, we don’t rush through teaching them about everything at Key Stage 3. And I’m not particularly bothered about doing that really, I’m more … in fact, I’m not really bothered about what the content is too much anyway. I’ve made sure we cover the national curriculum roughly. But with our year 9 exam work, for example, I can’t even remember what we are supposed to do on Japan, but we make sure that they know a few important features about Japan and also their literacy develops when they do Japan – that is the thing that we really work on. When we do settlement with year 7, I can’t remember what we are supposed to cover with year 7, I think we cover it, but we take them out to Bridgnorth and they do some of my sensory fieldwork and things like that and it gets them really looking at the town they live in. And so they are just some examples of where I have changed what we do. Some of these goals that I really want to work towards are being met. I’d like to do more of that but I don’t have time.
I went to a conference run by Ofsted a couple of years ago, one person from every county went. And they basically said: "this is what Ofsted are saying at the moment", and this was very much their thing, and that was great, very useful.

Clare asks about Significant Life Experiences

I think the Cosgrove changed my way of thinking although it didn’t necessarily make me into an activist or anything like that. I think a big influence on me has been my contact with the Field Studies Council, and particularly David Job actually. He has been a big influence actually. The two are connected, because I used to take my students down to Slapton in Devon every year. We had some fantastic weeks down there, not taught by David, but taught by other people that I really respected and really got on with. Nigel Coles etc.. Nigel was David’s lodger down in Devon, and I met David down there, and it turned out that he was from the Institute, lived on a boat in Hammersmith. And we met up, and he came round for a curry, and you know, and I’ve been in touch ever since. I suppose, not one moment in particular, but its over a period of time, but I think the whole Slapton way of life, and David’s way of life, is very much the kind of thing. Of being fairly minimalist, and not worrying too much about making money, and materialistic things, and that kind of thing. And being very green, and very sustainable, and that kind of thing, did have an influence on me.

It also about seeing things in a different way again, that kind of twist It is, yeah and influences, rather than being dramatic, changing the way I’m looking, they bring me further towards a different take on life. Probably a little more politicised and a bit less materialistic.

Has that changed your teaching and your approach to teaching? I think when your outlook on life comes through your teaching, which it does quite a lot and it has. For example I was teaching about Slapton yesterday: about the road on the shingle ridge and how it has eroded, and probably my slant on it was more towards the environmental approach. So the influence is that kind of thing. And it did, it has, influenced me more directly. It has encouraged to do qualitative fieldwork and that has had a direct influence on what I do. And so we do quite a lot of that now and obviously the other stuff that I am in to, and writing, and so on

Was that the subject of your BPRS? Yes it was

Well one of the things that has come out of the many discussions that I have had with David, has been the problem that the quantitative fieldwork that is being done by so many schools so much of the time, allows children to collect numbers and answer some questions but doesn’t engage them with the place, and doesn’t help them to answer the questions that are really important about the place. That was a huge influence that David had on me. We are completely in agreement on that one. Qualitative fieldwork on the other hand, I have found has got its
limitations as well. So, you can have a great time setting up haiku poems
and stuff like that, but I am wondering where you can take them, what you
can do with them, I want to give them a bit more structure. So really it
arose out of that dilemma really. So what I've tried to do is to develop
some work which used sensory fieldwork, but also fitted in much more
with the National Curriculum, prepares them for exams, and had much
more of a structure and a framework which would be easier to use. Any
geography teacher would be confident in using etc. So I spent some time
working on that and it ended up that it used quite a lot of literacy and
literacy became an important part of it. So I devised this fieldwork
technique where I take them out, and they are looking for changes in
Bridgnorth. It starts with a letter that I've made up from a lady that moved
away from Bridgnorth 20 years ago who used to come to this school. She
has written to the head saying that she left 20 years ago and she would
love to know how Bridgnorth has changed: could you get your children to
tell me how it has changed. Some of them think that it is true as well! And
so we take them out to Bridgnorth and find what's changed. The idea is
that they've got to look and really see, they've got to try and read the
environment a little bit, look around them and listen and discuss. It is
trying to give them a bit of a stimulus/framework for sensory fieldwork.

And to help them there is a template with has a row for each change that
they spot: one box for describing the change, one for saying why the
change might have happened and opinions that people might have about
the change, and the descriptive part of it particularly is the part where
sensory work would normally come in. One of the other big problems
with sensory fieldwork is that it tends to stop at description, and I was
trying to find a way to get beyond that. What happened with it is that,
because we had to be fairly pragmatic with it, we sort of lost almost all the
sensory fieldwork, and it became the activity that I described. And so
they took all the notes along and came back and wrote this letter. Each
row describing one change became a paragraph starting with the
description, explaining and opinions. And so it became a nice framework
and it worked nicely from the point of view of literacy. What I have tried
subsequently to do is to write an article which describes the whole thing,
how I tested it out with the students and what I have learnt from that, and
finally a finished model which has sensory fieldwork which is a precursor
to filling out these boxes. They get to look around, they get to think that
kind of thing. Also I was thinking if I could bring in some of this Socratic
dialogue thing that Denis Cosgrove wrote about, and used with his
students in Venice, trying to challenge the way that the children think
about the place in a completely different way. You know "what would
happen if there were no cars here?", for example. How would it be
different? and challenge the assumptions that they would have. So I
have ended up with a whole model/approach to fieldwork and I want to try
and publish it.

Break for lesson observations, interview picked up with two exercises.
Clare introduces the Ideology triangle
It's tricky – I'm all three. I would like to move towards that. I do all three,
but this is more about philosophy than what you do, isn't it really?
Yeah, so I do value that a little bit but not much

Values and attitudes I do that quite a lot as well, so I'm probably about here I reckon - a long way from that, but slightly nearer this than this.

Cross

I want to move towards this ...

I want to be ... ummm, yeah.

There we are ...

Clare introduces Cultures maps

Only in respect of how it influences my practice in the classroom?

So for instance, my family has an influence in that it makes me work more efficiently, more quickly, but probably doesn't have a great deal of influence in the classroom for example.

When you are going through that what comes to mind is that I am very influenced by the general education system and the ideas that are coming up like developing literacy, what the exam boards say, what makes a good way of writing, styles of differentiation, starters and plenaries all that kind of thing, and the strategies stuff and stuff before that. I've collected ideas and improved my practice all the time I have been teaching. And I have been quite heavily influenced by that I think from other teachers as well and that kind of thing. More than the mission to get the subject over, I'm not particularly fussed about that. Although I like the subject, I am not particularly driven by that, and I don't think that a lot of it is all that relevant to them and I am not particularly driven by that.

Coming out of those last two lessons you have just seen, I think they have learnt about drainage basins and about volcanoes a bit, but I don't think it has it has particular relevance to them, it's got a bit but ... um more important as an influence to me is what is the best way of teaching them - it's pragmatic.

I'm very heavily influenced by the exam - less so in Key Stage 3, but even then I am teaching them more influenced by literacy really. But then again I am influenced by the fact that they need to be able to write well. That is partly for the exam goals, and partly for the literacy strategy.

Big box then for the education world

The geography box is not so big is it then really.

Remember this is academic geography

Hmm yeah, I suppose, there's things like fieldwork techniques and that sort of thing, that gets me interested in different ways of teaching geography. Ways of differentiation sort of influence me in terms of geography education, that would be quite a bit bigger. But in terms of pure subject knowledge, I'm not very motivated by it
Why would be the best place to place it, there I think ...

If that is my geography one, then maybe my geography education one could come off here a little bit – oh yeah, okay

School, context you work in, hmm not a big influence really, its external things that – it's exams, strategies, and things I have learnt elsewhere. I don't feel I do things - I'm not motivated particularly by this school

And it seems to me that when you have gone looking for inspiration you have gone out

Almost always yeah

I watched one guy teaching, he was a supply teacher and I learnt a lot from him. But no, he changed by style a little bit, but no, I haven't been influenced that much by the school. I don't know where this goes – I've learnt a tiny bit about education since being in the school, so it is sort of here ...

Situated within your education box, but only a small part of it.

Yeah

Personal – travel? Yeah, that's bigger because I draw on that, you know, case studies, anecdotes and things like that. Teaching about London Docklands for example, I've been there loads, that kind of thing, so yeah, quite a bit bigger than I originally thought – oh dear, overlaps with geography, quite a bit, geog ed as well. Well it has made it my interest, yeah. Part of the reason why I am interested in geog education is furthering my career and moving on that way. Overlaps with education quite so much actually, with a bit in education, and a bit like that.

Now can I colour it in?

Pause

Why did P*** recommend you?

I don't know. I suppose the exam results

He doesn't know me that well, but he does know that I have good exam results, and from recommendation from the head I think. P*** had spoken to him and said, "you're geography, you must come and see our geography, Head of geography because he is doing alright", that kind of thing – that's why.

He has watched me teach for a little bit which wasn't very good, and I had had a long talk with him about my fieldwork interests and BPRS and all that, - that's probably why.

Where do you think your expertise lies?

Well, with fieldwork techniques, with sensory fieldwork I suppose. It is fairly good in that field and there isn't many people in that field. And I
know a lot about that compared to most people. I have pursued an academic interest which not most Heads of geography have done. And I've found I have been very successful in putting that over to other teachers actually. I've done some very successful inset – that's one of the most successful things I have done in my career. And let me think, and I think also within the school, in turning what I need to teach into something that is very purposeful – like we were saying in planning and how I am going to deliver things, is probably the other area I would have thought – I'm not an expert on that but it is a strength.

Have you done exam marking?
Yes
It is an influence, I did some GCSE marking 6-8 years ago and learnt a bit from that. And I did AS marking 3 years ago, and I think definitely, it will be an influence. But also I think levels marking, and that whole levels approach, gets you thinking about what you need to do to get to the next level, and that is very influential on me. Not that it has been easy to use, but it has been a good model to follow.

END OF INTERVIEW
o) Anna

... Looks like elitism, sounds a bit like I am their Master and the rest don’t matter ... but that (indicates a photograph of her son’s graduation at Cambridge)... might give you a clue to my own educational background. I think my subject knowledge is pretty good. I think my depth of understanding of the subject is pretty good. I am aware that other people don’t have that background, even people with degrees in geography don’t have that background or that understanding. I wouldn’t say that it was the only thing that makes you into a good teacher. But I think that some people can be very effective and not know a lot, but be very effective because they have the charisma that they can actually hold the kids. And therefore you can achieve a lot. I think for the kids to do well in your subject, they do better if they have a confidence that any question they are going to ask you are going to be able to answer. The degree tends to help.

Why did you choose to study geography in the first place?

Well, I don’t know, it is so long ago, isn’t it? When I think about it, when I think about what school geography was like when I did it, I can’t imagine why I chose to do it. Because, I mean, really, learning lists of imports and exports, and drawing maps of Africa with where they grew soya beans, it’s enough to drive you to distraction. I suppose it must always have been the kind of brain I have which some would say, “lateral thinking”, others would say “butterfly mind”, is well suited to geography. I never had (sounds terrible) I never had to do any work for geography. Whereas my other two A’levels were Maths and Physics, and I devoted far more time to working for my Maths and Physics than I ever did to my geography. And my geography was always of a much higher standard. I did the old S Level in those days, and we didn’t do any preparation for it at school. Nobody was ever taught to do S Level. And I remember my cousin who was three years older than me and did a degree in geography, came to visit me just as she was finishing her degree, and I was lying in the back garden, and she said “haven’t you got your S Level next week” and I said “yes, but I don’t know what I’ve got to do for that, I just have to think geographical thoughts haven’t I?” And I went into it, and I got a distinction. So I suppose my brain must have always meant that I found doing geography very easy and therefore, to that extent you enjoy it. And enjoyment, as I was talking about before the awe and wonder thing, it is about going to places and looking and going “wow, why is that like that?”. I suppose would be why I ended up in geography really.

Did you enjoy geography at school?

Yes I think I was always the sort of person that enjoyed everything – sounds a bit [tape goes quiet] I used to do lots of work.

What made you decide to go on and study it further?
Um. Well I suppose I was just thinking what should I do next. And it was what am I going to do for A' Levels? I thought I'll do Maths and Physics because, well, Maths is easy and Physics was not very hard. But that was at O'level before we got on to double integration and I was lost. And I enjoyed the geography and so that's why I went on. And then of course, the geography was the one that I enjoyed more and was much better at, and was very obviously much better at than the other subjects. So I didn't really think about alternatives . . and I suppose now you are going to ask me why I became a teacher?

No, not yet.

Tell me about your degree, where did you study, what did you do?

Ahh it was purely geography, I was at Girton [College]. In those days the Cambridge geography degree was very much based around the interests of the lecturers. It is not like that as much now, but in those days it was very much what Gus Caesar was interested in, and there really was a lecturer called Gus Caesar – have you heard of him?

No

He died a number of years ago. There was a letter in the Guardian. He really was called Augustus Caesar and he was a human geographer and he lectured in all things economic – he was very good. I once got a nasty stare from him in a lecture because he was talking about, he was actually doing a course on New Towns at that particular time. I think he was talking about Washington New Town which was very close to where I lived. And he was saying that the most stupid thing about Washington New Town was that the town centre was directly on the flight path for Usworth Airport. Now Usworth Airport is now where the Nissan works is. It was a civilian airstrip and my friend's father had a three seater plane and he used to take off from there. So when he said that I just burst out laughing and everybody around me looked, and I was saying “it's pathetically small” – But anyway the course was based on people and Sparks, Bruce Sparks, who you may know wrote the book Rocks and Relief, which is on the shelf behind me- oh and of course, Richard Chorley, this is an important book – but yes I bought this, well, you can see what I bought it with, [showed a voucher on the inside cover for a school prize]. You see Chorley was a lecturer at that point. Derby was the Professor and Chorley was the lecturer. And it was my first introduction to systems in geography because as I indicated when I was in the sixth form, geography was very much maps of Africa, and maps of soya beans and all that.

What they call capes and bays?

Very much regional geography, and that was what it was. I didn’t know what human geography was. I had to do an entrance exam, and the entrance exam was physical geography and human geography and I didn’t know what human geography was. I didn’t know. I didn’t know anything about this [refers to a book on human geography] .. well this is mostly physical geography in here, but ...
So what impact did that degree have on you?
Well I suppose... they were "it" and so I suppose by implication I was "it" too. I suppose at that age, I – I mean I was a fairly average Cambridge geographer, much more a work-a-day Cambridge geographer than your genius Cambridge geographer. Do you know only two people got firsts in my year, my son will never believe me because now... I don't know what they have done with the degree system, and I don't know what they have done with the geography, but nearly everyone now either gets firsts or 2.1s. I think that it is a recognition that the degree is actually a lot harder than elsewhere. Whereas when I did mine, two people got firsts and the rest of the year group was split equally between upper and lower seconds. And you know, I got a 2.2 and there was no shame in that, because half the year group got that. I think since then they have kind of...

So did you specialise at all in your degree?
The first two years was a mixture of both physical and human topics. Our first year I recall vividly, we had 14 hours lectures or whatever, and 7 of those were statistics. It was quite lucky that I could add up, and use a calculator. Although at that time we didn't have calculators, we had these big machines with handles and so on. And then, of course, we had supervisions on top of that. In my third year I took more human units than physical, largely because we are talking 1972, we were right at the height of the quantitative revolution and literally physical geography had almost become mathematics, and I felt it was a bridge too... for me it was just... a bridge too far. Every time you did any physical geography you were into integration again, and I had left that behind. But in my teaching I think it is quite clear, I would say that I definitely prefer to teach physical geography unless I've got a group of very interested (I'm talking at A level now because it doesn't matter lower down, does it really) unless I've got a group of really interested and academic children, it's far more rewarding to teach the physical than the human because the human gets far too....

So the degree level your interest was more in the human than the physical
Only in the last year, that was probably again we are talking frontiers and we are talking learning for the first time about Christaller, learning for the first time about diffusion. All of these things that now we teach to year seven, these were all models, you know. The models of human geography appealed to me and I found all of that quite exciting because of course, I had never done it before and I found all of that quite...

At this point some of the interview data is lost due to a technical problem.

So why do you think that is important for them to understand?
Well they've got to make judgments. You know, a number of years ago, my mother got a letter about the fact that they were going to block off the bottom of their road. And her immediate reaction was very conservative (with a small and large C). It was "we don't want the road blocked off", and I said "why not, I would quite like to have ridden my bicycle on the
road when I was little – if the road is blocked off you won’t get people
driving through, you won’t get …” because there used to be a hospital at
the bottom, and in emergencies you used to get ambulances coming
belting down our road, at god knows what speed … “you won’t get
ambulances coming belting down the road. It will be much quieter”. “Oh
right yes, fine, I am quite happy with the road being blocked off.” And she
is happy, it is much nicer, and that is one level.

Global warming, I am going to be doing this morning, despite my starter.
We have been doing weather which is why I thought I could still do it. But
global warming decision making: what should they do about switching off
lights? Should they drive to the shops at the bottom of the street in the car
or should they walk? Raising an awareness of all of those issues. And of
course, there is the famous awe and wonder thing: that they would want
to go to somewhere hopefully, not just go over in an airplane over the
Grand Canyon but actually walk into it, walk down and breathe it in. So I
think in so many different ways it affects your life …

So how would you describe yourself as a geography teacher then, what is
your approach?
A bottom up definitely. Always start with the principle that it doesn’t
matter what level text you use with a group of people so long as you lead
them on to the next level. So that, for example, here is an ancient book,
now this for example, if you recognise it from school, this is hard, you look
at this, distance between settlements. Did you do this exercise? You
could do a Spearman’s rank on it and all sorts of things. Look at that
farming, around a town, von Thunen. Why not start with that? What is
wrong with starting with that with your sixth form group and making sure
that they can all understand that? I’m not saying I would. It just happened
to be there and I thought of that example but there is … I don’t care what
book I use with whom so long as it adds to their understanding.
Particularly if you have got sixth formers who are not very bright and you
do get some, mainly those who come into this school who haven’t .. who
have come from another school and haven’t had the background that
ours have had. I don’t know how they have got the grades but we get
some who got As or Bs at GCSE, and the level of understanding is
pathetic. They just don’t know how they got that grade. They don’t know
anything. I did understand that a little bit when I looked at a GCSE exam
paper - it might be AQA. It was somebody who runs the geography
department at the hospital school. We’ve got one of our Year 11s in the
hospital school and she showed me the paper, and the trivial depth of
understanding required by that syllabus was nearer Year 7. So the ones
that come in, particularly with A Level I’m very careful, I think, I hope, to
try to provide them with something simple and then go up. And I always
try to keep it simple so the people gain confidence in their own ability.
One of my colleagues here, is very keen to make everything seem hard.
The harder it appears the better, because then it is an important subject.
I don’t think so, but she blatantly obviously does. She would get them to
do a chi-squared on anything. They showed me. They were doing a
revision session, and we were talking about chi-squared, and they
showed me what they had done. She had given them 50 columns and 
they had to measure all the orientation and then they had to ... and I said 
"aargh". And the simple one that you can see, where you have got the 
four sectors and a certain number facing and you go north east, north 
west, south west and south east, and you just do it that way. It shows 
you the chi-squared still proves that you get most corries in a north-
easterly direction. You don't have to do so many. They were lost in the 
calculation and I said it's easy this is it ... 

Implication is that if it has to be hard to be valuable then there is not value 
in a basic understanding 
I mean I try to keep it simple so that other people have confidence. 
Sometimes with some boys that slightly backfires in as much as they like 
to think they are above such things. And they like to do macho things, but 
then you can tell ... so where's your introduction? What happened to your 
conclusion, and where's your argument? And tear their stuff apart... 

My brother in law claims that I am obsessed with long shore drift. 
Because he is three years younger than me and I as you've probably 
gathered I have known my husband for a very long time, and hence my 
brother in law for a very long time. I think I met him when he was twelve. 
And I used to go to their house for lunch on Sunday at one period 
because when my boyfriend, he is a year older than me and he had a 
year doing a sandwich course and so he went away and he has just come 
back weekends and so I would go to their house for Sunday lunch so they 
actually got to see him because he was always at my house, and they 
wouldn't see him otherwise. We always used to go for a walk along the 
beach, and it always puzzled me when you learn about groynes and long 
shore drift because the beach at Sunderland there isn't a single groyne. 
Not a groyne in sight. I didn't even know what a groyne looked like until I 
saw some in real life at ... I forget where now. According to my brother in 
law, this is quite a recent revelation when we walked along the seafront at 
Christmas I think. "You are always on about, ever since I have known 
you, you have been on about Long Shore Drift". Because it really puzzled 
me, and I used to think why are there no groynes in Sunderland? Why 
isn't the beach getting eroded? Where is the long shore drift? Well clearly, 
there was no long shore drift. The angle of the coast is completely 
perpendicular to the waves, so you only get onshore, offshore processes. 
And it was very interesting also to look at the beach sediment – 
depending on how interested you are. I don't think he was remotely 
interested in them, but I used to discuss at length with my father-in-law 
who was interested in anything sort of obsessive like that. You know, you 
don't want to go around a museum with him because you will be there for 
hours and hours. And he would discuss the pebble pattern on the beach 
with me at length. Because one day the pebbles would be right up as a 
storm beach and another day they would all be spread out – wicked and I 
suppose I grew up with that from when I was little. We used to go to the 
beach and play on the cannonball rocks which are a very interesting 
limestone feature – they do appear in – I have a picture of them - it is
limestone but the way in which it has been eroded .. and they are completely spherical. They look like balls. And all the rocks on the beach were spherical and it is quite exciting. We used to play on those, and so I suppose that would be a thing that I grew up with was the waves ... and I used to love watching the waves, and thinking about the waves. And I suppose I always wanted to travel. When we went to university we went to the States, and did the summer and did the journey round Niagara, across Yellowstone, Yosemite, etc and the Grand Canyon obviously, and that was something we very much wanted to do. And the places that we wanted to go were Yellowstone, Yosemite and the Grand Canyon and we have. We haven't been back to Yellowstone yet, but we have been back to the Grand Canyon and Yosemite twice. And so I wouldn't have said that they were life changing events, though they were just what I wanted to do, wanted to go.

You are telling me coherent story – school, weekend type interest Cambridge all being measure for you – almost smooth path – all the roads leading in this direction. Yes, it is funny actually because my cousin as I said to you, she is my only cousin, there are others, but they are older than me, not people I grew up with. She is an only child, same as I am, and she is two years 9 months older than me, and she did geography at university. She was the other angle, because at A level she did geography German and French, and she went to Durham and her husband did geography. All of her three children did geography A' level. Now the youngest one has just started a degree in environmental something at Leeds. My two older children did geography A level. My brother in law who thought I was obsessed with long shore drift he was obsessed with meteorology. So much so that in his back garden he set up his own mini weather station. And it gets worse, he took a reading night and morning: maximum, minimum, rainfall. When he was 14, I suppose like some rather weird geeky boys do. And when they went on holiday, guess who had to go to their house and take the weather reading whilst they were away?

What are your current interests?
To people, to make them want to ask questions, to make them want to know about things, to make people want to go wow, to make people send me post cards from all over the world really. To have people send me a postcard that said, you know, climbed the top of this mountain and thought about you, you know, that sort of thing would be what I would want really. Stimulating that curiosity in them.
Yes, obviously I want them to do well. Good results, good GCSEs, good A' Levels. The number of people going on to do geography, I think has increased quite a bit recently. Quite a few of our current Year 13s are going to do geographical courses which is very rewarding.

How long have you been at this school?
Since 1994, and I actually came as sort of a first incarnation of M****. Because what happened, there was a person here teaching three days a
And we had just moved into the area and I thought, oh that would be nice 3 days a week. And I started in January 1994, doing three days a week. And I had been in the school a fortnight and my predecessor was pregnant and the Head asked me to become acting Head of Department and full time from Easter. So I did that, and a year later she came back, but she didn’t want a full time job, so they made me Head of Department. And she now works under me, and when she went on her second maternity leave and somebody else actually came. And we switched the timetable around and someone else did the temporary bit. And then M**** came here and taught. And of course that was just a part-time job at that point. And so that was 3 days a week, and that was when she had just done her Masters and was first doing teacher training at ***** and also at ***** ...

And head of year for?

I am in my fourth year as head of ten/eleven which I roll. So I am on my second cohort of those. The year before that my colleague, the one I spoke to about the IB, she is head of year 8. And she is a very different person to me, she makes notches on a stick, which is what sensible people do I suppose. She was head of year 8 and went on maternity leave and I was asked to be her acting head of year 8 whilst she was away. I actually looked after Year 8 from November through to July, and she came back the last two weeks of term. And at that point, another colleague retired and the one who had been head of year 10 rolled into year 11 and so year 10 became available and so I applied and got that. And I have very much enjoyed it.

In the inbetween years, ..

I started at a school in the North East of England where I was 5 and a bit years. And just in Maidstone and my husband then with his job, moved. And at the same time we decided to have number one, and so I actually stayed on until the November after he had moved, so I was there 5 and a bit years. And two years later I saw a job advertised as a maternity leave, have another baby and then I’ll go back. But the woman didn’t want to come back so I got the job and I liked it so I stayed. So then I had a maternity leave, went back and then I had another maternity leave, and went back. And then his job moved him to Florida which was nice. And so I left that school and went to Florida, and did volunteer work in an elementary school. We were only there a year and it went completely disastrously pear shaped. And we came back here because my husband is in computing and he actually got a job here and we thought even so, it was the best place to come. And that is why we came here and very soon after we came here I got a supply job in Wye Valley School which was running the history department on my A Level history. We had an Ofsted inspection in my first full week and I actually got Good for my lesson observation. So that was fine, and whilst I was there I saw this job advertised here and so I came here.

Future Plans
I'm 52 next week which is getting old. As I indicated just now about my
colleague who notches things up, I've never been like that. I've never
been a notch up person. I was very lucky that the school that I was
working at when my children were small was a girls independent school. I
was head of department and everything, but I managed to have my three
children to give them plenty of time and to do my job full time and to do
examining. I just sort of kept on going. At one stage I did try to get a
different job there and move along, but it was just comfortable. I enjoyed it
and I very much I like the kids. One of the best things about the job is ... I
mean I took these Year 12s away this week and I taught lots of them
when they were in Year 7. I've taught lots of their brothers and sisters and
I know their parents. I mean I am on first name terms with quite a few of
their parents. I get committed to a place and the children. I would very
much like, and I've only come to realise this in relatively recently, when I
see people that I regard as incompetent being promoted, it annoys me,
that people who are incompetent and only interested in themselves, are
not actually interested in the children or doing their job.

I would much like to have a role as assistant principle or something like
that. I was looking whilst I was away, but we got some details of a school
in Warwick that I might apply for if I get time. I think the closing date is
next week and with this Ofsted ... I really don't know how I am going to
get it done ... It is a Key stage 4 assistant principle role. It doesn't specify
a subject so clearly that would be flexible. The geography results of that
school, I haven't seen them but he says they are very good. I would really
rather stay here and feel that I would like a position where I would have
some ... influence is the wrong word, because I have quite a lot of
influence here, but recognition yeah. But I get recognition. But Assistant
Principal is the best paid. But that is only because I am wearing so many
hats and I am probably the best paid here but there are people who are
better paid who do considerably less than me who are not assistant
principals. And with my husband's current situation, the pay does become
more important. Before I wasn't bothered about the money as much, and
now I am more concerned about it, pensions and so on. Thinking about
the future, my youngest son is in year 9 and so after this he had 4 and
half years of full time education. Our original plan had been to retire at
about 57 and do some travel. Get a camper van and go to all the places
we haven't been to yet, or the places I haven't been to yet. He has been
to New Zealand. I haven't. But I don't know really. It will really depend on
the next couple of years. If I do manage to get another job.

I mean Mrs H**** came in today. The Mrs H**** situation is exactly the
situation I want to be in when I am 62/3. I want to be in a situation where
a school that I am familiar with, rings me up and says "Anna we need
somebody. Come and earn 120 quid." And I can go in and the
geographer can say "Anna I am taking a trip I need an extra body", fine,
I'll be there – that's what I want to do. When we went to the States, I
dreamt about my school every night for 6 months – every night and some
of them were really vivid dreams. I can still remember some of them. I
was dreaming about what my colleagues were doing. I was dreaming I
hadn't written my reports. And then after 6 months ... I just think that as it
has been so much a part of my life, and I wouldn't want to be the sort of
group who suddenly has nothing in that kind of way. I very much want to
be in a situation where I am able to be of use to a school that I am familiar
with and to also earn a bit of extra money.

Teaching is not just a job to you is it?

No, not at all

Ideology triangle

Oh this is hard, because if you said to me what is the role of a teacher I
would have said that a teacher is a facilitator which puts me there. I think
it is very important that you use an analytical approach, hypothesis
testing. And I equally think that values and attitudes are very very
important, so I think I would put myself slap bang in the middle. I don't
know where I am coming from and where I am going to. But I think I am
on a kind of .. you know, one day I might be into number crunching, and
the next day I might be into “how does this picture make you feel?” And it
would be one lesson I am doing this and the next lesson I am doing that,
and I would go home at the end of the day and think hmm – or I have a
headache and say open your textbook, and go home and think “oh god
that was a crap lesson”. I really think yeah ...

I don't think I would want to go up to the top here. I know there are some
people who insist on the approach to lesson planning that every lesson
has to be a question and that you can't plan unless it is a question. I
don't think you can do that all the time. I just don't think that every lesson
can be a question, maybe when you are starting out. The person who I
am thinking about who advocates that, I won't mention any names, I don't
know whether you would know this person, but she advocates that every
lesson has to have a question, absolutely everyone, and I think that it is
very important and I ask, probably in my lesson, I ask a lot of questions.
Some of the kids were saying something about, you know, geography
being hard. I said why? and I was pursuing them. It is because I ask
them to think about things, instead of just, as they do in some many
subjects – here is a diagram of the digestive system..

Interruption

Questioning and that's what this is going on to. It has to be all problem
solving. I don't go down that route, where you have to do that all the time.
I think that this, the values and attitudes, conflicts, damage, who makes
the decisions, you know why the Americans won't sign up to global
warming treaties properly and do their share when they make the biggest
mess, you know. And do look at what is going on and you know, when
we take the Year 7s to Lulworth and ask “what is going on here” and so I
think ... Not really moving ... I suspect in my very early days I was more
there being a child of the quantitative revolution and I mean I did more
spearman's ranks on things than other people when some people were
still capes and bays, and some people were probably - coming from that
area – came from there – but that would be a long time ago – I think
maybe
At the moment you are happy where you are and you don’t feel like you are moving.
I do, I sort of move in a kind of, I don’t stay there. I move lesson by lesson.
At this point she shows me the work she has contributed to SLN Cultures Maps.
I think geography has to be a big square. The personal, my own life, is very much overlapping with geography. I have three children, and one thing that I notice is that the children I teach, who are the same age as my children, are somehow special. So that the ones that are now 24 were the first year 9s at this school when I came here in year 9. And we went through GCSEs together, and we went through A levels together, and we’ve gone through university. I still hear from some of them. A couple of them came to my 50th birthday party, and they met D**** for the first time. They had heard about him. And if I speak to kids now, they so there is a very close overlap between my family and the children I teach, because geography is very much part of our family I suppose. I even did sixth form games and I did golf which is what I’d do if I didn’t teach. There is probably not a lot left.
The school is part of this as well – I do take part in things. I attend things that my year group are doing. I’ll go and sit in their drama and bother about what they are doing. The school is quite supportive of geography because [the Head] likes you to take people on trips, especially if there is some kudos on the trip. So probably the school, certainly takes over my personal life, I don’t think it is as big as the geography so it comes down that way.
Geography education – I think that is something that is growing because of things like SLN and interactive whiteboards and because of the links I’ve had with teacher training institutions, force you to think about your own teaching and whether you are doing what you ought to be doing. So that’s probably bigger than school really – probably quite important because I get quite excited about different ideas and things.
Education generally, I think that would probably be contained within education (School). But probably, because of my links through teacher training institutions, it would be stronger. I don’t always do starters and plenaries. I’ve been reading the Ofsted stuff on SLN, and inspectors slate you if you don’t do a decent starter or plenary. They have produced the lesson plan at school that we have to follow that lists the starter and plenary ...
It’s got be, everything overlaps – the size of this shows the variety of what you are doing.
Other education comes within the geography education for me so it would be contained within that so you can draw it almost like that.
Appendix IV Data

p) Data from first cohort of case teachers

i) Steven’s planning documentation

Extract from Steven’s Day Planner

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Activities

Lunchtime/After School

Personal Reminders
Not only is the distribution of population uneven in Britain, but it is uneven throughout the world. There are now over 5,000 million people in the world yet most of them live on only a third of the land surface. Like Britain, some areas are very crowded and others are almost empty.

There are many reasons for this. People do not like to live in places which are too wet or too dry, too hot or too cold. Nor do they like places that are mountainous, lack vegetation, are densely forested or liable to flood. People prefer pleasant places in which to live. They want to be able to earn money by working and have food available through farming or from shops. They like to be near to other people and have things to do and places to go.

Factors that discourage people from settling in an area are called negative factors. Factors that encourage people to live in an area are called positive factors. Some of these are shown in the photos below and in diagrams G and H on the next page.

Look carefully at the photos and for each one in turn try to work out why it is likely to be either a densely populated area or a sparsely populated area.
Steven's Day to Day record

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Example of Steven’s schemes of work and coursework planning record.

<table>
<thead>
<tr>
<th>Unit 1: Settlement</th>
<th>People and Places to Live: coursework record</th>
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</thead>
<tbody>
<tr>
<td><strong>Task 1:</strong> Develop a planning document for a new residential area.</td>
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<td><strong>Task 2:</strong> Analyze the impact of population growth on existing infrastructure.</td>
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<tr>
<td><strong>Task 3:</strong> Investigate the role of green spaces in urban planning.</td>
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</tbody>
</table>

**Task 1:**
- Identify the key planning principles to be considered.
- Create a zoning map for the new area.
- Design public spaces and amenities for the community.

**Task 2:**
- Conduct a survey of existing usage of public transportation in the area.
- Evaluate the feasibility of implementing a new public transport system.

**Task 3:**
- Research the benefits of incorporating green spaces in urban design.
- Propose a plan for integrating green spaces into the new area.

**Coursework:**
- Submit a research report on population growth and infrastructure impact.
- Present a project on green space integration in urban planning.

**Additional Notes:**
- Literature review on residential and public planning. 
- Field study on existing urban areas and their planning documents. 
- Presentation of findings to class and feedback from peers and instructor.

**Follow-Up:**
- Final coursework submission due Date: [Insert Date]
- Oral presentation date: [Insert Date]

---

**Instructor Feedback:**
- [Instructor's comments]
- [Suggestions for improvement]

---

**Student Reflection:**
- [Reflection on learning and improvement areas]
ii) Steven's validation feedback

From Steven:

To: 

Subject: PhD reply

Dear Care,

My apologies, more delays on top of more delays- but at least now a reply.

I can see myself (certainly as I was), within your evaluation, and don't think you have manipulated the data. (Point 5) I consider the data analysis to be fair unbiased, and not clouded by personal feelings. (Point 6) Overall the representation of myself is true to the main characteristics, I certainly used to, and in many ways continue to display. (Point 1)

Responses to observations and comments:

(Point 2)
- Teaching has always been the main focus
- Teaching the subject (the pupil) has often been a joint aim - valued equally
- The textbook, materials, teaching and learning styles have all been key ingredients
- An awareness of the whole pupil, their background needs an essential ingredient
- In aiming to achieve a successful lesson
- Rapport with pupils/students adds a positive and enjoyable outcome
- I feel ( rhetoric) Geography is a wonderful vehicle to explore not only processes, features, concepts and events but also additionally people's views and attitudes
- Having no particular specialism was deliberate, to gain a balance, but additionally because genuine interest was evident in all chosen areas of focus
- Creativity was not a frequent component within the Humanities dept. in order to work first with familiarity for non-specialist staff (although gradual progress was taking place)

Changes since observations:

(Point 3)

JOB ROLE
- I was Head of House until 2003.
- I'm now Head of Geography

PHILOSOPHY / PRACTICE
- Greater range of learning and teaching styles incorporated now
- I still retain the view that the best outcomes for individuals as well as groups are achieved by working with pupils (and pupil baggage), and by trying to generate a rapport

Culture man

See additional sheet (POINT 4)

A few amendments:

Page 2.5.1.1  Studied BSc (dissertation final influence - I could have requested a B.A.)
2.5.1.1  PGCE completed at Nottingham
4.5.1.2  6 continents all told
10.5.1.6  School serving Stalderston,

Again my apologies for any inconvenience caused. Hope you're well. Take care.
Digitised version of Steven's cultures of influence map

- Value self and others equally
- Felt a comfortable upbringing
- Organisation and confidence (lack of) have influenced

Balanced - not specialism, rather a deliberate overview approach following varied range of interests

- Own travel experience (and work) allowed me to see first hand a number of issues, concepts, people and landscapes that Geography tries to explore and explain.
- Style, format and structure are all influenced by my personal characteristics, depth of subject.

- Hands on, practical therefore taught other subjects and consequently value the contributions other subjects can provide to a pupil's understanding of learning.
- Believe in the issues, values covered within geography (not teaching the subject, just its teaching)
ER's original cultures of influence Map for Steven

- His ideas about teaching geometry (G-E) are strongly influenced by his own geography, and this is largely framed by his personal culture. Hence big overlap of these three squares. The personal grows outside the G and G-E squares because of his emerging personal self, which overlaps with school but not G or G-E.
- Education more broadly seems to benefit him little, and certainly seems to be largely isolated from G, G-E, P. Education becomes important through school education, rather than C box entirely within S box, E small.
- School is biggest - big overlap with P, G, G-E. The school seems to be the main author on which he relies. This school is the mechanism - breeder for his mediatory geography into geography education.
ER's comments on my cultures of influence map

School org: 425
Surely with GE = similar to mine.
Personal through School, G, G, S = same.
Education - but bigger - but I took pleasure
in mainly a school, personal set G, GE.

I think we are remarkably close here given how open - possibly varied the representation format is.

Let's check the next 2.
iii) Clive's planning documentation

Department Aims

1.1 Introduction

We believe that geography has an essential and unique role to play in a child's education. Our aim is to provide the necessary knowledge and skills to empower tomorrow's citizens to:

- participate individually and collectively in bringing about a better world (global citizenship)
- know about places, understand them and engage with the increasingly connected world (global understanding)
- protect environments and contribute to a sustainable world (environmental responsibility).

Through the teaching of geography we seek to develop the following skills:

- A competent familiarity with the language of maps
- A competency in information communications technology
- A thorough understanding of the process of geographic enquiry, in particular the relevance of place, pattern and process.
- To develop problem solving skills and decision making through independent, logical and reasoned thought.

We accept that it is our responsibility to deliver the geography curriculum in a challenging, lively and relevant form, acknowledging that individual children have preferred styles of learning.
<table>
<thead>
<tr>
<th>YEAR 9</th>
<th>GEOGRAPHY DEPARTMENT</th>
<th>AUTUMN 6</th>
<th>TERM</th>
<th>PLAN</th>
<th>UNIT 1: WEATHER AND CLIMATE</th>
</tr>
</thead>
</table>

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**Week 1:**
- **N.C. Study 2 Themes 9.a**
- **Recap Y7**
- **Weather Recap**: How do temperatures vary around the world?

**Week 2:**
- **Diagram to show why it's hotter at the equator and colder at the poles**
- **Hypothetical Water Cycle**
- **Special Needs Book**: p. 85-94

**Week 3:**
- **Relief, Frontal and Convection rainfalls**
- **SHEETS 9.c & f.**
- **Using recent news**
- **Impact of weather on people**

**Week 4:**
- **Some time may be needed to go over last week's work**
- **H meg E.2.3.1.2**
- **Water Cycle**
- **Map the world climate zones using p. 119**
- **Types of climate graphs**
- **Climate graphs from Sheet 9.1&2.**
- **Weather at London**
- **E.2.1.2 & E.2.1.2.3**
- **Effect of latitude - nearest to the equator / poles - refer back to wk. 1**
- **Weather Fronts**

**Week 5:**
- **Diary of a tropical cycle**

---

**Homework:**
- **Week 1**: A day in the life of Water Cycle
- **Week 2**: Special Needs Book: p. 85-94
- **Week 3**: Homework: set as part of the work booklet
- **Week 4**: Homework: How will rainfall influence farming in East Africa? 9.1.9.
- **Week 5**: Homework: Types of climate graphs p. 97-98
- **Week 6**: Homework: Climate graphs p. 97-98
- **Week 7**: Homework: Diary of a tropical cycle
iv) Clive’s validation feedback

ER’s cultures of influence map for Clive (original and digital versions)

Geography is overwhelmingly important. Personal contained entirely within it. Education also quite large (becoming larger) and overlaps with geography mainly, and also is personal culture. School is playing a role mainly through personal and education (themselves within geography). Geography education seems to nestle in within all these.
ER's analysis for Clive

Middle similarly!

I think this is more in the claim than the representation - this sense of fit.

Design big - or zoo - though I was going
something I was confused with nearly everything
when going on something.

Overall you themes have not nearly add
overlapped little and in it from. The big
'themed' bit some person put in. Introduced also
refined in my maps.

I think this was really basically saying the
same thing: everything goes together. Make a
summary paragraph or theme of going - write the influences
are not by an historical function in terms of each other
mainly going...

Well that's what I think...
v) Mandy’s planning documentation

Handbook Aims

WHY “HUMANITIES?”

The traditional school subjects of History, Geography and Religious Education contribute to our understanding of human behaviour. These subjects together with other subjects such as Environmental Studies and Citizenship, which may be better described as fields of interest or cross curricular themes, can be grouped under the umbrella of “Humanities”.

There has been a longstanding debate about whether Humanities should be taught in an interdisciplinary way or taught as single subject such as History, Geography and RE. The advent of the National Curriculum has answered some of the questions posed by classroom teachers and contributed others. In one sense, the position is clearer: History and Geography are prescribed subjects in KS3 and optional subjects in KS4. RE remains a compulsory subject at both KS3 and KS4. However the method of delivering these subjects remains within the school’s control. At Hampden Park we have avoided the extreme positions of this debate. Humanities is timetabled for all Years 7 - 11 but within this timetabled slot the modular structure of the course allows for some modules which have a clear subject focus, eg, Year 7 Medieval Realm and other modules which are more interdisciplinary in character, eg., Year 8 World Encounters.

In order to achieve this delivery of Humanities in the classroom we, as teachers, have to be quite clear not only of the commonality of the Humanities disciplines but also aware of the disciplines’ unique contributions.

We believe that this Humanities curriculum model allows us to debate and clarify our objectives across the subject areas in a more constructive and useful fashion. Our “shopping list” of aims certainly includes the following:-

1. Humanities should contribute to student’s understanding of the society in which they live, enabling them to respond to and interact with the community in which they live on a local, national and international scale.

2. Humanities should contribute to a student’s exploration of personal beliefs and values particularly in the context of Britain as a multifaith, multicultural society.

3. Humanities subjects and others share many common concepts and analytical techniques. We believe that our curriculum model, which allows for interdisciplinary study, enables students to recognise this community of concepts and techniques. This should promote a more independent, flexible form of learning and a recognition that learning is a life-long process.
## Mandy's Lesson Planner

<table>
<thead>
<tr>
<th>Period</th>
<th>Time</th>
<th>Lesson Planned</th>
<th>Notes</th>
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<tbody>
<tr>
<td>1</td>
<td>AM</td>
<td>Interactions pp 8-7</td>
<td>Role play</td>
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<td>2</td>
<td>PM</td>
<td>Read the page 1/2/3/4, Summary</td>
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<td>3/10</td>
<td>AM</td>
<td>Written Work Exam background</td>
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<td>4/9</td>
<td>AM</td>
<td>Grammar Powerpoint The Iron Curtain (In 20 In Crisis)</td>
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<td>5</td>
<td>PM</td>
<td>In Search of History 1066-1485, pp 32-35 read question 3 at 6a-5b</td>
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### Thursday

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<tr>
<td>1</td>
<td>AM</td>
<td>In Learning Their 1066-1485 at Luncheon</td>
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<td>2/7</td>
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<td>Interactions pp. 10-11</td>
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<td>Draw D and write key</td>
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<td>Company Modern Town to Modern Village</td>
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<td>7/9</td>
<td>AM</td>
<td>Exam paper - In Search, Complete all</td>
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**Notes:**
- After School Activities
- Special Notification
- Homework Required
MODULE Coastal Processes & Environmental Management

LESSON NO: 12-15

N.C./AGREED SYLLABUS – KEY ELEMENT/UNIT OF STUDY
1a Access to geographical questions involving both fieldwork and class work
1b Explain geographical patterns and physical human processes.
1c Consideration of issues and concerning human interaction with the environment
2a Identify geographical questions and issues
2b Identify, collect, record and present evidence
3a Use of extended geographical vocabulary
3b Undertake fieldwork
3c Add Geomorphological processes

LEARNING OUTCOME

LESSON PLAN
1) Aim of lesson – Introduction of the Coastal Erosion in Eastbourne Assessment and field work techniques.
   a) Distribute the assessment outlines, go through explaining marking criteria and link with field work. Explain a class debate concerning whether or not beach defences should be built will also assist in this process.
   b) Distribute worksheets for recording data on field work visit. Go through what is to be recorded and how; illustrate use of clinometers, ranging poles, tape measure
   c) Go over arrangements for visit and answer student questions. Key question – How do we analyse our data?
2) Feedback from the field work and discuss how data can be analysed to produce graphs and beach profiles.
3) Production of graphs and distribute roles to be prepared for the class debate; students given roles in six groups. Each group develops response and nominates spokesperson to present to the class.
4) Presentation by each of the six representatives to the class, notes to be taken by all news articles which help or exhibition pieces.

HOMEWORK
1) Complete production and analysis of graphs from fieldwork.
2) Prepare role for class debate, nominate spokesperson.

RESOURCES
Coastal field work recording sheets
Assessment outline, coastal erosion in Eastbourne
Role cards for the class debate
News article

NOTES
Field work - on the day students should, in addition to data collection, make notes on cliff collapse and human demands on the area.
Book I.T. rooms for producing assessment.
vi) Mandy's validation feedback

Dear Clare,

I have read through the two documents that you sent me from your PhD work. I have made comments on the script of Chapter 5 'Mandy' and have also prepared a brief response to the six areas requested. I have addressed the areas in a different order to that which they were posed. My logic for doing this relates to the impact my response to 5 will have on the other areas. I had some difficulty separating the six and have included similar comments in some areas.

I didn't think you would want pages and pages of response so have attempted to summarise the points that I want to make. I have tried to be frank, honest and open about my thoughts/responses/feelings assuming this will help you to further develop your work.

Have a really good Christmas – sounds very exciting. Don't work too much during the holidays.
5. To what extent do you think I have manipulated the data to present you as a caricature? Or can you 'see' yourself in what I have written?

I believe that the data has been manipulated to present me as a caricature that fits a commonly held preconception of 'pouri' geographers. It appears that you have looked for evidence to push the descriptions of me to an extreme, to polarize me from the case study of the 'Teacher of Geography'. I acknowledge and accept that I have a more 'student' than 'subject' centred approach.

I am a little confused as to the academic basis for categorisation of the 3 teachers and for the categorisation of geography 'traditions'. I refer, in part, to the definitions from Rawling (2001). Was this an academic study? Are there others that subscribe to those definitions? What size sample and who was the study based on? I would also be interested to know about the underlying academic basis for the study as a whole.

2. What is your response to my comments/observations?

I found your comments and observations interesting, it is rare to be placed under a microscope; I am very uncomfortable with the notion that my motive to 'support and help' students from challenging socio-economic circumstances is 'worthy'. An absolute commitment to equality of opportunity, success and challenge for all and improving self-esteem and achievement is what I aim to achieve – empowerment of the individual through higher educational experience.

Empowerment is about strength, a term such as 'worthy' suggests there is a victim to be helped. I do not consider the students to be victims but I do consider them to be individuals that need to be empowered through the development of particular skills, attributes, knowledge and understanding. These are of benefit to the individual, the community and society. I do believe that geography, as a discrete subject, can contribute to that.

I have concerns about the interpretations that you have made of my 'personal culture'. The examples I provided were to illustrate ways in which the knowledge and understanding of students could be enhanced through the use of anecdotal examples in the classroom, similar to the ways in which 'The Teacher of Children' draws on his travels and life before teaching. The suggestion is that my motivation is 'to try to effect change/make her mark' p8 inferring that my personal culture results in my being on some kind of hobbyhorse or mission.

1. How accurately does my representation depict you as you were then?

My responses to all the other questions relate to this one. On reading through the observations I was surprised to find how little reference was made to teaching and learning styles, methodology and general skill development. Although I have been given the label 'Teacher of Issues' I have always considered my role to be far more than that. I consider developing young people to become critical thinkers with transferable skills for further academic study, the workplace and life to be central to what I do. It may be because we were focusing on very different areas during the interviews and exploring philosophical basis for content that this was not explored more fully. (another study in itself I imagine)

3. Have you changed since then? If so, how?

Yes, I have changed. Some of the changes are the result of my changing school and role. As you are aware my responsibilities are now wider, as Assistant Headteacher Key Stage 3 I apply the same values to my role as a leader and manager as I do to my role as a teacher. I subscribe to the view of Michael Fullan that the most effective leaders are those that equip and empower those they lead with the skills and understanding that will enable them to surpass you in their leadership and management expertise and ability. This tallies with the comments you make about the way in which I lead and managed the faculty and how that linked with my teaching. A very interesting parallel that made sense as I read through.

Having oversight of the KS3 Curriculum has strengthened my view of the unique contribution that geography, alongside other humanities subjects, has for the learning experience of students.

6. To what extent have I allowed my personal feelings/opinions about you cloud my analysis?

It would not be possible for your personal feelings and opinions to be separated entirely from the study. So, how have they impacted on the study? You have made elements of my personal culture appear to be a stronger influence on my teaching than I consider them to be, this does however facilitate the development of a caricature and hence presses me to be placed in a box distinctive to the other 2 distinctive studies. I am aware that it was your intention to look at 3 very different examples/cases – I feel that some points are exaggerated or made more of to make the case being presented appear stronger.

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ERs' comments on my cultures of influence map

I put school and education as both big and pretty much equal. I think the main issue is her parents' involvement. The overlay of these two. School is twice bigger because the group is humanistic. School approach seems more important and significant than benefits underlying. Personal culture is important. It locally
carries her geography (her own values, beliefs, missions, perceptions) and her
talk about geography. Personal identity contains fitted as well. But then -
also influenced by school - can return to her. Hence some extra bias
consistent personal. The overlay of these two is important. I
think she has her beliefs or beliefs without her parents is not determined
by her. But she has her way with them. And for me, Karen brings
the overlay culture personal.
ER's feedback on my "cultures of influence" map

More on culture difference:

My culture set is within school education.

Culture is within personal.

Personal spaces are better than school education.

Your new model is very interesting. I can see why you made your own model. This isn't 100%.

-
### q) Data from second cohort of case teachers

vii) Paul's planning documentation

The Enquiry Ladder

<table>
<thead>
<tr>
<th>PLACES</th>
<th>THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Tectonic processes</td>
</tr>
<tr>
<td>U K</td>
<td>Volcanoes/earthquakes</td>
</tr>
<tr>
<td>France</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>U S A</td>
<td>River landforms and processes</td>
</tr>
<tr>
<td>Brazil</td>
<td>Coastal landforms and processes</td>
</tr>
<tr>
<td>Global</td>
<td>Climate and Weather</td>
</tr>
<tr>
<td>Y 10 - Y 11</td>
<td>Climat and Weather</td>
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<tr>
<td>U K</td>
<td>Ecosystems</td>
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<tr>
<td>European Union</td>
<td>Population</td>
</tr>
<tr>
<td>Italy</td>
<td>Settlements</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Economic Activities</td>
</tr>
<tr>
<td>Japan</td>
<td>Development</td>
</tr>
<tr>
<td></td>
<td>Environmental Issues</td>
</tr>
</tbody>
</table>

The Enquiry Process

At the Heart of Geography

A Range of Skills
Page 52 in Essential Geography

Answer Questions 1 to 5 - very briefly in writing - ignore Q 6

Work on your own - make your own decisions.

Each of you to report to the whole group - talk clearly and be prepared to answer the specific question I ask you. I will always ask you question 4
Paul's long-term planning

### Table 3 CONTENT  
**Economic Systems and Development**

<table>
<thead>
<tr>
<th>QUESTIONS FOR ENQUIRY</th>
<th>CONTENT</th>
<th>SCALE</th>
<th>PLACE</th>
<th>EXAMPLES</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Economic systems</td>
<td>How can systems data help the study of economic systems?</td>
<td>Economic activity in laptop, output and processes and the study of at least one selected example.</td>
<td>Local</td>
<td>Honda - Sendan, Farm - Japan</td>
<td>UK Book 99 F9 - 61</td>
</tr>
<tr>
<td>3.2 Economic activity, growth and change</td>
<td>Why is economic activity so essential?</td>
<td>The general factors affecting the location of economic activity and at least one selected example.</td>
<td>Local</td>
<td>Location of industry</td>
<td>England reg. 2011</td>
</tr>
<tr>
<td>3.3 Economic activity, growth and change</td>
<td>How and why is economic activity changing?</td>
<td>Regional economic change.</td>
<td>Regional</td>
<td>LDC economic development, includes the role of tourism, multi-sectoral international cooperation and development projects.</td>
<td>World 96-53, 50-63</td>
</tr>
<tr>
<td>3.4 Economic activity, growth and change</td>
<td>Why do these changes occur?</td>
<td>Global</td>
<td>World</td>
<td>International trade, development, migration, tourism, regional cooperation and development projects.</td>
<td>UK Book 95, 199-100</td>
</tr>
<tr>
<td>3.5 Economic activity, growth and change</td>
<td>How has economic activity changed?</td>
<td>Global</td>
<td>World</td>
<td>Economic activity as economic activity and at least one selected example.</td>
<td>UK Book 99 F9 - 61</td>
</tr>
</tbody>
</table>

### Table Year 9

<table>
<thead>
<tr>
<th>NC No.</th>
<th>Subject Headings &amp; Key Questions</th>
<th>Place/Key Words</th>
<th>Content</th>
<th>Skills</th>
<th>ICT SHIP and Assessment</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>9a</td>
<td>Developing World (Brazil)</td>
<td>Home and Brazil</td>
<td>India - south and north divide</td>
<td>Density shading mapping</td>
<td>ICT in World Atlas data</td>
<td>Geog 3 &amp; 4</td>
</tr>
<tr>
<td>9b</td>
<td>Developing World (Brazil)</td>
<td>Brazil and Brazil</td>
<td>Brazil - north and south divide</td>
<td>Density shading mapping</td>
<td>ICT in World Atlas data</td>
<td>Geog 3 &amp; 4</td>
</tr>
<tr>
<td>9c</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>Proportional bars</td>
<td>ICT - relationship graphs in World Atlas data</td>
<td>ICT Assessment</td>
<td>Geog 3 &amp; 4</td>
</tr>
<tr>
<td>9d</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>ICT - relationship graphs in World Atlas data</td>
<td>ICT Assessment</td>
<td>Geog 3 &amp; 4</td>
</tr>
<tr>
<td>9e</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>ICT - relationship graphs in World Atlas data</td>
<td>ICT Assessment</td>
<td>Geog 3 &amp; 4</td>
</tr>
<tr>
<td>9f</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>Brazil - north and south divide</td>
<td>ICT - relationship graphs in World Atlas data</td>
<td>ICT Assessment</td>
<td>Geog 3 &amp; 4</td>
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</tbody>
</table>
### Year 7: Water

<table>
<thead>
<tr>
<th>NC No.</th>
<th>Subject Headings and Key Questions</th>
<th>Places/Key Words Content</th>
<th>Skills</th>
<th>ICT and Assessment</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>6j</td>
<td>What is pollution?</td>
<td>Pollutants</td>
<td>Recognise how water can be tainted</td>
<td>Geothemes 1, 94-95</td>
<td></td>
</tr>
<tr>
<td>6j</td>
<td>How can water become polluted?</td>
<td>Environmental issues (link to R. Cole at Roves Farm) (Rhine (dirty water))</td>
<td>Knock-on effect of river pollution</td>
<td>Geothemes 2, 84-89 inc. Rhine case study</td>
<td></td>
</tr>
</tbody>
</table>

Updated Oct 2002
SUBJECT: GEOGRAPHY

STUDENTS INVOLVED: Mixed ability upper and lower literacy sets

The complete Key Stage 3 Course covers the SKILLS, PLACES and THEMES contained in the GEOGRAPHY NATIONAL CURRICULUM. Where possible skills, places and themes are integrated. The detailed work schemes for each module are held within the Department.

<table>
<thead>
<tr>
<th>NC Number</th>
<th>Place/Theme</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>Local area/skills</td>
<td>Local area, map skills, local street, route to school, map of school (PTA Welcome Evening), atlas skills, aerial photos, satellite image, Assessment. MAP LEVEL ASSESSMENT. The UK and its place in the World World map, urban-rural-population, our local area, M4 Corridor, UK Enquiry Homework – LEVELS.</td>
</tr>
<tr>
<td>1, 2, and 6, 7</td>
<td>Further mapping and</td>
<td>Height on map exercises, contours, making an island, cross-section</td>
</tr>
<tr>
<td>6ijk</td>
<td>Water</td>
<td>Hydrological cycle, THE INFILTRATION ENQUIRY, (LEVEL ASSESSMENT) Water Supply, reservoirs, RESERVOIR ELECTRO-MECHANICAL, LEVEL ASSESSMENT.</td>
</tr>
<tr>
<td>6de</td>
<td>Soil/Weather</td>
<td>British Isles rain and temperature bar and line graphs – draw and interpret</td>
</tr>
<tr>
<td>6fh, 7c</td>
<td>Farming/Environment</td>
<td>Local FIELDWORK visit – EIU, Environmental Awareness END OF YEAR exam covers a variety of skills and themes.</td>
</tr>
</tbody>
</table>

Resources Used:
- Geog 1 Gallagher, Parish, Williamson – OUP – and worksheets
- Geographies Book 1, Murray Punnett, Weeber – Simon & Schuster
- Philips Foundation Atlas, Heinemann – Philip
- Local Ordnance Survey Map, sheet 173 in envelopes and 1 25 000 OS map – their own
- Other Ordnance Survey maps, worksheets, videos

Links with other subjects:
Citizenship – Local area work – linked with KEY SKILLS WORK
Economic and Industrial Awareness – Farm work
Environmental Awareness – Farm work, Water Supply

Last updated: Oct 2002
Paul's cultures of influence map
viii) Dan's planning documentation

A2 Geography coursework

Before you start writing, check your data
• Is it clearly and appropriately presented?
• Have levels of significance been found and quoted for all statistics?
• Is there enough for meaningful analysis? (collect more?)
• Decide on an order
• Number all graphs/maps/statistics (fig.1, fig.2 etc)

Introduction
• State and explain your aim and sub aims
• State why you chose to do this topic
• Describe (with the aid of a map) the location of study and say why you chose to do it there and at that scale
• Link your study to a broader part of Geography (make reference to literature). Make sure the significant terminology is used.

Description of the fieldwork methods
• Describe fieldwork methods and say why you chose to do each of them (sketches can help you explain some methods more clearly).
• Include sample recording sheets to illustrate how you collected the data
• Include maps, photographs and diagrams of the field site(s)
• Justify the types of sampling, number of sample sites, questionnaire responses, who you contacted, etc
• Explain any changes that you were forced to make during the study
• Could this section be done in a table to save words?

Analysis
• Describe what your field results show (support this with the maps, graphs, statistics)
• Explain and discuss patterns, trends and relationships shown by your results

Interpretation
• Write about the significant points that come out of the analysis
• Discuss unexpected results (anomalies). Can you explain why they might have occurred?
• Recognise the limitations of the data collected (amount, accuracy, etc.)
• Suggest how your local study relates to wider aspects of Geography. Ask why your results do not fit perfectly with the textbook theory that you explained in the introduction - was this due to limitations in the fieldwork, or were there other factors that you did not explore with your fieldwork? Go a little beyond just what your results have shown.

Conclusion
• Briefly summarise what has been found out (bullet points?).
• Relate this to your original aim and assess how far that aim has been met
• Suggest what additional work might develop this project from here.
• Draw some recommendations that follow from what you have found

Evaluation
• State the shortcomings of your study, particularly with the methods and data collected, but also perhaps with the aims.
• Suggest how these shortcomings might have been lessened

Synopsis
• Very briefly describe the aims, methods and main conclusions of your study (write in the past tense – eg. “The study set out to show that...”)

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Colombia landslide worst since Krakatoa

20,000 feared dead after volcano erupts

From Tony Jenkins in Bogota

As many as 20,000 people may have died in western Colombia after a long-dormant volcano in the Andes erupted and sent torrents of mud and water flooding the town of Armero.

Dismembered bodies were washed downstream in flood waters stained with sulphur as rescuers struggled to reach the scene. Colombian civil defence units reported that seven villages had also been destroyed.

The busy riverside town of Armero, with a population of 28,000, was devastated before dawn while its inhabitants were sleeping. If early estimates are confirmed the death toll will be the highest from a volcanic eruption since the eruption at Martinique in 1902.

Nevado del Ruiz stands nearly 18,000 feet high in the northern Andes, and its eruption caused an ice-cap and snow on the peak to melt. Together with torrential rain-fall, the water burst the banks of the river La Lagunilla. Two hours after the eruption, the melting snow also sparked an avalanche.

The mud, rocks, and water flooded through Armero and swept away 80 per cent of the town. Captain Fernando Cervera, a Colombian airline pilot who flew over Armero yesterday, said: "It's Danteque. It looks like a beach at low tide, just mud and driftwood. Trees, houses, and cars were all carried off."

The captain said that a few houses were still standing, and that the roofs were crowded with people waiting to be rescued. "Captain Cervera said that the volcano threw smoke 26,000 feet into the air, and filled the cabin of his plane with smoke."

"I had to ask the passengers to use their oxygen masks," he told Radio Caracol, after diverting his plane from a scheduled landing at Bogota to Cali. He said that visibility was so bad "we did not know it was an eruption."

Local radio crews struggled for 12 hours to get through to Armero — which is only 150 miles from the capital, Bogota — because a half-dozen bridges had been swept away and the road is covered in mud. After being there for only an hour they were obliged to withdraw, as the landslides continued to advance on what was left of the road.

The Times, 14 November 1985
<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>SPRING TERM RESOURCES</th>
<th>AS MODULE: DRAINAGE BASINS POSSIBLE TEACHING ACTIVITIES, HW, ASSESSMENT</th>
<th>PAGE No. 1 DIFFERENT'N</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB operates as a system, inputs, flows, stores and outputs of water and sediments</td>
<td>Landmarks, sheets 'global hyd cycle', dge basin processes</td>
<td>Read through, colour sections of hyd cycle, taboo, hw learn for test</td>
<td></td>
</tr>
<tr>
<td>Flood hydrographs show passage of water through drainage basin</td>
<td>Large whiteboards, prizes, model on sheet - Landmarks p49 on reverse</td>
<td>Diagrams from memory activity - draw model hydrograph from memory on large whiteboards in groups - start with what remember form GCSE, then visit diagram at front, describe to person doing the drawing. Issue model on sheet - what missed? Read through Landmarks p49. Hw Explain why hydrographs on sheet are different. Notes on 1. the conditions that favour overland flow and 2. the conditions that discourage it How does water move sediment downslope?</td>
<td></td>
</tr>
<tr>
<td>Sediment also passes through DB</td>
<td>Template 'influence of soil...' for notes. Sheet 'box 1' for definitions</td>
<td>Lecture, and draw diagram of particles of soil and pores</td>
<td></td>
</tr>
<tr>
<td>Passage of water through DB is influenced by:</td>
<td>Other side of soil template</td>
<td>Lecture, questions for hw</td>
<td></td>
</tr>
<tr>
<td>- Soil conditions</td>
<td>Sheet 2 sides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Geology</td>
<td>'Impact of Afforestation' sheet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Vegetation characteristics</td>
<td>Harlow OHT</td>
<td></td>
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<tr>
<td>- Urban development</td>
<td></td>
<td>More able - change of context - desert or rainforest environment</td>
<td></td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td>POSS. ACTIVITIES (+ HW)</td>
<td>SKILLS/ICT/IT/NUM</td>
<td>RESOURCES</td>
</tr>
<tr>
<td>---------------------</td>
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</tr>
<tr>
<td>effect of a volcanic eruption, Mt St Helens, Primary and secondary effects of the volcano, role of location in rural area and an MEDC in reducing impact</td>
<td>Living graph - put statements describing effects onto a timeline. Write newspaper headlines to describe primary and secondary effects (papers from different dates after the eruption Internet search to find and download photos that best describe pr and sec effects - 3 of each Plan and write two long paragraphs on each of primary and secondary effects</td>
<td>Plan writing, developing explanations</td>
<td>Sheet ‘The eruption of Mt St H’ Video50, 60, 2, NWW p250,1, WW p214,5</td>
</tr>
<tr>
<td>Responses to the eruption: short, medium and long term. Role of being in an MEDC in effectiveness of response. Responses of different groups.</td>
<td>Produce PowerPoint - Internet search to find photos illustrating responses</td>
<td>Videos show short term responses - monitoring, evacuation Sheet ‘Mount St. Helens - Responses’ for med and long term sheet ‘perceptions’ and videos (Harry Truman section, tourists arriving, residents choosing to live there)</td>
<td>More able - originality: evaluate responses. How could have been better? (flexible thinking)</td>
</tr>
<tr>
<td>Values and attitudes of different groups</td>
<td>Read, note views of different groups, discuss in pairs and write a statement for each interest describing their perception of Mt St H and why they have it</td>
<td>Flexible thinking skills - what are the reasons different groups of people might give for living here?</td>
<td></td>
</tr>
</tbody>
</table>
### Weekly Planner for Year 7 Spring Term 2004 TY

<table>
<thead>
<tr>
<th>Week commencing</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Jan B</td>
<td>The shape of a town how a town grows model town exercise from Foundations. Models of Urban structure?</td>
</tr>
<tr>
<td>12th Jan A</td>
<td>How has the world's population grown? Population concern clock or world population clock from <a href="http://www.census.gov/ipc/www/world">www.census.gov/ipc/www/world</a> Where do people live? At a world scale, what factors have been most significant in determining population distribution and density? Thinking Through Geog exercise on sparse and densely populated areas. Image annotation. 3A worksheet as homework.</td>
</tr>
<tr>
<td>19th Jan B</td>
<td>At a world scale, what factors have been most significant in determining population distribution and density? Thinking Through Geog exercise on sparse and densely populated areas. Image annotation. 3A worksheet as homework.</td>
</tr>
<tr>
<td>26th Jan A</td>
<td>At a countrywide scale, what factors are important in producing the pattern of population? Individual work mapping the distribution of population in Brazil or Japan. The use of choropleth technique. Outline maps should be annotated to give explanation. Use of atlas to identify physical and human factors.</td>
</tr>
<tr>
<td>2nd Feb B</td>
<td>How does a population grow? The definition of birth and death rates and the drawing of age sex pyramids. (France and Brazil) World 2000 video clips of population. What effect do birth and death rates have on the total population?</td>
</tr>
<tr>
<td>9th Feb A</td>
<td>The demographic transition model. Sheet 4B from Geog 2. Talking graphs. What is the impact of rising population? The ecological footprint? What are the options available?</td>
</tr>
<tr>
<td>23rd Feb B</td>
<td>Population test ACAC.</td>
</tr>
<tr>
<td>1st Mar A</td>
<td>How have Shopping patterns changed? Introduce the topic with a brainstorming activity, asking pupils in groups what sorts of questions would need to be asked to find out about changes in shopping patterns over the past 20–30 years. Developing the questionnaire could be a whole-class activity. (Agree the questions to include, eg what, where, how often, cost, mode of transport). Groups can pool responses and discuss the best selection of wording to elicit the information they seek. Produce a set of questions to be used for homework. Ask pupils to identify the age groups (parent/grandparent) they will...</td>
</tr>
</tbody>
</table>
Need to interview recording their results on a database or wall chart. In groups, they can ask questions about the data to evaluate the extent to which the questionnaire worked and to identify how it could have been improved.

**Week commencing 8th Mar B**
- Pupils to compile a class summary and identify the main changes that have taken place and suggest reasons why they have occurred (human processes). Use sheets 4b and 4c.

**Week commencing 15th Mar A**
- The development of the superstore – Merry Hill video. Work from OGP2 on Merry Hill.
- Internet exercise. Activity 2 to consider views of the Out of town shopping centres. Do Q2 table of pros and cons.

**Shopping on the Internet**
- Use pages from AQA (48/9) shopping on the Internet Qs 1 – 6 (most able can stop at 5 and then as extension do Activity 3 from the Internet exercise).
- Summary sheet on viewpoints ex 4 D.

**Week commencing 22nd Mar**
- Help pupils to plan a piece of extended writing entitled “How and why has shopping changed in Britain over the last 30 years? How is it likely to change in the future?” Weaker writers may need structured support to help them group sentences into paragraphs which have a clear focus, and in linking ideas and paragraphs into continuous text 15 mins.
- This is to be set as a piece of ‘coursework’ and is due in on the first day back after the Easter hols.

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<table>
<thead>
<tr>
<th>Time</th>
<th>Key Questions</th>
<th>Pupil Activities</th>
<th>Knowledge &amp; Understanding</th>
<th>Skills</th>
<th>Resources</th>
<th>Differentiation</th>
<th>Assessment Evidence</th>
<th>Aspect</th>
<th>Citizenship, literacy, numeracy, sustainable development, OT links</th>
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</thead>
<tbody>
<tr>
<td>Mapwork</td>
<td></td>
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</tr>
<tr>
<td>Week 6</td>
<td>How much is it worth?</td>
<td>Inquiry task</td>
<td>Simple responses; basic knowledge</td>
<td>Visit</td>
<td>skill</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Where is it?</td>
<td>Visit</td>
<td>Knowledge of the local area</td>
<td>Visit</td>
<td>skill place</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>What is our place?</td>
<td>Through the window</td>
<td>Knowledge of the local area</td>
<td>Field study; persuasive writing</td>
<td>Large scale local maps</td>
<td>skill place</td>
<td></td>
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<tr>
<td></td>
<td>Evolving England</td>
<td>Unit 4 lessons</td>
<td>Visual with the CSS ways of life; Interview with the CSS ways of life</td>
<td>Visual with the CSS ways of life</td>
<td>Visual with the CSS ways of life</td>
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</tr>
<tr>
<td></td>
<td>Images of England</td>
<td>Unit 5 lessons</td>
<td>High quality; visualising the CSS ways of life</td>
<td>High quality; visualising the CSS ways of life</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>How is our place connected to places around the world?</td>
<td>Unit 1</td>
<td>Knowledge of the CSS ways of life; Interview with the CSS ways of life</td>
<td>Knowledge of the CSS ways of life; Interview with the CSS ways of life</td>
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<td></td>
<td>Settlements and Processes</td>
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<tr>
<td></td>
<td>What is a settlement?</td>
<td>Knowledge of the CSS ways of life; Interview with the CSS ways of life</td>
<td>Knowledge of the CSS ways of life; Interview with the CSS ways of life</td>
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</tbody>
</table>

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### 2.2. Settlement patterns

#### 2.2.1 The size and location of settlements vary, and distinct patterns can be identified
- Physical, social and political reasons for the size and location of settlements, and distributional patterns
- Variations in settlement size, proximity, and the theoretical rank-size relationships at the national scale
- Settlement hierarchies — central places, range and threshold
- Theoretical and practical ways of determining the nature of influence

#### 2.2.2 Settlements vary in their internal structure
- Spatial variations in land use patterns in urban settlements — retail, commercial, industrial, residential
- Economic, political and physical reasons for variations in land use — accessibility and cost curves and peak land value
- Models of urban growth and structure — their applications and limitations

#### 2.2.3 Settlements change over time
- The nature of changes in urban areas include functions, land use, street patterns, building age and height, population characteristics
- Reasons for changes in urban areas, including issues of transition and suburbanisation
- Reasons for and issues associated with decline and development and city centre redevelopment
- Impact of physical site on settlement growth and expansion

### Synoptic links
- Government policies influence settlement characteristics and patterns
- Policies for managing changing urban and rural settlement
- Impacts, rationales and variances of policies

<table>
<thead>
<tr>
<th>Key Ideas</th>
<th>Content</th>
<th>Case studies</th>
<th>Time Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2. Settlement patterns</td>
<td>The use and extension of Slough. The hierarchy of settlements in South Post Millennium Transition Character Analysis</td>
<td>The settlement should be examined in detail and fully developed in early part of Spring term</td>
<td></td>
</tr>
<tr>
<td>2.2.2 Settlements vary in their internal structure</td>
<td>The land use patterns of Slough, the economic base of the town and its current structure</td>
<td>Opportunities here for local development in Slough. Land use patterns to be developed in models</td>
<td></td>
</tr>
<tr>
<td>2.2.3 Settlements change over time</td>
<td>The changes which have taken place in Slough, including the city centre development and the New Slough retail parka</td>
<td>Opportunities for visiting Slough Museum and other handling sessions</td>
<td></td>
</tr>
</tbody>
</table>

### Analysis of the New Towns policy and green belts.